ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of)	
Space Gateway Support, LLC)	ASBCA Nos. 55608, 55658
Under Contract No. NAS10-99001)	

APPEARANCES FOR THE APPELLANT: Kare

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OPINION BY ADMINISTRATIVE JUDGE HARTMAN UNDER BOARD RULE 11

The government furnished appellant government-owned property valued at \$120 million pursuant to a cost-plus-award-fee contract to supply "support services" for Cape Canaveral Spaceport, including "strategic replacement of obsolete [government-owned] equipment" appellant used to perform other contract services through the procurement of new equipment. During the contract's 10-year performance, the government issued two "change orders" directing that appellant procure replacement equipment at dates earlier than set forth in the contract schedule to maintain the Spaceport's laboratory and other capabilities. During the relevant cost years, the government reimbursed appellant for the increased costs it claimed regarding the two change orders (i.e., the cost of replacement equipment procured, general and administrative (G&A) expense, and overhead) and adjusted the parties' contract to include "award fee" on overhead and G&A associated with the equipment procured, but declined to adjust the contract to include additional award fee that appellant had calculated as a percentage of the equipment purchase cost. The government asserted payment by it of the latter was barred by Federal Acquisition Regulation (FAR) 45.302-3(c) (1998), which states "[n]o profit or fee shall be allowed on the cost of facilities when purchased for the account of the Government under other than a facilities contract." Appellant subsequently filed these two appeals, which are before us pursuant to Rule 11 for a decision on the record.

Appellant does not dispute that, for the purposes of FAR Subpart 45.3 and government contracts other than "facilities contracts," FAR 45.301 (1998) defines the term "facilities" as "property used for production, maintenance, research, development or testing" or that the equipment purchased for the government's account under the change orders was property used for production, maintenance, research, development or testing. Rather, it contends: the term "facilities" historically has been used to refer to property which was provided under a "cost-only" "facilities contract" (not authorizing payment of any fee) for use by the contractor on a "separate" supply or service contract providing for payment of fee or profit; the interpretation of the term "facilities" advanced here by the agency would improperly deny a contractor any fee; the equipment furnished to it under its contract constitutes "government property," rather than "facilities," due to "absence" of the term "facilities" from its contract; and FAR 45.302-3(c) cannot be applied to its contract because (a) the government did not comply with requirements for furnishing of "facilities" to a contractor and (b) the FAR provision conflicts with both the "Changes" and "Government Property" clauses set forth in its contract, which mandate receipt of an "equitable adjustment" that includes "profit" or "fee" in the event of a "change." Thus, the issue presented in these appeals is whether FAR 45.302-3(c) bars appellant's receipt of "profit" or "award fee" on the cost of the equipment it acquired for the government's account and utilized to perform production, maintenance, research, development and/or testing work under its services contract.

FINDINGS OF FACT

1. Contract No. NAS10-99001

On 21 August 1998, the National Aeronautics and Space Administration (NASA) awarded appellant Space Gateway Support, LLC (SGS) a cost-plus-award-fee contract, Contract No. NAS10-99001, for provision of joint base operations support services (J-BOSC) at John F. Kennedy Space Center (KSC), Cape Canaveral Air Force Station (CCAFS), and Patrick Air Force Base (AFB) with a potential value of \$2,808,035,562. The 88-page statement of work for the contract stated, among other things, SGS was to:

- supply "planning for operations, maintenance, and logistics support in preparation for launches, operations and maintenance support during launch operations, and requirements following launches prescribed in the Shuttle Integrated Operations and Maintenance Instructions";
- "initiate proactive measures to support the government in achieving the goal of becoming the world's premier gateway to space while...maximizing operational effectiveness for the government and commercial customers";
- provide "laboratory and/or on-site NDE [non-destruction evaluation] services for evaluating the quality and integrity of components/parts, systems, and structures related to facilities, ground support equipment, payloads and flight vehicles" that

fall into two basic categories – "surface and near-surface inspections by Visual, Magnetic Particle, Liquid Penetrant, Eddy Current, and Infrared Testing; and Volumetric Inspections using Leak Testing, Radiography...and Ultrasonic inspection methods";

- furnish "laboratory and in-place calibrations for required technical disciplines and instruments";
- "provide services...including operating, maintaining, and constructing assigned fixed and portable propellant facilities, systems, and utilities", and "establish and maintain an ongoing maintenance, refurbishment, and overhaul program that ensures the safety and operational readiness of propellant equipment and facilities";
- "prepare a design with an option for procurement, for the replacement of existing Liquid Hydrogen Rechargers";
- "implement government initiatives such as the maintenance and restoration of facilities" and, "[b]ecause of constrained budgets,...implement trade-offs with other contract functions...to ensure compliance with regulatory and statutory requirements";
- "assess, recommend, and purchase property necessary for maintaining successful day-to-day contract operations";
- "support the government's objective of reducing dependency on government-furnished property";
- "conduct safety inspections of all contractor-occupied facilities on a quarterly basis";
- supply "services in support of facilities planning" and "provide a full range of facilities planning services";
- "ensure the reliability of assigned facilities, systems, and equipment" (F/S/E);
- "perform routine and recurring maintenance on all assigned F/S/E as prescribed by maintenance analysis to ensure safe and efficient operations";
- provide "logistics capabilities" including vehicle maintenance, laboratory services, and propellants;
- furnish "property management for NASA and J-BOSC including tagging for government-owned equipment, equipment records management,...training property custodians, excess property management, and inventorying equipment and documenting all findings";
- supply custodial, trash, mail, fire protection, law enforcement, and security services;
- operate and maintain a classified document control system;
- provide operations support for information technology; and
- "respond to customer needs 24 hours a day, 365 days a year."

(R4, tab 1 at 12, 20, 71, 74-75, 77-79, 84, 93, 100-01,103, 106, 112, 120, 125-28, 133, 149)

The contract states in Articles G-11 and H-8 that: the government will make available to SGS government property valued at \$120 million and identified in Section J, attachment J-3, on a "no-charge-for-use-basis" and also an "as-is" basis in accordance with FAR 52.245-19; SGS "shall use this property in the performance of this contract"; and SGS "is accountable for the identified property" under FAR 52.245-5 (R4, tab 1 at 40, 46; supp. R4, tabs 79, 80). As prescribed by FAR 45.106(f)(1), the parties' contract incorporates by reference the latter clause, FAR 52.245-5, GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS) (JAN 1986), which provides in pertinent part:

- (a) Government-furnished property....
- (2) The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the Government-furnished property described in the Schedule or specifications, together with such related data and information as the Contractor may request and as may be reasonably required for the intended use of the property (hereinafter referred to as "Government-furnished property").
- (b) Changes in Government-furnished property.

 (1) The Contracting Officer may, by written notice, (i) decrease the Government-furnished property provided or to be provided under this contract or (ii) substitute other Government-furnished property for the property to be provided by the Government or to be acquired by the Contractor for the Government under this contract....
- (2) Upon the Contractor's written request, the Contracting Officer shall make an equitable adjustment to the contract in accordance with paragraph (h) of this clause, if the Government has agreed in the Schedule to make such property available for performing this contract and there is any—
- (i) Decrease or substitution in this property pursuant to subparagraph (b)(1) above;...

(h) Equitable adjustment. When this clause specifies an equitable adjustment, it shall be made to any affected contract provision in accordance with the procedures of the Changes clause. When appropriate, the Contracting Officer may initiate an equitable adjustment in favor of the Government. The right to an equitable adjustment shall be the Contractor's exclusive remedy....

The cost-reimbursement contract additionally incorporates by reference FAR 52.216-7, ALLOWABLE COST AND PAYMENT (APR 1998), which provides the government shall make payments to the contractor when requested as work progresses in amounts determined to be allowable by the Contracting Officer (CO), and FAR 52.243-2, CHANGES – COST-REIMBURSEMENT (AUG 1987) – ALT. II (APR 1984), which states a CO may at any time make changes within the general scope of the contract to the description of services to be performed and, "[i]f any such change causes an increase or decrease in the estimated cost of...or otherwise affects any other terms and conditions of this contract, the [CO] shall make an equitable adjustment in the (1) estimated cost..., (2) amount of any fixed fee; and (3) other affected terms..." (R4, tab 1 at 56-58, 60).

Article G-4 of the contract contains NASA FAR Supplement clause 1852.216-76, which states the "contractor can earn award fee from a minimum of zero dollars to the maximum stated in Article B-3," the "government's Fee Determination Official (FDO) will determine the award fee amounts based on the contractor's performance...," and, in accordance with FAR 16.405(e)(3), the "[a]ward fee determinations made by the government under this contract are not subject to the disputes clause." Article B-3 of the contract sets forth the various award fees "Available" for each contract performance period, which total \$150,954,897. (R4, tab 1 at 10-12, 34-35)

2. CTC Equipment Purchase

In March 2005, SGS received a Contract Change Request (CCR), No. 2005-023, requiring it to "procure Core Technical Capability (CTC) equipment requested by NASA Laboratories WBS 3.2.3" which showed a funded cost of \$967,100 and "\$0" for fee. The letter which transmitted the CCR stated that "[n]o fee will be applicable to this CCR in accordance with FAR Part 45." (R4, tab 56 at 1, 3)

CCR No. 2005-023 included CTC equipment for both NASA's Calibration and Nondestructive Evaluation (NDE) Laboratories. Meeting minutes appended to the CCR indicated the CCR's justification was to "[m]aintain Core Lab capabilities...through strategic replacement of obsolete equipment," and that the equipment "would normally be

contractor replaced, but NASA has the funding available now and wants this equipment to be replaced ahead of schedule." (R4, tab 56 at 4-6)

In response to the CCR, SGS submitted a proposal stating proposed cost for procuring the equipment was \$929,373, which included "burdened estimated costs of \$871,700 and fee of \$57,672." The proposal explained that no material or labor costs were being proposed, and award fee was calculated at 4.5% for purchases between November 2004 and May 2005 and 8% for purchases between June and September 2005. (R4, tab 11 at 1, 3, 6-8, 12)

CO Linda Adams requested a technical evaluation of SGS's CCR proposal (R4, tab 12). The proposal evaluator, MSgt Juan Riquelme, stated he was in agreement with the CTC equipment costs but not with the inclusion of award fee because "there is already consideration from GOV to contractor via benefit of updated equipment at government expense" since "monies are from GOV and accelerates the replacement of equipment otherwise replaced by contract" (R4, tab 14). The CO then prepared a pre-negotiation position memorandum stating in paragraph II.B that "[s]ince the purpose of this acquisition is to accelerate the replacement of government furnished equipment and utilize government funds rather than the contractor's own capital, no risk is associated with this acquisition and it is considered a pass through cost" (R4, tab 13 at 3). The notes to the cost evaluation portion of the memorandum further state that "[a]ward fee is not applicable to this action based on the premise that the government is replacing equipment that would have eventually been contractor replaced and capitalized by the contractor" (R4, tab 13 at 6).

As discussions continued regarding the applicability of award fee to the CTC equipment purchase, the CO sent an email to an SGS manager noting that, under FAR 45,302-3(c), "no profit or fee is allowable on the cost of facilities [procured] under other than facilities contracts," and asking if the equipment procured was deemed to be "special tooling" or "special test equipment," which does not fall within the regulatory definition of "facilities." SGS's manager responded that the equipment procured "falls within the exceptions(s) and that 8% fee is allowable." (R4, tab 15 at 4) After further communications, the CO stated she didn't "see any evidence that this equipment fits any of the exceptions" and asked the SGS manager how the property was classified in the NASA Equipment Management System (NEMS) (R4, tab 15 at 1). He replied that the equipment was "classified as Personal Property. They are not 'facilities'" (R4, tab 18 at 5). The CO then contacted the NASA Industrial Property office, which verified that the items are commercial off-the-shelf (COTS) and "general purpose type items that are considered 'plant equipment' per FAR 45," and so advised SGS. The SGS manager replied that FAR "45.301 is not in our Contract. Therefore, it does not apply to J-BOSC." (R4, tab 18 at 4)

After receiving and reviewing an opinion from agency counsel asserting the FAR precludes payment of award fee on the cost of the CTC equipment and a memorandum from counsel for SGS asserting FAR 45.302-2 is not applicable to the J-BOSC, CO Adams directed SGS to complete the CTC equipment purchase set forth in CCR No. 2005-023 not later than 30 September 2005 and stated:

No fee is permitted on this replacement equipment in accordance with FAR 45.302-3. This provision prohibits fee or profit "on the cost of the facilities when purchased for the account of the Government under other than a facilities contract."

SGS responded it would comply with the CO's direction but would "perform the work under protest and intends to submit a request for equitable adjustment for the estimated cost and fee." (R4, tabs 16, 18, 23, 26, 29)

SGS subsequently submitted a request for equitable adjustment (REA) in the form of a cost impact proposal (CIP), No. 81, in the amount of \$961,034, which included a burdened estimated cost of \$902,386 and fee of \$58,648. SGS proposed no direct labor in its CIP. (R4, tab 30)

Because SGS had been given "unauthorized" direction to procure some of the equipment prior to issuance of CCR No. 2005-023, which later was ratified by the CO, the CO prepared two pre-negotiation memorandums with respect to CIP No. 81, one for equipment that SGS purchased pursuant to initially unauthorized direction (Phase I) and another for the remaining equipment (Phase II). The Phase I memorandum stated all of the CTC equipment falls within the simplified acquisition threshold and determinations to support restricted competition had been supplied by SGS based on the equipment being available only through certain manufacturers. The Phase I memorandum included no award fee on costs of CTC equipment and the Phase II memorandum included an 8% award fee on the overhead and G&A costs for "non-fee bearing plant equipment" for both Phase I and Phase II equipment, but no fee on the direct costs of the CTC equipment. The CO also prepared a third memorandum "FOR RECORD" stating that "[t]he purchase is a direct expense to the contract in lieu of the purchase of contractor capitalized equipment." (R4, tabs 31, 32, 43)

In September 2005, the parties executed a bilateral Contract Modification No. 316, providing for partial settlement of Phase I costs in the amount of \$351,698 that included no fee on costs of CTC equipment (R4, tabs 37, 38). Eight months later, in May 2006, when SGS refused to sign Modification No. 339, which provided for \$535,269 in "direct" costs for Phase II and \$6,623 in fee on G&A expenses, overhead costs, and costs of "non-plant" equipment (e.g., software and a maintenance agreement) for Phases I and II, CO Adams elected to issue unilaterally that modification (R4, tabs 43, 46-50). Shortly

thereafter, SGS submitted a certified claim, in the form of REA CIP No. 95, for \$64,334, "which represents the Award Fee on the burdened estimated costs for the equipment contained in CIP [No.] 81 for which SGS has already received value for the equipment but not the fee." SGS stated in CIP No. 95 that it had received \$6,623 of fee under unilateral Modification No. 339 and had deducted that sum from the \$70,957 in total fee it believed to be due. (R4, tab 52) In September 2006, CO Adams issued a final decision denying SGS's claim (R4, tab 54), which SGS timely appealed to this Board (ASBCA No. 55608).

3. PPG Equipment Purchase

During May 2005, in another CCR, No. 2005-25, SGS received a listing of "Reinvestment Projects" for the Propellants, Petroleum and Gases (PPG) Working Group, which included procurement of "a second Liquid Nitrogen Recharger." The CCR, which was prepared by another CO, Michael Wheeler, included award fee for all items set forth. (Supp. R4, tab 57)

On 19 July 2005, CO Wheeler directed SGS to purchase the second liquid nitrogen recharger listed in CCR No. 2005-25, which he stated is "a top priority for [PPG] core technical capability." His letter of direction, however, stated that no fee will be permitted on the purchase pursuant to FAR 45.302-3 because "[t]his [regulatory] provision prohibits fee or profit 'on the cost of the facilities when purchased for the account of the Government under other than a facilities contract." (Supp. R4, tab 58)

Ten days later, CO Wheeler sent SGS correspondence concurring with all fiscal year 2006 PPG purchases under CCR No. 2005-25, which included the liquid nitrogen recharger, and eliminated the award fee originally included for the recharger in the table setting forth a listing of all of the projects (supp. R4, tab 59). SGS responded it would comply with the direction, but objected to the elimination of recharger "fee" as contrary to the Property and Changes clauses in the J-BOSC. SGS added that it was performing the work under protest and would submit a REA within 30 days. (Supp. R4, tab 60) Shortly thereafter, SGS submitted a REA with respect to the nitrogen recharger in the form of CIP No. 86, which showed an estimated cost of \$712,647 and award fee of \$57,012 (supp. R4, tab 61).

During October 2005, CO Wheeler told SGS to "not proceed" with procurement of the liquid nitrogen recharger (supp. R4, tab 63). Six months later, however, in April of 2006, he again directed SGS to purchase the recharger without inclusion of fee (supp. R4, tab 66). In May of 2006, SGS submitted to the CO a "Rev 1" of CIP No. 86, which also claimed \$57,542 in award fee calculated at 8% of the cost of the recharger (supp. R4, tab 69 at 1, 8).

During November 2006, SGS filed an appeal with this Board, ASBCA No. 55658, based upon a "deemed denial" by the CO of CIP No. 86 (Rev. 1). Two months later, in January of 2007, CO Wheeler issued a final decision granting payment of award fee on overhead and G&A associated with the liquid nitrogen recharger purchase in the amount of \$2,679, but denying payment of such fee with respect to the purchase cost of the recharger based on FAR 45.302-3 (supp. R4, tabs 76, 77).

LEGAL AND HISTORICAL FRAMEWORK

I. Constitution

The Constitution provides that "[n]o Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law," and grants authority to spend money raised by taxes to Congress. Thus, Executive Branch agencies can procure real and other property only with money that has been appropriated by Congress and for purposes that have been specified by Congress. U.S. CONST. art. I, § 8, cl. 1, § 9, cl. 7; *OPM v. Richmond*, 496 U.S. 414, 424, 427-28 (1990) (clause "assure[s] that public funds will be spent according to the letter of the difficult judgments reached by Congress"); Office of the General Counsel, Department of the Navy, *Navy Contract Law* § 10.13 (2d ed. 1959).

The Constitution also expressly grants authority to Congress to dispose of property constitutionally acquired by the United States. It states:

The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting...Property belonging to the United States....

U.S. CONST. art. IV, § 3; Ashwander v. TVA, 297 U.S. 288, 330 (1936); Irvine v. Marshall, 61 U.S. 558, 566 (1857); United States v. Gratiot, 39 U.S. 526, 537 (1840). Accordingly, there is no power in an Executive department to take such action absent the existence of specific legislative authority. E.g., Steele v. United States, 113 U.S. 128, 133 (1884).

The phrase "dispose of," which appears in the Constitution, historically has been construed as meaning to "alienate" or "effectually transfer." Accordingly, that phrase includes a lease, which results in a "diminishing of the interest, control or right of the owner" in the property, or any other attempt to limit or restrict the "full and exclusive ownership" of the United States in the property. *E.g.*, 34 Op. Att'y Gen. 320, 322-23 (1924); 22 Op. Att'y Gen. 240, 245 (1898); *United States v. Gratiot*, 39 U.S. at 537.

Thus, if an Executive department wishes to allow use of government property based on the belief it would be beneficial to the public interest and does not have express

Congressional authorization to do so, it normally grants a "revocable license" to utilize that property. Legally, such a license passes nothing — it does not vest any estate, interest or franchise or confer any right whatsoever to the continuance of the permission given. Rather, it simply makes lawful something that "would have been unlawful without it." 34 Op. Att'y Gen. at 323-25; 30 Op. Att'y Gen. 470, 482 (1915); 22 Op. Att'y Gen. at 245; 20 Op. Att'y Gen. 93, 96-97 (1891); 16 Op. Att'y Gen. 152 (1878); see Henry v. A.B. Dick Co., 224 U.S. 1, 24 (1912).

II. Historical and Legal Development of Government Contracts

From the earliest days of our nation, Congress has attempted to ascertain the best procedures for efficiently and fairly obtaining reasonably-priced supplies and services for our government. As discussed below, in its effort to find the ideal procedures, Congress often has modified procurement practices either to prevent favoritism or fraud, or in order to mobilize production of needed items or curtail excessive profits during time of war. In developing procurement procedures, however, Congress repeatedly has favored obtaining supplies and services from "contractors" who use "private capital" to produce and supply the goods and services desired.

During the Revolution, the Continental Congress used "purchasing agents" acting under direct congressional authority to buy, store, insure, transport, and distribute supplies needed by soldiers fighting the war of rebellion. The agents, who often were referred to as "Commissaries," were merchants experienced in purchasing who acted in their own names, used their own personal credit to obtain the supplies (thereby incurring debts for which they were personally liable), and were generally paid a "commission," which was a percentage of the gross value of the goods they obtained. Due to the Army's constant needs and a chronic shortage of government funds to pay suppliers, the agents frequently advanced large sums of money to keep rations and other supplies flowing to the troops. In early 1777, the President of the Continental Congress and General George Washington both complained that the purchasing agent provisioning troops during operations in New Jersey had announced that he was purchasing large quantities of rum, pork and beef, and was prepared to pay the "highest price" for each. Roger Sherman of Connecticut, one of the five authors of the Declaration of Independence, wrote:

I don't know on what terms you employ people but sure I am it will not do to employ them to purchase on Commissions unless you limit the prices: For the greater prices they give the more will be their profits, which is such a temptation as an honest man would not wish to be led into.

After other commissaries were accused of enhancing prices to swell commissions, Congress investigated, concluded many of the charges were true, recommended that regulations be drafted to govern the conduct of commissaries, and showed interest in a

proposal by a Baltimore merchant to supply the Army by "contract" rather than the commissary method. In May of 1779, Elbridge Gerry of Massachusetts again charged purchasing agents were guilty of frauds – that they had deliberately induced sellers to demand high prices in order to profit through large commissions. With two campaign expenditures exceeding \$79 million, staggering amounts being spent for other supplies, and a widespread belief purchasing agents were becoming rich, the Continental Congress concluded a superintendent of finance was needed and appointed Robert Morris, a former member of Congress and one of the most influential merchants in America, to that position. James F. Nagle, A History of Gov't Contracting 16, 21, 24, 26, 33-34, 41, 45 (Geo. Wash. U. L. School 1992); Erna Risch, Quartermaster Support of the Army 52-54, 160, 162, 166-68, 180-81, 184; James F. Nagle, Federal Procurement Regulations: Policy, Practices & Procedures, 12-13 (ABA Press 1987); Proceedings in Congress – Organization of the Finance Department (7 Feb. 1781), 4 Revolutionary Diplomatic Correspondence 251-52 in American State Papers, available at http://memory.loc. gov/cgi-bin/ampage; Letter of Robert Morris to President of Congress (13 Mar. 1781), 4 Revolutionary Diplomatic Correspondence 297-99 in American State Papers, available at http://memory.loc.gov/cgi-bin/ampage.

Morris believed it was his duty to collect revenue by methods that affected all equally and to expend that revenue in the most frugal, fair, and honest manner possible. He further believed that the existing system of supply was inordinately extravagant and wasteful, and that it was in the best interest of the country to "contract" for supplies near to the troops. Morris wrote that, in all countries at war, "experience has sooner or later pointed out contracts with private men of substance and talents equal to the undertaking as the cheapest, most certain, and consequently the best method of obtaining those articles, which are necessary for the subsistence, covering, clothing and moving of an Army." Morris believed that the use of contracts awarded through competitive bidding would reduce the price per ration to a minimum and reduce other costs by (a) allowing for closure of expensive military posts utilized for supply and (b) avoiding payment for the transport and waste/spoilage of supplies. General Washington endorsed the plan. On 30 June 1781, Morris advertised in the *Pennsylvania Packet* newspaper for proposals "for supplying by contract" food for the Continental Army and others in Philadelphia from the contract's execution until 1 January 1782 and subsequently placed a similar notice in the newspaper for provisions for individuals located in Lancaster, Pennsylvania. Morris received six proposals for the Philadelphia contract. Realizing it had not yet authorized anyone to contract on behalf of the new nation, the Continental Congress promptly vested Morris with the power to make contracts for all supplies needed by the Continental Army and their transportation. Morris subsequently entered into contracts for both Philadelphia and Lancaster, and those two contracts set the precedent for obtaining goods and services in the future – published advertisements inviting the submission by a certain date of a proposal to furnish specific goods or services, opening of all proposals received after the date specified, identification of the best proposal, and the entry into a contract for the provision of goods or services with the one submitting the best proposal. Nagle, A

History of Gov't Contracting at 49-52; Risch, Quartermaster Support of the Army at 242-45, 251-52, 254, 257-58; James F. Nagle, Federal Procurement Regulations at 13-16; Richard F. Kaufman, The War Profiteers 7 (1970); 20 Journals of the Continental Congress (10 July 1781) 734 in American State Papers, available at http://memory.loc.gov/cgi-bin/ampage.

After the War, the Army quickly demobilized and Congress made a Board of Treasury responsible for buying military supplies and the Secretary of War responsible for storing and distributing those supplies. The Board followed the practices established by Morris to obtain supplies. Nagle, A History of Gov't Contracting at 57-59; Risch, Quartermaster Support of the Army at 76, 78-79, 81; Marvin A. Kreidberg & Merton G. Henry, History of Mil. Mobilization in the United States Army 1775-1945 23 (1955); 1 Amer. Mil. Hist. 107 (Maurice Matloff ed., 1996), available at http://www.history.army.mil/books/amh/amh-05.htm; 1 Stat. 65 (1789).

In 1789, our nation formed a constitutional government, Congress created the Departments of War and Treasury, and President Washington appointed Henry Knox and Alexander Hamilton, respectively, Secretary of those Departments. While the Treasury did not expressly inherit the Board's duties of obtaining supplies, it continued the supply practices of the Board. Nagle, A History of Gov't Contracting at 63; Risch, Quartermaster Support of the Army at 81; 1 Amer. Mil. Hist. 106-07, available at www.history.army.mil/books/amh-v1/index.htm.

At the request of Congress, Secretary Hamilton prepared and presented a "Report on Manufactures" dated 5 December 1791, which stated "the independence and security of a country, appear to be materially connected with the prosperity of manufactures" and "[e]very nation...ought to endeavor to possess within itself all the essentials of national supply," which are "the means of subsistence, habitation, clothing, and defense." The report noted that: "[t]he extreme embarrassments of the United States during the late war from an incapacity of supplying themselves are still matter of keen recollection"; "future war might be expected again to exemplify the mischiefs and dangers of a situation to which that incapacity is still in too great a degree applicable"; "[n]o quantity of...[gunpowder] has yet been produced from internal sources"; "manufactories on the immediate account of [the] government are to be avoided" as a "general rule" but the issue of "whether manufactories of all the necessary weapons of war ought not to be established on account of the Government itself" may "deserve legislative consideration" since the articles are not "objects of ordinary and indispensable private consumption or use"; and it would "be a material aid to [the] manufactures of [firearms], as well as a means of public security, if provision should be made for an annual purchase of military weapons of home manufacture to a certain determinate extent." The report discussed the "want of capital for the prosecution of manufactures" and recommended various acts to promote manufacture, including grant of "bounties" or monies to potential manufacturers. The report stated "[t]here is no purpose to which public money can be more beneficially

applied than to the acquisition of a new and useful branch of industry...." While the Congress adopted many of Hamilton's recommendations, it rejected the idea of giving monies to individuals or entities to facilitate engaging in manufacturing, a concept that was opposed by Thomas Jefferson and James Madison, among others. Alexander Hamilton, Report on Manufactures (1791), reprinted in S. Doc. 63-172 at 1, 23, 33, 38-40, 48, 58 (1913); James Madison: Philosopher, Founder, & Statesman, 186, 188 (eds. John R. Vile, et al. 2008); Alexander Hamilton, Ron Chernow, Alexander Hamilton 374-79 (Penguin Books 2004); 4 John C. Hamilton, History of the Republic of the United States of America as Traced in the Writings of Alexander Hamilton and of his Contemporaries 68, 297, 305-08 (1879), available at http://books.google.com/books; Sandy Keeny, The Foundations of Gov't Contracting, J. Contract Mgmt., Summer 2007 at 7, 13; 1 Amer. Mil. Hist. 108 (1996), available at www.history.army.mil/books/amh-v1/index.htm.

In 1794, three years after Hamilton's report, Congress authorized establishment of two national armories to produce and stockpile weapons, which President Washington specified be located in Springfield, Massachusetts, and Harpers Ferry, Virginia. The nation, however, continued to purchase most weapons from private manufacturers. The Congress "poured money" into the nation's fledgling arms industry by authorizing procurement of several hundred cannon. Robert Morris, Jr., and Henry Foxall, an immigrant from Britain with knowledge of cannon manufacture, received contracts to supply cannon and, utilizing private capital, established a new foundry, Eagle Foundry, in Philadelphia. 1 Stat. 345, 352; 2 Columbia Historical Society, Records of the Columbia Historical Society 30-31, 34, 40 (1908), available at http://books.google.com/books; Raphael P. Thian, Legislative History of the Gen. Staff of the Army of the United States, 1775-1901, 572 (1901), available at http://books.google.com/books; Morris J. MacGregor, Jr., The Formative Years 1783-1812 in 1 Amer. Mil. Hist. 108 (Maurice Matloff ed., 1996), available at www. history.army.mil/books/amh-v1/index.htm.

During 1798, relations with France deteriorated. While it had supplied arms and otherwise aided the United States during the Revolution, France was now controlled by different men. Europe was preparing for war and an unlikely source of weapons for our nation since French privateers made safe delivery across the Atlantic doubtful. Congress thus enacted legislation preparing for war. It created a Navy Department, appropriated funds for ships, cannons, small arms, and military stores, and authorized establishment of a foundry to cast cannon (an idea supported by President Adams and the Federalists, but opposed by Vice President Thomas Jefferson and his political party on the ground that, if the government made cannon, private foundries would go bankrupt). With these funds, the government entered into 27 contracts, including one with Eli Whitney (the inventor of the cotton gin), to obtain 40,200 muskets, which were to be copies of the "Charleville musket of 1763," the weapon France supplied the United States during the Revolution. Except for Whitney's contract, which was handwritten after he consulted his attorney, the legal documents were a "standard form" containing simply five paragraphs. All of the

contracts stated the manufacturers were to use "government furnished material" (well-seasoned, black walnut stocks in the rough), if available from the government, at a cost of 25 cents a stock. 1 Stat. 352, 553; Nagle, A History of Gov't Contracting at 70-71, 78-79; Maj. James E. Hicks, U.S. Military Firearms 1776–1956, 9, 14, 19, 21-22 (1962); Boyd L. Dastrup, King of Battle 40 (1992); Constance McLaughlin Green, Eli Whitney and the Birth of American Technology, 100-01, 105-06, 109, 111 (1997); Merritt Roe Smith, Military Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society: Historical Perspectives on the Military-Indus. Complex, 24, 25-26 (Benjamin Franklin Cooling ed., 1977); MacGregor, The Formative Years 1783-1812 in 1 Amer. Mil. Hist. at 108, 115, available at www.history.army.mil/books/amh-v1/index.htm; Additional Naval Force and the Establishment of a Public Foundry (16 Jan. 1798) in 1 American State Papers: Military Affairs at 32, available at http://memory.loc.gov/cgibin/ampage; see Contracts for the Supply of Cannon (12 Apr. 1798) in 1 American State Papers: Military Affairs at 123, available at http://memory.loc.gov/cgi-bin/ampage; Claim for Loss on a Contract for Muskets (6 Jan. 1820) in 1 American State Papers: Military Affairs at 684-85, available at http://memory.loc.gov/cgi-bin/ampage.

Whitney, who was aware of French success making arms with novel die-forging, jig-filing, and hollow milling techniques, proposed "manufacture of 10 to 15 thousand stands" (musket complete with bayonet, wiper, ramrod and screwdriver), even though he had no experience making arms and had not tooled his factory for such work. Whitney stated that machinery moved by water adapted to the manufacture would diminish labor and facilitate making the arms, and he would not "go to the expense of erecting works for this purpose unless [he] could contract to make a considerable number." Most in the new nation assumed that production of a musket defied machine manufacture. A few skilled craftsmen filed and fitted each individual component of every musket made in the United States because the weapon required exact fit of parts. Precision work early in the 19th century was an "art," not a craft. Each musket was made one at a time, i.e., "lock, stock and barrel." The concept of interchangeable parts for arms or other items was not within the imagination of most. While Whitney had been "down on his luck" when making his proposal due to pirating of his cotton gin invention and a fire at his plant, the government advanced him \$10,000 under the contract, which allowed other advances at the discretion of the Treasury Secretary "in proportion to the progress made in executing the contract." Other musket contractors were also given advance payments to enable them to bid on the government work since Great Britain had maintained a monopoly on most manufacturing and, as Hamilton had observed, no real arms industry existed in the nation. Claude E. Fuller, The Whitney Firearms 2-3, 6-7, 33-34, 40, 42, 44-45, 47-48 (1946); Merritt Roe Smith, Army Ordnance & the "American System" of Mfg., in Mil. Enterprise and Technological Change 47-49 (Merritt Roe Smith ed. 1985); Nagle, A History of Gov't Contracting 70-71, 79-81; Smith, Military Arsenals & Industry Before World War I, in War, Bus., & Amer. Society at 25-27; Green, Eli Whitney & The Birth of Amer. Technology at 98-99, 100-02, 104, 109-10; Joseph & France Gies, The Ingenious Yankees 72-76 (1976); Chernow, Alexander Hamilton at 374; Geoffrey Perret, A Country Made By War 95 (1989); Keeny, The Foundations of Gov't Contracting, J. Contract Mgmt., Summer 2007 at 12; James V. Joy, Jr., Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 141-43; Peter George, The Emergence of Indus. America 71 (St. U. of N.Y. 1982); Claim for Loss on a Contract for Muskets (6 Jan. 1820) in 1 American State Papers: Military Affairs at 684-85, available at http://memory.loc.gov/cgi-bin/ampage.

During 1799, Pierre Samuel du Pont arrived from France with his family to invest most of his remaining fortune in commercial and industrial establishments in the United States. He was certain that within 10 years the capital he invested would be quadrupled and hopeful it might increase in amount 10 or 20 times. Du Pont had attained eminence as an economist, had befriended Jefferson during Jefferson's days as ambassador to the Court of Louis XVI, and had joined Jefferson in advocating freedom of commerce. His son, Eleuthere Irenee (E.I.), wished to establish a gunpowder factory. The younger du Pont, who had studied at the French government gun powder works, created what today would be called a "business plan," which was entitled "On The Manufacture of War and Sporting Powder in the United States." It detailed: the equipment and facilities needed to manufacture gunpowder; costs of necessary raw materials, equipment and labor; existing competition which du Pont considered to be inefficient and producing a more-costly, lower-quality product; potential future competition; the anticipated pricing of powder to be made; future market and need for the product, which included the Army and Navy; potential profit that might be made; and capital believed necessary to operate a powder factory in the United States. Correspondence between Thomas Jefferson and Pierre Samuel du Pont de Nemours 1798-1817 at xiii-xviii; xix, xxi (Dumas Malone ed. and Linwood Lehman trans. 1930); Business America, The History of the E.I. du Pont de Nemours Powder Co. 11, 167-74 (1912), available at http://www.freepyroinfo. com/Pyrotechnic/Historical Pyro/The History of the E I Du Pont De Nemou.pdf (Google Books); B.G. du Pont, E.I. du Pont de Nemours and Co., A History, 1802-1902, 11, 12, 15 (Houghton Mifflin Co. 1920), available at http://books.google.com/books; H.C. Engelbrecht & F.C. Hanighen, Merchants of Death 24-25 (1917); Correspondence between Thomas Jefferson & Pierre Samuel du Pont de Nemours 1798-1817, I, xvi-xviii; supp. XXIII-XXIV (Dumas Malone ed. & Linwood Lehman trans. 1930).

Infinite opportunity for manufacturing existed in the United States but there was little money available for investment in manufacturing facilities. Land companies could enlist shareholders by selling stock to finance their venture because land itself was seen as a tangible, familiar asset offering security. Merchants who accumulated capital by traveling to exotic ports and procuring various goods, however, were not willing to risk their capital on uncertain manufacturing, especially that done by an unheard of method such as proposed by Whitney. Those who wished to manufacture, such as Whitney and du Pont, thus often had to locate sources of financing for their planned ventures. For example, while E.I. du Pont received some capital from family to erect a "manufactory," he raised significant funds from friends in France, including monies needed to purchase powder equipment made at the French government works. Because the expenses of

completing his factory were more than he had anticipated, he also had to borrow \$11,000 from a bank. Whitney negotiated receipt of a significant advance and progress payments from the government as financing on his initial musket contract. Du Pont, E.I. du Pont de Nemours & Co., A History at 11-12, 15, 29, 167-74, available at http://books.google.com/books; Engelbrecht & Hanighen, Merchants of Death at 26; Green, Eli Whitney & the Birth of Amer. Technology at 99; Nagle, A History of Gov't Contracting at 80-81, 87; Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 143-44.

Only 3 of the 27 contractors making guns fulfilled their contracts within 9 months after passing of their contract completion dates and Whitney was among the delinquent. Weather and a yellow fever epidemic/quarantine in Philadelphia (which halted delivery of gunstocks and purchases of Philadelphia iron), among other things, delayed Whitney's progress. With government backing, Whitney had counted on his commercial loans to finance purchase of materials but found the 60-day notes utilized by merchants to be unsatisfactory for businesses like his where there was no quick turnover. He used money earmarked for other purchases to pay off the notes and was unable to buy in the quantity economy dictated. The government gave Whitney an extension of time to perform and granted him an additional \$1500, but required him to furnish a bond to cover the \$10,000 initial advance and specified he complete a specified number. Ten New Haven citizens underwrote the required \$10,000 bond in exchange for a mortgage on his plant and farm. While Whitney did not complete the required number, he saved himself from contract termination by dramatically dumping 10 sets of components for musket locks on a table and picking parts at random from the table to assemble 10 firing mechanisms, persuading those assembled, who included Jefferson and Adams, that the lock parts for one of his muskets could be exchanged with those of others. If the jigs and machine tools used by Whitney could make components so identical that both filing and special fitting in assembly were not necessary, guns could be made much more quickly by less skilled laborers and would not require an armorer for repair, but simply an "interchangeable" replacement part. Whitney had seen a French model 1777 musket in 1801 and was so impressed with its advantages over the 1763 model being made that he suggested "changes" embracing the improvements. Whitney stated that he believed the advantages of the improvements "will more than compensate for the expence [sic] of the alteration" and he "will contract" to make the improvements for a small increase in price of each musket. The government agreed to the "changes" and increased price, granted an additional advance of \$30,000, and allowed five (rather than two) years for completion of his contract. Nagle, A History of Gov't Contracting, at 84; Smith, Military Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society, at 25-27; Perret, A Country Made By War at 96; Merritt Roe Smith, Harpers Ferry Armory & the New Technology: The Challenge of Change 24-51 (1977); Vernon W. Ruttan, Is War Necessary for Economic Growth?: Military Procurement & Technology 22-23 (2006); Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 140-41, 144-45; Green, Eli Whitney & the Birth of American Technology at 112-17, 121-22, 126-29; Hicks, U.S. Military

Firearms 1776–1956 at 19; Fuller, The Whitney Firearms at 51-52, 56-57, 67-71; Smith, Military Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society at 27.

In 1801, Jefferson became President and Foxall, one of the nation's foremost authorities on cannon and a friend of Jefferson's, ended his Pennsylvania partnership with Morris and established a new foundry along the Potomac River near Georgetown in Washington, D.C., using his own capital. About the same time, du Pont began making gunpowder at his facility in Wilmington, and the federal government and Jefferson were among his first customers. While President Adam's Secretaries of War and Navy had begun planning a national cannon factory pursuant to the 1798 legislation, Jefferson desired to reduce military expenditures and no such factory was built. 2 Columbia Historical Society, Records of the Columbia Historical Society at 28, 30-32, 34, 38, 40-42 available at, http://books.google.com/books; Engelbrecht & Hanighen, Merchants of Death at 23; MacGregor, The Formative Years 1783-1812 in 1 Amer. Mil. Hist. at 109, 117, available at http://www.history.army.mil/books/amh/amh-05.htm (Jefferson took office committed to a policy of peace and economy); du Pont, E.I. du Pont de Nemours & Co., A History 19, available at http://books.google.com/books; Nagle, A History of Gov't Contracting at 87; see Cannon, Small Arms and Other Munitions (15 Dec. 1811) in 1 American State Papers: Military Affairs at 303, available at http://memory.loc.gov/cgibin/ampage; Contracts for Cannon and Shot (24 Feb. 1832), in 4 American State Papers: Military Affairs, at 933-34, available at http://memory.loc.gov/cgi-bin/ampage.

In September 1801, Whitney's first 500 muskets were fully proved and inspected. Whitney proposed that they be shipped in well-seasoned pine boxes carefully fitted and designed to keep dampness from the weapons to protect them from rust. The government agreed and paid him \$2.50 additional for each pine box holding 25 muskets. Seventeen months later, after Whitney was required to travel south to handle matters relating to his cotton gin patent litigation, the government again extended his contract. Green, *Eli Whitney & the Birth of Amer. Technology* at 131-35; Joy, *Eli Whitney's Contracts for Muskets*, 8 Pub. Cont. L.J. at 145.

Because our nation's founders believed that a well-regulated citizen militia would allow the United States to avoid a standing army of professional soldiers, the Constitution specified Congress was responsible for "organizing, arming, and disciplining" a "militia." U.S. CONST. art. 1, § 8. Jefferson hoped to avoid additional expense of arms for the militia, but censuses of arms conducted in 1803 and 1806 showed there were insufficient arms for militia members. Congress therefore passed the 1808 Militia Act appropriating \$200,000 a year "for the purpose of providing arms and military equipment for the whole body of the militia." The Treasury Department purchased ads in most major newspapers seeking bids and signed contracts with all but one of the 20 gun makers who had replied. These contracts were the start of a government practice of providing orders on a long-term basis. 2 Stat. 490; James A. Huston, *The Sinews of War: Army Logistics 1775-1953* at 96-97, 115-18 (1966); Nagle, *A History of Gov't Contracting* at 87; Claude E. Fuller, *The Whitney*

Firearms 85 (1946); Hicks, U.S. Military Firearms 1776-1956, at 19-24; 17 Annals of Cong. 1002-05, 1019-45 (1807), available at http://memory.loc.gov/ammem/amlaw/lwaclink.html#anchor10; 18 Annals of Cong. 2175-97 (1808), available at http://memory.loc.gov/ammem/amlaw/lwaclink.html#anchor10; Henry Dearborn, Return of the Militia (29 Dec. 1802), in 1 American State Papers: Military Affairs at 159, 162, available at http://memory.loc.gov/cgi-bin/ampage; Henry Dearborn, Return of the Militia (4 Apr. 1806), in 1 American State Papers: Military Affairs at 199, 200-03, available at http://memory.loc.gov/cgi-bin/ampage; Henry Dearborn, Return of the Militia (7 Feb. 1807), in 1 American State Papers: Military Affairs at 210, 214; Jacob E. Cooke, Tench Coxe & the Early Republic 286-88 (U. of N.C. Press 1978).

During 1807, Congress passed a resolution directing the War Department to "inquire" into the expediency of building "a national foundry" in D.C. to cast ordnance and sell arms to the individual States. Jefferson's Secretary of War, Henry Dearborn, wrote Foxall a letter seeking his advice. Foxall replied that: he would not build such a foundry at his own expense because the government's ordnance needs likely would be satisfied in "a few years" "before any adequate return could be made of the expense of building the works"; if the foundry were built on government-owned land, as Foxall believed desired, when there was no immediate need for ordnance, he would not be able to "convert" the "facility into mills for making flour or some other manufactory" and no person would purchase from him a facility "that had no immediate use"; thus, if another new foundry was desired, the government should pay to erect its own foundry; such a facility could benefit the government "in case of emergency," establish "uniformity in artillery," and serve as a guide or yardstick for determining a "fair price" for ordnance that the government obtained by contract; and he was willing (with the exception of the necessary steam engine) to erect, "on as large or...small a scale as [the government] shall determine", and place "into complete operation" such a facility in exchange for "use of the same, without rent or charge, with a contract sufficient to keep it at work for two years after completion." He added that (1) he would maintain "a regular set of books of expenditures" with "vouchers of all moneyed transactions" concerning foundry erection which would "be open at all times to the inspection of any person" that the government might appoint; (2) if there was need for ordnance after the two year period, he was willing to pay a satisfactory rent to continue to operate the facility; and (3) he hoped that the government agreed he was attempting to advise it as one who did not have an "establishment of the kind" which "has nearly his all invested in it" and which will "be of little value" as a "manufactory" if the nation "withdraws aid and patronage therefrom." The federal government, however, did not accept Foxall's offer to enter into what would appear to be the nation's first contract to produce goods (cannon) with government-furnished facilities (equipment and buildings) assembled and erected for the government by the contractor without the receipt of any profit for the assembly and erection of that property. Congress determined instead that the nation's 530 "privately-owned" foundries could meet the nation's wartime artillery needs. Letter from Henry Foxall to the Secretary of War (Aug. 1807) in 1 American State Papers: Military

Affairs, 215-17, available at http://memory.loc.gov/ammem/amlaw/lwsplink.html#anchor5; 2 Columbia Historical Society, Records of the Columbia Historical Society 34-37, available at http://books.google.com/books; Dastrup, King of Battle at 47-48; Nagle, A History of Gov't Contracting at 79; Kreidberg, History of Mil. Mobilization in the United States Army 1775-1945 at 56; see Cannon, Small Arms and Other Munitions (16 Dec. 1811) in 1 American State Papers: Military Affairs at 303, available at http://memory.loc.gov/cgi-bin/ampage.

In 1809, Congress required "all purchases and contracts" of the War, Navy and Treasury Departments be "made by open purchase or by advertising for proposals." The Attorney General subsequently construed this statute as requiring that the Departments advertise for goods unless there were "public exigencies" that "necessitated immediate contract performance." Additionally, Whitney made the final delivery of muskets under his 1798 arms contract. Because further advances had accompanied each extension of the performance period, only \$2,450 remained on the \$134,000 contract. The same year, the government entered into contracts with 19 other gunsmiths for 85,000 muskets at a price of \$10.75 apiece. 2 Stat. 536; 2 Op. Att'y Gen. 257 (1829); Nagle, A History of Gov't Contracting at 86; Patricia H. Wittie, Origins & History of Competition Requirements in Fed. Gov't Contracting 2-3, available at www.reedsmith.com_functions/download.cfm?use_id= 0&fde_id; Jeanette Mirsky & Allan Nevins, The World of Eli Whitney 212, 220 (1952); Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 145; Green, Eli Whitney & the Birth of Amer. Tech. at 137-38; Fuller, The Whitney Firearms at 86, 89.

In 1812, the government had received fewer than one third the number of expected muskets and concluded that a number of the contractors were likely to default. Whitney, who was not among those contractors likely to default, offered to deliver 15,000 muskets. While he had been performing small contracts for New York and Connecticut, he understood he needed to keep his equipment and workmen fully utilized. He wrote in his papers:

As waterworks are expensive and soon go to decay, the machinery should be so proportioned and the extent of each establishment such, as to keep all the machinery constantly employed. Any attempt to carry on such a manufactory without a solid, fixed and sufficient Capital must be abortive. The amount of the capital must be at least equal to double the value of the Arms delivered in one year — and this amount will not be sufficient unless the finished work be turned in and payment for the same received every ninety days. The establishment of such a manufactory...can in no case be accomplished in less than two years — and should be

continued at least twenty years to warrant such an investment of capital.

War Secretary Eustis entered into a contract with Whitney to produce muskets following the pattern of arms he had made for New York State, except the length of the barrel was to be 40 inches. Whitney was to start delivery in May 1813 and thereafter complete "not more than 3,000 nor less than 1,500" annually. The government agreed to again advance money and to pay \$13 per stand. Green, Eli Whitney & the Birth of Amer. Tech. at 155-56; Fuller, The Whitney Firearms at 80, 87-92; Arms Provided for, and Issued, to the Militia (24 Dec. 1812) in 1 American State Papers: Military Affairs at 327-29, available at http://memory.loc.gov/cgi-bin/ampage.

Shortly before the start of the War of 1812, Congress placed the Army's supply system under the exclusive control of the Secretary of the War, created the Office of Commissary General of Purchases, and created an Ordnance Department. Callender Irvine became the "Commissary General" of purchases and preferred "government" production over private contracts. He argued it was "[b]etter to increase the number of our public establishments and the number of hands at those already in operation and bring the whole under the superintendence of one judicious and independent man," who many thought he believed should be him. He was not happy that Whitney had received his new contract. Irvine and a colleague had hoped to have their own model musket adopted by the Army. When Whitney did not deliver the first annual installment of muskets timely, Irvine notified the Secretary of War that he "had been trifled with long enough...by these contractors," he has authority to cancel contracts, and he had written Whitney that he will exercise his authority. When Whitney produced the first batch of muskets, Irvine made various complaints, including that the bayonet was short and the britch not water tight, and stated all defects noted needed to be corrected. Whitney responded to each point, noting that the musket model had been selected by former War Secretary Eustis, the muskets conformed to that model, he was willing to make requested modifications at government expense, and a party to a contract cannot legally "force changes unacceptable to the other." Irvine then withheld advances due Whitney and initiated proceedings to commence suit against Whitney. Whitney appealed. President Madison discussed the matter with Whitney. The Chief of Ordnance praised Whitney's work. War Secretary Armstrong ordered Irvine to send an inspector to prove the muskets awaiting inspection at Whitney's plant. In 1815, Congress placed the Ordnance Department in charge of all contracts for arms, destroying Irvine's hopes of developing an empire. While some, like Irvine, viewed government patronage of private contractors as furnishing gain to private individuals at public expense, others were concerned that a government "monopoly" of arms manufacture could lead to a dictatorship. Congress, and the President, elected to continue to enter into contracts, with Ordnance Department supervision of production by contractors and armories. The country therefore continued to purchase most of its arms (and other supplies) from the private sector, which utilized its own capital to produce the goods and supplies

purchased. 2 Stat. 696-97, 732; 3 Stat. 203; Nagle, A History of Gov't Contracting at 92-93, 95-99, 116-17; W. Michael Hix et al., Rethinking Governance of the Army's Arsenals and Ammunition Plants 14 (2003), available at http://books.google.com/books; Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 141, 147-54; Green, Eli Whitney & the Birth of Amer. Tech. at 156-60, 168; Keeny, The Foundations of Gov't Contracting, J. of Contract Mgmt., Summer 2007 at 14; Hicks, U.S. Military Firearms 1776–1956 at 36, 40, 41-44.

Insufficient supplies and faulty arms plagued the 1812 war effort, but the United States prevailed. Du Pont sold the federal government gun powder for the war and had company sales of \$148,597.62 in 1812. Foxall's foundry is thought to have supplied the cannons used by Commodore Perry to defeat the British on Lake Erie. Some criticized the government for failing to obtain the best available equipment for the nation's soldiers. The Governor of Tennessee, for example, advised militia volunteers from his state to "avoid the smoothbore muskets" preferred and supplied by the War Department because they may be "good enough for Regular Soldiers but not the Citizen Volunteers of Tennessee." Du Pont, E.I. du Pont de Nemours and Co., A History at 59, available at http://books.google.com/books; Nagle, A History of Gov't Contracting at 92-93, 95-99, 116-17; 2 Columbia Historical Society, Records of the Columbia Historical Society at 32, available at http://books.google.com/books.

During March of 1818, five du Pont powder mills exploded, destroying almost the entire plant and over 85,000 pounds of powder, causing a loss of about \$30,000. Until new facilities could be built, du Pont supplied most customers with excess powder it had obtained from the federal government at the end of the War of 1812, which was not lost in the explosion. Between explosions, the bankruptcies of customers who had bought powder on credit for six months or more (which generally was allowed), and the financial distress existing in the nation, du Pont's powder works lost \$190,000 between 1817 and 1819. Du Pont, E.I. du Pont de Nemours & Co., A History at 29, 54-55, available at http://books.google.com/books.

By 1819, the policy of the War Department was to renew firearms contracts where performance was satisfactory and the price offered was as low as other bids. Col. George Bomford, principal contracting officer for the Ordnance Department, explained:

Without such inducements, contracts upon reasonable terms could not have been obtained because the United States was the only customer the contractors could have.... In 1798, when the first attempt was made there were but few persons in the country acquainted with the business; and but one of these (Eli Whitney of Connecticut) who embarked in it succeeded; all the rest were either ruined by the attempt or

found the business so unprofitable and hazardous as to induce them to relinquish it. In 1808, after the passage of the law making a permanent appropriation, a renewed attempt was made, and many of the contractors who were then engaged in the business have also failed. The steady support and patronage given by the Government since that time to the contractors whose skill, perseverance and capital saved them from early failure has resulted in the firm establishment of several manufactories of arms, and preserved to the country establishments of great importance to its security and defence [sic].

Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 155; Nagle, A History of Gov't Contracting at 88; Mirsky & Nevins, The World of Eli Whitney at 273-74; Huston, The Sinews of War: Army Logistics 1775-1953 at 117; see Contracts Made Since 1820 (6 Jan. 1824) in 2 American State Papers: Military Affairs at 599-612, available at http://memory.loc.gov/cgi-bin/ampage.

During 1819, the Ordnance Department desired to acquire 1,000 breechloading rifles which were the subject of a patent received by John Hall. While Hall had the option to produce the guns in his Maine shop, he elected to contract to manufacture the rifles at Harpers Ferry Armory with government-owned equipment. Under this special contract, he was not paid a fixed sum or "piece rate" for the rifles, but a "salary" for serving as an "Assistant Armorer," who instructed and directed armory workmen in fabricating the rifles, plus a "royalty" of \$1 for each weapon. In 1820, Hall was placed in charge of a separate rifle works at Harpers Ferry and developed many of the machines used in the rifle works. Because of a statutory provision requiring that arms for state militias be produced by "private contractors," Hall could not make breechloaders for them and the Ordnance Department awarded a contract to Simon North of Connecticut to manufacture them with technical advice provided by Hall. In 1834, North produced rifle components that could be exchanged with rifles made by Hall at Harpers Ferry. Thus, Hall and North, rather than Whitney, are credited by some historians with introducing the practice of interchangeable parts to manufacturing. Report on a Proposition to Purchase Patent Right of John H. Hall for Making Rifles, 24th Cong. (24 Feb. 1836), in 6 American State Papers: Military Affairs at 104-11, available at http://memory.loc.gov/cgi-bin/ ampage; Merritt Roe Smith, John Hall, Simeon North and the Milling Machine, 14 Technology and Culture 573-80, 583-85, 591 (1973); Nagle, A History of Gov't Contracting at 116-17; Merritt Roe Smith, Harpers Ferry Armory and the New Technology: The Challenge of Change 196, 209-11 (1977); Gies, The Ingenious Yankee, at 176; Smith, Army Ordnance & the "American System" of Mfg., in Mil. Enterprise and Technological Change 8-9, 61-64, 76-77 (Merritt Roe Smith ed. 1985); Fuller, The Whitney Firearms at 152; Huston, The Sinews of War: Army Logistics 1775-1953 at

115-18; Smith, Military Arsenals & Industry Before World War I, in War, Bus., & Amer. Society: Historical Perspectives on the Military-Industrial Complex at 31.

In 1835 and 1836, Congress again considered establishing a national cannon foundry in Washington, D.C. General John Mason, who had purchased Foxall's foundry in 1815 and continued its operation of manufacturing cannon of various calibers for both the War and Navy Departments, proposed the purchase of his facility for \$70,000 and the enlargement of that facility. A Congressional committee endorsed that proposal. During December 1837, in his annual address to Congress, President Martin Van Buren, based on a report by the War Secretary, recommended the nation establish both a government cannon foundry and gun powder works. The latter recommendation prompted Alfred du Pont to state that, "if the expectation is to save expense, they will find themselves greatly deceived." Neither Presidential recommendation was pursued. Report on the Expediency of Establishing a National Foundry in the District of Columbia (9 May 1936), in 6 American State Papers: Military Affairs at 413-16, available at http://memory.loc.gov/cgi-bin/ampage; Select Committee Report on Expediency of Establishing a National Foundery [sic] in 5 American State Papers: Military Affairs at 518-21, available at http://memory.loc.gov/cgi-bin/ampage; 2 Columbia Historical Society, Records of the Columbia Historical Society at 29, 32, 37-38, available at http://books.google.com/books; du Pont, E.I. du Pont de Nemours and Co., A History at 95, available at http://books.google.com/books; War Secretary Ann. Rep., in 7 American State Papers: Military Affairs at 571, 576, available at http://memory.loc.gov/cgibin/ampage; Bill to Provide for Establishment of a National Foundry, H.R. 628, 24th Cong. (1836), in American State Papers, available at http://memory.loc.gov/cgibin/ampage; Bill to Establish a Foundry, S. 12, 24th Cong. (1836), in American State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Establish a Foundry, S. 234, 24th Cong. (1836), in American State Papers, available at http://memory.loc.gov/ cgi-bin/ampage; Bill to Establish a Foundry, S. 239, 25th Cong. (1838), in American State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Provide for Establishment of a National Foundry, H.R. 1032, 25th Cong. (1839), in American State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Huston, The Sinews of War: Army Logistics 1775-1953 at 118-19.

During the 1830s, procuring small arms by contract declined because some arms makers could not obtain the increasing capitalization required by new technology and frequent model changes, survive the rigid inspections of the parts "uniformity system," and/or had depended too much upon one craftsman who died and could not be readily replaced. While the Mexican War briefly halted the disappearance of contractors, the industry had changed significantly by mid-century – only 3 of 11 firms active in the 1820s still held government contracts and, by 1856, all but one of those firms (Whitney Arms Company) had gone out of business. Larger, corporately-organized contractors led by young, aggressive businessmen, such as Samuel Colt and Epiphalet Remington, who had better capitalization and improved equipment, replaced the earlier arms makers. Colt

produced a revolver patented by him in 1836 that was popular among the Texas Rangers in the Texas War for Independence. The high price of the gun and Army reluctance to accept a complicated weapon, however, limited its early success causing the Pennsylvania company that had obtained the right to manufacture the pistol to go bankrupt in 1842. Thereafter Colt made arrangements with Whitney to manufacture the revolver until he accumulated sufficient capital to open his own plant in 1855. Huston, The Sinews of War: Army Logistics 1775-1953 at 115-18; Nagle, A History of Gov't Contracting at 172-73; Smith, Military Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society: Historical Perspectives on the Military-Indus. Complex at 31; Engelbrecht & Hanighen, Merchants of Death at 40-42.

The Ordnance Department opened the armories to visits by private manufacturers to obtain drawings and other information. Arms contractors, however, were expected to share their inventions with the armories on a royalty-free basis if they wished to continue receiving government contracts. As a result, few patents issued for machines or machine processes prior to the Civil War. The diffusion of knowledge between the armories and private manufacturers resulted in development of various equipment key to advancing manufacturing in the nation. Nagle, A History of Gov't Contracting at 118-19; Smith, Army Ordnance & the "American System" of Mfg., in Military Enterprise and Technological Change at 8-9.

During the 1840s, the Navy launched its first ocean-going "steam-driven" capital ships, the USS Missouri and Mississippi, which were constructed, respectively, at its New York and Philadelphia shipyards. The machinery for both was built pursuant to contract and designed by the superintending engineer of West Point Foundry under a consulting contract with the Navy. The Navy also launched a paddlewheel steamer (USS Michigan), iron-hulled steamer (USS Allegheny), screw steam warship (USS Princeton) and screw steam sloop (USS San Jacinto). The engines and boilers for all four were again built by private-sector firms under contract. The Princeton, which was exhibited as a "marine wonder" at locations along the East coast was constructed at the Philadelphia Shipyard pursuant to a design by Swedish inventor John Ericsson under the supervision of CPT Robert Stockton, who secured the political support for it to be built. (While the Navy later sought to build other vessels based on the *Princeton* design, the ship is remembered for an early cruise on the Potomac River during which one of its guns designed by CPT Stockton exploded injuring President Tyler and killing several, including the Secretaries of Navy and State). No accepted design for steam power plants then existed. "Each ship's engine was a unique piece of machinery attuned to the peculiarities of design of that particular vessel." In sum, steam technology was in a state of flux with frequent new developments and patents, and Navy engineers found it difficult to keep abreast of the changes. Pursuant to congressional request, the Navy convened a Board of Engineers to report on problems experienced with the Princeton, Allegheny, and San Jacinto. The Board's report cited the Navy for poor planning, shoddy engineering and extravagant expenditure of funds in constructing and maintaining the

ships. As a result, the Navy replaced its Engineer-in-Chief and the San Jacinto discarded its engines designed by Navy engineers in favor of engines designed and warranted by a contractor. Kurt Hackemer, The U.S. Navy and the Origins of the Military Indus. Complex 1847-1883 16, 18, 34 (2001); Frank M. Bennett, The Steam Navy of the United States: A History of the Growth of the Steam Vessel of War in the U.S. Navy, & of the Naval Engineer Corps, 32-36, 44-47, 53, 61, 67, 69-70 (1896), available at http://books.google.com/books; 1 Donald L. Canney, The Old Steam Navy: Frigates, Sloops, & Gunboats 1815-1885, 37-38 (1990); see generally Ericsson v. United States, 1857 U.S. Ct. Cl. LEXIS 194 (Ericsson entitled to \$13,900 additional for services rendered regarding the Princeton).

Expansion of the Navy occurred sporadically – in fits and starts depending on the desires of a particular administration. Congressmen representing districts with shipping interests supported expansion, but those from inland with agricultural economies desired the nation's limited funds be spent on roads, canals, and railways. After conclusion of the Mexican-American War in 1848, the Navy, which was slow to adopt steam to power ships, recognized it needed to possess seaworthy, "steam-powered" vessels. Lacking specific appropriations from Congress for such ships, the Navy used funds appropriated annually for ship "repair" to "rebuild" existing ships, including the USS Princeton and Allegheny. Essentially, the Navy would dismantle a ship, rebuild it with new materials to the same or different dimensions, retain the vessel's name and a few of its timbers or fittings, and have a "new" steam-powered vessel. The rebuilt Princeton, for example, used its original engines designed by Ericsson in a hull built of almost all new material. Similarly, the rebuilt *Allegheny* discarded its experimental boiler system which generated patent royalties for a Navy engineer in favor of other boilers, received additional frames and braces for its hull, had openings in its hull for wheels that generated patent royalties for another Navy officer permanently closed, and received a screw propulsion system. Hackemer, The U.S. Navy & the Origins of the Military Indus. Complex at 10-11; Bennett, The Steam Navy of the United States at 41, 52-57, 62, 72-74, 137, 141, available at http://books.google.com/books; 1 Canney, The Old Steam Navy at 31-43; see, e.g., 9 Stat. 97-101, 169-73, 187-88, 266-73, 374-79, 513-17, 621-26; 10 Stat. 100-05, 220-24, 583-87, 675-82.

Naval expansion became more acceptable in the 1850s after a "Report on the National Defences" by Navy Cmdr. Samuel Francis du Pont contended a Navy strong enough to protect the American coastline helped ensure peace and the Navy needed fast sailing ships capable of carrying larger cannon that were equipped with steam power and propeller, rather than paddle wheels, for their propulsion, i.e., a larger and more powerful version of the *Princeton*. During 1854, Congress authorized the Navy to obtain six steam frigates, one of which was the *USS Merrimack*. The Navy viewed this authorization as the initial step in a comprehensive rebuilding of its fleet and realized that, if it wished to obtain additional authorizations, it needed to demonstrate that it could be trusted with the funds necessary for a building program complicated by a lack of sufficient plant to build

steam engines and need to use private contractors to obtain power plants. 10 Stat. 273; Navy Sec'y Ann. Rep. 1854 at 392-93, Rep. 1855 at 13-15; Hackemer, *The U.S. Navy & the Origins of the Military Indus. Complex* at 11, 14-16, 20, 22-24, 47; Bennett, *The Steam Navy of the United States* at 141, 145, *available at* http://books.google.com/books; 1 Canney, *The Old Steam Navy* at 45-46, 48, 50.

Because of the embarrassments suffered previously, the contracts for the 1854 steam frigates provided that: when both one-third and two-thirds of contract work were completed satisfactorily, the Navy would pay one-fifth of total contract price; another one-fifth payment of contract price would occur when the ship made a satisfactory trial trip of not less than a week at sea; the remainder of the contract price would be paid when the ship had been in the Navy's possession and performed satisfactorily for six months; repairs necessary during the trial due to defective workmanship and material were to be at the expense of the contractor; and a bond posted by the contractor equal in value to three-fourths of the amount of the contract would be forfeited if the contractor failed to meet terms of the contract. Thus, unlike its earlier engine contracts, the Navy withheld a percentage of the total contract price pending successful sea trials and imposed substantial financial penalties for engines that failed. Navy Sec'y Ann. Rep. 1854 at 393; Hackemer, The U.S. Navy & the Origins of the Military Indus. Complex at 6, 31, 53.

During March 1857, Congress appropriated \$1 million to the Navy to obtain five heavily-armed, shallow-draft, screw "sloops" better suited for coastal operations. The Navy awarded contracts for three sloop power plants to private firms and contracted with a civilian engineer to assist it with an experimental arrangement for a fourth to be built in the Navy's own yard. For the first time in over four decades, the Navy also contracted to have a warship's hull built by a private contractor. All of these contracts derived their basic structure from the 1854 frigate contracts and included paragraphs lifted verbatim. The Navy, however, made a key adjustment to the contracts to address a major problem facing a company awarded an engine contract – cash flow. Steam power plants were extremely expensive – the Merrimack's cost \$172,064 (a huge sum in 1854). Engine manufacturers did not possess that kind of capital. While the earlier contracts utilized graduated payments linked to work progress, a contractor needed to have "deep pockets" because it received only 60% of total contract price even when an engine was fully built. In the new contracts, the Navy attempted to alleviate some contractor financial pressure by providing for payment of 20% of total contract price at completion of \(\frac{1}{4} \), \(\frac{1}{2} \), \(\frac{3}{4} \), and the entirety of contract work with only the remaining 20% to be paid after machinery had performed successfully on a six-month, trial cruise. Thus, a contractor received a higher percentage of total contract price (80%) when an engine was complete and ready for trial under the 1857 contracts. Concerns that a contractor might default after substantial funds had been paid it were alleviated by including a new clause giving the Navy a lien on the uncompleted machinery and all material, and requiring the contractor to insure the power plant being constructed against fire. 11 Stat. 247; Hackemer, The U.S. Navy & the

Origins of the Military Indus. Complex at 14, 45, 48, n.9, 49, 51-54, 102-03; 1 Canney, The Old Steam Navy at 61.

Opinion shifted to support procurement of all arms by contract during the 1850s. Secretary of War Jefferson Davis, however, defeated an attempt to curtail manufacture at government armories and have the government obtain all its arms by contract. Secretary Davis thought both were needed. While he recognized private manufacturers were more likely to experiment with methods to lower production costs, he was concerned that they would be reluctant to consider new developments in arms due to the expense of retooling and argued armories established a standard for price comparison. Huston, *The Sinews of War: Army Logistics 1775-1953* at 115-18; Nagle, *A History of Gov't Contracting* at 89.

During June 1860, Congress extended the requirement purchases be advertised and competed to all government departments. It enacted a statute specifying that "[a]ll purchases and contracts for supplies or services, in any of the departments..., except for personal services, shall be made by advertising a sufficient time previously for proposals respecting the same, when the public exigencies do not require the immediate delivery of the articles, or performance of the service." 12 Stat. 103, 220; Wittie, Origins & History of Competition Requirements in Fed. Gov't Contracting 6-7, available at www. reedsmith.com/_functions/download.cfm?use_id=0&fde_id.

The Civil War in 1861 again brought efforts to mobilize the nation for battle. It resulted in mobilization on a scale unprecedented in the nation's history to date. The Union Army grew from 16,000 in 1861 to over one million in 1865. Prior production of arms had been in quantities of "thousands," but the War required production of "hundreds of thousands" of weapons and other items, such as clothes and shoes. The War Department had no reserves of clothing and equipment, other than some obsolete rifles. Often, formal advertising requirements were disregarded. As frequently occurs with rapid mobilization, profiteers and unscrupulous contractors missed few opportunities to take advantage of the haste. For example, J.P. Morgan, through an agent, purchased 5,000 obsolete guns from the government for \$3.50 each at auction before the War, which he later resold to General Fremont in St. Louis for \$22 each. These guns often exploded when fired, injuring the soldiers. Fraud often occurred in the purchase of horses and mules, which were needed in large quantities. Thousands of animals obtained by agents and subagents in the early months of the War at significant expense to the government were worthless. Established private contractors, such as Colt's Patent Fire Arms Company and du Pont, however, supplied gunpowder, artillery, and a large share of the arms required. Colt received 267 contracts at a total value of \$4,687,031. The government asked du Pont, which had developed a new powder providing superior firing power, to buy all saltpeter available in Britain and in transit from the British colony of India because saltpeter was (a) necessary to make the powder and (b) Britain was thought to be sympathetic to the Confederacy and unlikely to cooperate with the Union. Du Pont

sent Lammot du Pont on a secret mission to London where he obtained all saltpeter available with funds that ultimately were supplied by the government, and began producing gun powder 24-hours a day. It furnished more than 40% of the powder used by Union forces and, as a result of the War, stopped shipping powder to the South. After the Confederates raided and burned Harpers Ferry Armory, the Springfield Armory assembled 802,000 rifles from parts made by private contractors and industry produced another 670,000. Gies, The Ingenious Yankees at 274; Norman Wilkinson, Lammot du Pont & the Amer. Explosives Industry, 1850-1884, 60-61, 76-85 (1984); Nagle, A History of Gov't Contracting at 185-86, 195; Keeny, The Foundations of Gov't Contracting, J. of Contract Mgmt., Summer 2007, at 16-18; Huston, The Sinews of War: Army Logistics 1775-1953 at 176, 180, 186; Kreidberg, History of Mil. Mobilization in the United States Army 1775-1945 at 122; Hix, Rethinking Governance of the Army's Arsenals and Ammunition Plants 17 (2003), available at http://books.google.com/books; du Pont, E.I. du Pont de Nemours & Co., A History at 89, available at http://books.google.com/books; Engelbrecht & Hanighen, Merchants of Death at 31; David A. Armstrong, Bullets & Bureaucrats 9, 11 (Praeger 1982); Smith, Military Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society, 35; Risch, Quartermaster Support of the Army at 374-76; see generally Child, Pratt & Fox's Case, 4 Ct. Cl. 176, 187-96 (1868); The Stevens Case, 2 Ct. Cl. 95, 99-102 (1866); Fremont Contract Cases, 2 Ct. Cl. 1 (1866), rev'd, United States v. Morgan, 154 U.S. 565 (1869); United States v. Adams, 74 U.S. 463 (1868); H. Rep. 37-2 at 2, 34-37, 40-47, 749-94 (1861) (Select Comm. to Inquire into the Contracts of the Government).

The Navy was working with various ship and engine builders when the War began and promptly awarded 23 "90-day gunboat" contracts similar in form to its 1857 sloop contracts. Because there was an urgent need for the new vessels, the Navy included in the contracts a "standard design" for the boat, specified contractors were to "conform in all respects to the specifications and general drawings furnished," and set forth penalties for delay in boat completion. The Navy also included in hull contracts a unique clause allowing it to seize a hull that was behind schedule and have it completed at contractor expense. In sum, based upon its experience with prior contracts, the Navy once again refined contract language to address issues arising from the peculiar circumstances of the contract and of concern to it or its contractors. Hackemer, *The U.S. Navy & the Origins of the Mil. Indus. Complex* at 98-101, 105.

During June of 1861, the Confederate Navy began converting the captured *USS Merrimac* from a wooden vessel into an "ironclad" ship. In a report to a special session of Congress on 4 July, Gideon Welles, Secretary of the Navy, sought authority to build several ironclad ships if investigation proved them to be feasible. Congress granted that authority on 3 August. Welles published an advertisement dated 7 August calling for offers for "construction of one or more iron-clad steam vessels of war" and received 16 proposals. A Navy board reviewed the proposals and, on 16 September, accepted three, each with a different design. John Ericsson, who had designed the *USS Princeton*,

submitted one of the proposals for a self-propelled platform or raft with a revolving turret containing two guns. Ericsson had no capital to finance his proposed "ironclad," but entered into a partnership with leading figures in the New York iron industry, who agreed the men would share equally in any net profit or loss from this government contract and any future contracts for ironclad ships. Although Ericsson's contract stated he was to receive \$275,000 for his ironclad in installments of \$50,000, it provided 25% of each installment was to be withheld pending satisfactory completion and performance of the ship and, if the ship "shall fail in performance of speed for sea service...or in the security or successful working," he would refund the money paid him within 30 days. Ericsson and his partners organized a network of subcontractors comparable to what a 20th century contractor might use and, on 30 January 1862, the Union launched his vessel, the USS Monitor, just two weeks prior to the Confederacy launching its ironclad, the rebuilt Merrimac. Robert MacBride, Civil War Ironclads 8, 11-15 (1962); James P. Baxter, III, Introduction of the Ironclad Warship, 257-61, 265-66 (1933); Nagle, A History of Gov't Contracting at 213-16; see McKay v. United States, 27 Ct. Cl. 422-23 (1892).

In March of 1862, at the mouth of the James River at Hampton Roads, Virginia, the "ironclad" Merrimac rammed and sunk the 24-gun, wooden USS Cumberland, assaulted the 50-gun, wooden USS Congress with broadsides that caused a fire which reached the ship's powder magazine blowing the ship apart and killing more than 100 sailors, and forced the wooden USS Minnesota to run aground while trying to defend her sister ships. When President Lincoln's cabinet met in emergency session, Secretary Welles tried to calm fears by saying the *Monitor* was on its way to the scene, but no one knew if the vessel (which newspapers had referred to as "Ericsson's folly") could save the remaining Union ships and stop the Merrimac from proceeding up the East Coast and bombarding New York City and the Union into submission. While the Union Navy had fired 98 shots striking the *Merrimac*, none had penetrated her armor and disabled her. The following morning, when *Merrimac* returned to finish *Minnesota*, she encountered Monitor and a two-hour battle ensued. Most historians deem the battle a draw because neither could shatter the other's armor, but the ironclad Monitor had saved the Union and changed naval warfare forever. Several days later, on 14 March, the Navy paid Ericsson the \$68,750 it had withheld from his contract, allowing him and his partners to divide a net profit of \$79,857.40. Shortly thereafter, Congress appropriated over \$10 million to construct additional ironclads and, by June 1862, the Union was building 27 more such vessels. Baxter, Introduction of the Ironclad Warship at 267, 269, 290-95, 297, 303, 306; MacBride, Civil War Ironclads at 15, 22; Nagle, A History of Gov't Contracting at 218-19; Lawrence v. United States, 32 Ct. Cl. 245, 246-47 (1897).

The ironclad contracts the Navy awarded varied from earlier contracts due to the unique nature of the ships. Because no pool of shipwrights or contractors skilled in the art of ironclad construction existed, the Navy removed its clause allowing inspectors to reject materials and work due to "improper design." Whether a design was "proper" could not be known with certainty. The ironclad contracts also did not pay based upon

percentage of work completed, but upon the basis of contractor bills approved by the Navy's superintendent. The Navy agreed to reimburse 75% of bills approved with the remainder to be paid after completion and a satisfactory trial. Due to the uncertainties surrounding ironclads, the contracts further provided that "improvements of the form . . . suggested by either party, and agreed upon, shall be adopted as the work progresses." The Navy altered this term in later contracts to specifically provide for "adjustments to be made to total contract price" as a result of "alterations and additions to the plans and specifications at any time during" the progress of the work. While the Navy maintained close communication with all contractors, it also began to deal with them as a "collective group," establishing rules to be followed in all cases and using circular letters to set forth policy and communicate "uniform" decisions. Hackemer, *The U.S. Navy & the Origins of the Military Indus. Complex* at 84-85, 109–12, 114.

A bill in Congress during 1862 contained a clause providing for manufacture of powder by the government, but the idea of a government gunpowder works was dropped. During July 1864, the government owed du Pont for powder supplied a year earlier and, in October 1864, owed the company \$350,000 for Army purchases alone. Since saltpeter was selling only for cash and most items required for the manufacture of powder, such as labor, had to be paid in cash, du Pont was extending the government significant credit in its purchase of powder. Du Pont, E.I. du Pont de Nemours & Co., A History at 95, 98, available at http://books.google.com/books.

After the Confederacy's surrender in April 1865, the government moved rapidly to dismantle the nation's war effort. The Army demobilized and disposed of surplus items. Unserviceable animals and other property, along with property too expensive to transport to storage, were auctioned to the highest bidder for relatively low prices. Telegraph lines seized or built during the war were restored to their owners or turned over to the company owning the "telegraph patent right" for the territory. Railroads which had been operated by the military were also restored to their owners with no payment for use or charge for improvements made while under government control. The Navy cancelled contracts for items it no longer required and attempted to agree amicably with contractors on monies to be paid for their partial performance. Risch, Quartermaster Support of the Army at 456, 458, 460-61; Armstrong, Bullets & Bureaucrats at 3; see, e.g., United States v. Corliss Steam-Engine Co., 91 U.S. 321 (1876).

While refinement of arms had caused some changes in military tactics, the armies of the Civil War had differed little from those of earlier years. Moreover, despite a spate of inventions in the 19th century, including Hall's breech-loading rifle which could be loaded while a soldier was lying down not exposing the soldier to enemy fire, most field armies still used muzzle-loading rifles. Both sides ended the War with substantially the same type of arms with which they had started four years earlier. The reluctance of the Army to accept new weapons until after they had been tested, proved, and adopted by armies of one or more major European powers was the subject of criticism for years after

the War and indicated there may have been as much reluctance among military personnel to accept change in arms as Jefferson Davis perceived existed with private contractors. Armstrong, Bullets & Bureaucrats at 3, 4, 7; Green, Eli Whitney & the Birth of Amer. Technology at 141-42; Smith, Mil. Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society at 38-39.

The modern age of technology, however, made its first appearance during the Civil War. The Navy's ironclads were the first example of what we now call a "weapons system," where all components are designed to achieve optimum performance in terms of a system's stated mission or function. Inexpensive wrought iron, which was available due to the development of railroads, was used to protect a wooden ship powered by a steam engine from new heavy, long-range cannon, which did not need to punch a "hole" through a ship's wooden wall to destroy the ship, but could do so simply by having a shell burrow part way into a wall and then explode, exerting force in all directions that would splinter and usually set afire the wood. At its introduction, the ironclad was the most technically complex item ever procured by our government, requiring months to produce and having no commercial counterpart. The ironclad caused the government to develop a special contract clause, the Changes Clause, which is at issue in these appeals, and altered government procurement for decades. For example, in an 1861 contract, the Navy included a clause, section 16, providing:

It is further agreed, that the parties of the second part shall have the privilege of making alterations and additions to the plans and specifications at any time during the progress of the work, as they may deem necessary and proper, and if said alterations and additions shall cause extra expense to the parties of the first part, they will pay for the same at fair and reasonable rates; and should said changes cause less work and expense to the parties of the first part, a corresponding reduction to be made from the contract price, and in each case the cost of the alterations to be determined when the changes are directed to be made.

The Court of Claims enforced the clause, explaining:

When the contract for the construction of the [ironclad] was made, the specifications were doubtless as perfect as the knowledge of the subject then permitted, and it was then uncertain whether any alterations would be made, and therefore the time fixed by the contract for its performance was the time required for the construction of such a vessel as was then designed; and the evidence is that the time fixed was sufficient for that purpose. But an ironclad steam-battery was

then a novelty in naval construction, for the battle of the monitors in Hampton Roads in the previous summer, had made, as has been truly said, as sudden and complete a revolution in naval warfare as was made by the introduction of gunpowder; and this revolution required changes in almost every particular of that multifarious combination without parallel, which now makes a ship of war and fits her to struggle with the elements and with adversaries; and the effect of any change could be but imperfectly ascertained beforehand by science and forethought, and the evidence shows that changes from plans elaborated by naval engineers and constructors were continually demanded by the experiences of ironclads under fire in the service; and this accounts for the changes shown, that, according to the testimony, resulted in a different vessel from that originally designed.

McCord v. United States, 9 Ct. Cl. 155, 169 (1873), aff'd sub nom., Chouteau v. United States, 95 U.S. 61 (1877); MacBride, Civil War Ironclads at 1-3, 15; F. Trowbridge vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B.J. 305, 311 n.16 (1970); Nagle, A History of Gov't Contracting at 230.

While the Navy preferred to deal with experienced contractors, the demands of war forced it to experiment with smaller firms from west of the Allegheny Mountains. Many of those firms did not survive past 1865 and those that did abandoned the warship business. Hackemer, *The U.S. Navy & the Origins of the Military Indus. Complex* at 117. Between 1865 and 1867, ordnance disbursements dropped nearly 87%. Firms that had been encouraged and, in some cases hounded, to execute large contracts were faced with

The first reference to the legal concept of contract "changes" appears to have been in an 1818 musket contract entered into after Whitney advised Irvine he could not dictate changes in contract work. That contract stated that, if the Ordnance Department changed its musket model at the national armories to have barrels and bayonets finished a brown color and locks finished without polishing, the musket contractor "will conform to the directions...without claiming any extra compensation therefor" but "should any alterations...other than above mentioned, be decreed by the Ordnance Department, the [contractor] will be entitled to compensation for any extra expenses occasioned by such alterations." Ralph C. Nash, Jr., Government Contract Changes 13 (1975); accord F. Trowbridge vom Baur, The Origin of the Changes Clause in Naval Procurement, 8 Pub. Cont. L.J. 175, 177 (1976).

no further sales and high overhead costs for idle plant and equipment. While three arms manufacturers obtained contracts for breechloaders and several others agreed to convert older arms to breechloaders, there was insufficient work for an industry tooled to produce great quantities of weapons. Only 11 of 48 major arms contractors that were active during the Civil War continued in business after 1870. The others returned to prior pursuits (such as manufacturing textiles), applied manufacturing techniques to new products (such as sewing machines, typewriters, and bicycles), or went bankrupt from large debts. Some who continued as arms contactors did so by entering into contracts with foreign nations. Among those were Remington, Winchester, and two prior Colt employees (Pratt & Whitney). Nagle, A History of Gov't Contracting at 223; Smith, Military Arsenals & Industry Before World War I, in War, Bus., & Amer. Society at 24, 35-37.

The War Department first procured the Gatling gun, which was operated by a hand crank that rotated six barrels past a firing bed spewing 100 one-inch-caliber rounds per minute, in 1866. The weapon's inventor, Richard Gordon Gatling, transferred production of the gun from a Philadelphia arms maker to Colt shortly after contract award, securing backing of a large established firm with ample manufacturing capacity and giving the War Department extra assurance its contract would be fulfilled. Capital-intensive, high-technology competitors, like Colt and Remington, were generally too much competition for any relatively new firm. Nagle, A History of Gov't Contracting at 220-24; Armstrong, Bullets & Bureaucrats at 78.

While "land" had been the primary builder of wealth in the country, wealth was now generated by "capital" in the form of factories. Because one individual or even a small group of people usually could not provide the giant pools of capital required for such enterprises, the corporation (a business form allowing the pooling of substantial assets) developed for engaging in mass production. Nagle, A History of Gov't Contracting at 220, 222, 224-25; Smith, Mil. Arsenals & Indus. Before World War I, in War, Bus., & Amer. Society at 36-37.

Open market (negotiated) purchases dominated Civil War procurement, but the government returned to formal advertising after the War. On 12 November 1867, the War Department issued General Order No. 97, requiring that advertisement occur a reasonable time before opening so distant contractors could also compete for a contract. Nagle, A History of Gov't Contracting at 226.

After the government sold its excess Civil War gunpowder at auction, the "bottom fell out" of the industry, causing powder prices to reach low levels. In 1872, seven of the largest powder companies (including du Pont) formed the Gunpowder Trade Association (GTA). The 1873 economic panic and depression caused serious competitive pressures for manufacturers. There was ample supply, but limited demand. The GTA established a minimum price for members to sell powder. Independent manufacturers who would not

join the association had action taken against them by members – purchase of a sufficient part of their stock to exercise control over their policies or underselling of their powder at a price less than their cost. Du Pont possessed a majority of association votes, was given larger production and sales quotas than other members, and supplied the GTA's principal officers. By 1880, GTA was almost synonymous with du Pont. In sum, powder industry consolidation occurred through Du Pont lending badly needed capital to others and acquiring stock in or making a total purchase of their assets. Wilkinson, Lammot du Pont & the American Explosives Industry, 1850-1884 at 193, 226-27; du Pont, E.I. du Pont de Nemours & Co., A History at 101-11, available at http://books.google.com/books; Engelbrecht & Hanighen, Merchants of Death at 33-34; George, The Emergence of Indus. America at 81-82; Smith, Mil. Arsenals & Indus. before World War I, in War, Bus., & Amer. Society at 38-39; 7 Harold U. Faulkner, The Economic History of the United States, Decline of Laissez Faire 1897-1917, 172-73 (1961), available at http://books.google.com/books.

For more than a decade after the Civil War, while Britain and France were engaged in a naval arms race developing new technology in armor and ordnance, Congress did not appropriate funds for the Navy to obtain new warships. Preoccupied with reconstruction and believing the Navy should not build seagoing war vessels, but confine its role to a defense of the coastline, Congress primarily supplied monies to repair and maintain the Navy's existing ships. Because Navy vessels acquired during the Civil War were built under the stress of great emergency, they often contained unseasoned timbers, imperfect fittings and/or faulty machinery, and rapidly deteriorated. The ships therefore required large sums to be maintained. Navy Sec'y Ann. Rep. 1872 at 5-6; Kurt Hackemer, The U.S. Navy & the Late 19th-Century Steel Industry, 57 Historian 703 (Summer 1995); Charles Oscar Paullin, A Half Century of Naval Admin. in America, 1861-1911, 39 U.S. Naval Institute Proceedings, 1217, 1219-20, 1223-24 (1913), available at http://books.google.com/books.

Only a few American shipbuilders remained in business – seven according to one count. In 1871, with business slow and a desire to keep skilled personnel busy, John Roach, a major manufacturer of marine engines during the War who had purchased the Morgan Iron Works in New York and a shipyard in Chester, Pennsylvania, during the post-war slump, submitted a proposal to the Navy for refitting several warships with "compound" engines, asserting that the new engines would save space and reduce running costs by as much as 40 percent. The Navy awarded Roach an experimental contract for one engine refit, the *USS Tennessee*, which provided that Roach would receive \$300,000 plus the ship's original engines for scrap. While the contract resembled those used during the War, it recognized the need for contractors to have significant capital reserves to fund work over the life of a contract with only 6 to 8 work payments and specified 15 equal payments with reservation of only 16.66%, instead of 20 or 25% as in prior contracts. Hackemer, *The U.S. Navy & the Origins of the Military Indus. Complex* at 119, 121-24; Leonard Swann, *John Roach, Maritime Entrepreneur* 131-33

(1980); H.R. MISC. NO. 44-170, pt. 5, at 101-14, 116-30, 140-57 (1876); Nagle, A History of Gov't Contracting at 231.

Starting in 1872, the Navy began a thorough overhaul of 14 or more of its single-turreted monitors. It substituted iron beams for wooden ones, laid iron deck plates on the new beams, raised ship decks by six inches to increase freeboard and reconditioned the machinery. The Navy awarded William Cramp's shipyard in Philadelphia a contract on a time-and-materials basis for overhaul of the first of the monitors to establish a "standard" for the repairs. While it ultimately paid Cramp \$225,000 for the work, Roach offered to do the same work for \$180,000. The Navy accepted Roach's offer, furnished him four monitors to overhaul since he had two establishments, and insisted other shipbuilders match Roach's price if they desired to perform monitor work. The Navy subsequently sent two monitors each to William Cramp and Harlan & Hollingsworth for overhaul. As a cost cutting measure, the Navy Secretary (with approval of the House Committee on Appropriations) supplied the contractors with deteriorated Civil War vessels which were good only for scrap for the contractors to reroll the ships' iron into deck beams and plates for use in the overhaul. Swann, John Roach, Maritime Entrepreneur at 138; Navy Sec'y Ann. Rep. 1872 at 6; Paullin, A Half Century of Naval Admin. in America, 39 U.S. Naval Institute Proceedings 1225, available at http://books.google.com/books; Bennett, The Steam Navy of the United States at 628-29, 632-33, 647-48 (1896), available at http://books.google.com/books.

During 1873, the Spanish Navy intercepted a merchant ship flying the American flag, the Virginius, on suspicion of supplying the Cuban insurgency and a few days later summarily executed many of its crew and passengers, including a number of Americans and Britons, creating a diplomatic crisis and fears of war with Spain. This event, along with the fact that a Spanish ironclad coincidentally was anchored in New York Harbor, made Navy Secretary Robeson, a lawyer from New Jersey, and others recognize that the nation did not have a single ironclad in serviceable condition for defense of American ports. Faced with a possible war, the Secretary decided to build five new monitors and directed the work go only to those "who had extended experience in the detail of such work, abundant facilities for carrying it on, and large capital for its prompt and thorough completion." He awarded identical contracts to leading shipbuilders of the day – Harlan & Hollingsworth (Amphitrite), Phineas Burgess (Monadnock), William Cramp (Terror), and John Roach (Miantonomah and Puritan). The latter received two monitors because Continental Iron Works declined to accept the Puritan. While the contracts designated the work to be performed as "repairs" in order for the Navy to utilize funds appropriated for such work, they provided for building of a "new vessel." For each new monitor, there were three separate contracts: one for erection of iron frames for plating; another for the installation of hull and deck plates; and one for manufacturing of machinery. Further, the Navy supplied each shipbuilder with three tons of scrap iron for every ton of fabricated iron needed to build a monitor, which included the ship supplying the name for the new monitor. Swann, John Roach, Maritime Entrepreneur at 141; H.R. MISC. DOC.

No. 45-21 at 129-40 (1878); H.R. REP. No. 45-787 at I-VII, 165-68, 170 (1878); Paullin, A Half Century of Naval Admin. in America, 39 U.S. Naval Institute Proceedings at 1217, available at http://books.google.com/books; Hackemer, The U.S. Navy and the Origins of the Mil. Indus. Complex 1847-1883 at 125; Myerle, Executor of Phineas Davis v. United States, 31 Ct. Cl. 105, 131, 134-35 (1896).

Secretary Robeson used part of the \$4 million Congress appropriated for expenses the Navy incurred during the *Virginius* crisis to pay for overhaul of single-turret monitors but did not possess sufficient funds to pay contractors as they completed their work. The Navy offered the contractors a choice -(A) wait to be paid until future appropriations allowed or (B) receive from the Navy scrap metal credited at the value of one ton of new iron plate for every three tons of old iron received. Many firms, including John Roach, chose the latter. Roach did so because he was short of operating capital due to large expenditures to equip his shipyard and rolling mill, and interested in quickly recovering operating capital involved in the monitor overhauls. He probably received more scrap than any other Navy contractor because he was the only one who could use it as raw material within his own works since he also owned the Chester Rolling Mill. While Secretary Robeson obtained approval from the House Appropriations Committee to use nearly \$1 million in monies appropriated for a dock to build new monitors, those funds were not sufficient to pay for even erection of the five frames. To keep work on the monitors continuing, Secretary Robeson again sent the Navy contractors old Civil War vessels as scrap iron. In his annual report for 1876, he asked Congress for \$2.3 million to complete the new monitors, but it did not appropriate the monies requested and all work ceased on the vessels (with the exception of the nearly complete Miantonomah). The result was that the shipbuilders not only had operating capital devoted to a monitor on which no progress was being made, but also a monitor frame occupying one of their building ways. Swann, John Roach, Maritime Entrepreneur at 139, 141-44; H.R. MISC. Doc. No. 44-170, pt. 3, passim; pt. 5, 542-43, 662; H.R. Misc. No. 45-21 at 137-38 (1878); H.R. No. 45-787 at I-VII, 165-67, 170 (1878); Navy Sec'y Ann. Rep. 1876 at 7-8; H.R. MISC. NO. 45-63 at 128 (1878); Bennett, The Steam Navy of the United States at 629, available at http://books.google.com/books; Myerle, 31 Ct. Cl. at 131-32; Nathan Miller, The U.S. Navy: A History 145 (1977); see Steele v. United States, 19 Ct. Cl. 181 (1884), aff'd, 113 U.S.128 (1885).

A crusading newspaper editor attacked Robeson and Roach repeatedly concerning award of the compound engine contract, using the phrase "Roach, Robeson, robbers," and caused the first of four congressional investigations of Robeson. The editor did not prove his charges of corruption concerning the contract, even though he was given the unusual privilege of questioning witnesses at the congressional hearings. Roach's competitors, however, who often were unable to match his prices since his shipbuilding business was the only one "vertically integrated," i.e., involved in every aspect of ship construction from raw materials to distribution, frequently repeated the charges and advanced others, accusing Roach of stealing scrap from the Navy by providing incorrect weight receipts

for amounts received or sneaking into Navy yards after hours and loading scrap onto barges. Congress, which was controlled by the opposing political party for much of Robeson's tenure, generated nearly 6,000 pages concerning his award of Navy contracts, which revealed that the Secretary had benefited financially from "gifts" made to him by a supply contractor named Cattell, but demonstrated no impropriety on the part of Roach despite a thorough investigation of all allegations concerning him. The award of Navy contracts became a major political issue in the presidential campaign, but no action was taken against the Secretary. Two days before the new Hayes administration assumed office, Robeson directed award of the third monitor machinery contract to each of the new monitor contractors, stating that the "contractors are to do their work...and accept[] for their pay, such appropriations as may be made by Congress therefor." Paullin, A Half Century of Naval Admin. in America, 39 U.S. Naval Institute Proceedings at 1217, 1128-32, available at http://books.google.com/books; Swann, John Roach, Maritime Entrepreneur at 125-38, 140-41, 143-44; H.R. MISC. No. 44-170, pt. 5, at 140-57, 152-53, 365-70, 378 (1876).

The new Navy Secretary, a lawyer from Indiana, suspended all monitor machinery contracts. He thought the award of a contract without appropriations to pay for it was illegal under 16 Stat. 251, objected to building a new vessel under the misnomer of "repairs," and believed the exchange of scrap iron for new material violated the act of May 7, 1872, providing for public auctioning of surplus Civil War goods. Swann, John Roach, Maritime Entrepreneur at 147-48; H.R. REP. No. 45-787 at I-VII; Paullin, A Half Century of Naval Admin. in America, 39 U.S. Naval Institute Proceedings at 1227, available at http://books.google.com/books; see Steele v. United States, 19 Ct. Cl. at 197-98.

By 1880, few serviceable ships remained in the Navy. Much of the fleet was obsolete – slow wooden ships with smooth bore guns. Some ships were so unseaworthy they rarely departed port. European navies were deemed far superior to that of the United States, which had pioneered the ironclad. The nation's press routinely ridiculed the Navy for running aground or colliding with civilian vessels. Congressmen also made fun of the Navy. 14 Cong. Rec. 1410 (1883) ("worn out, slow in speed, feeble in offensive power, even in the power of running away from danger"); 15 Cong. Rec. 1623, 1974, 48th Cong., 1st Sess., 2nd sess. ("alphabet of floating washtubs," a "marine Falstaffian Burlesque," and a "cruel national joke"); 14 Cong. Rec. 1416, 47th Cong., 2nd sess. (1883) (Navy not comparable to that of "the smallest power of Europe"); Benjamin Franklin Cooling, *Gray Steel & Blue Water Navy. The Formative Years of America's Military-Industrial Complex 1881-1917*, 18-21 (1979); Bennett, *The Steam Navy of the United States* at 772, available at http://books.google.com/books; Swann, John Roach, Maritime Entrepreneur at 153; Miller, The U.S. Navy: A History 144; Nagle, A History of Gov't Contracting at 231.

When William Hunt, a judge of the U.S. Court of Claims, became Secretary of the Navy under President Garfield in 1881, he appointed an advisory board to report on ships to replace the existing fleet, which proposed that 68 vessels be built at once and an 8-year construction program totaling 116 ships, including 18 cruisers armored with steel. While Briton and France had been using steel armor and large caliber guns for warships, there was no source of supply in the United States for such items, and their manufacture was very expensive and deemed ill adapted for commercial purposes. While the steel industry in the United States had expanded rapidly to satisfy demand from railroads and industry, the steel it produced was "mild," not "hard" steel required for warships. If the Navy wished to build and maintain a fleet of steel warships, American business would have to make significant investment in steel plants and shipyards, i.e., finance long-term capital improvements. In sum, while the Navy had used the nation's contractors to adapt steam technology for its purposes and bring it into the age of steam-powered warships, there were no armor-plate or large-caliber gun contractors in the nation it could rely on for the latest technology in warships. Wilbur D. Jones, Jr., All-Steam, All-Steel: White Squadron to Great White Fleet, 22 Program Manager 2-3 (Nov.-Dec. 1993); H.R. EXEC. DOC. NO. 47-32, 2-3; Perret, A Country Made By War at 274-75; Nagle, A History of Gov't Contracting at 230-31; Robert Hessen, Steel Titan; The Life of Charles M. Schwab 42-43 (Oxford U. Press 1975); Bennett, The Steam Navy of the United States at 772-75, available at http://books.google.com/books; Swann, John Roach, Maritime Entrepreneur at 152-54, 158; Miller, The U.S. Navy: A History at 148-49, 151; Lawrence Burr, US Cruisers 1883-1904: The Birth of the Steel Navy 8-9 (Osprey Publishing 2008).

In August of 1882, Congress authorized construction of only two ships. It did not, however, appropriate any funds for construction. Instead, it prohibited the Navy from spending funds to repair wooden ships if the estimated cost of such repair was in excess of a specified percentage of the cost to build a new ship of the same size and material, and specified that the money the Navy saved was to be spent to construct the "two steam cruising vessels of war" made of steel it authorized. Congress also established a new Naval Advisory Board to advise and assist the Secretary in all matters "relative to the designs, models, plans, specifications, and contracts for said vessels" and report as to "the wisdom and expediency" of completing work upon the four new monitors begun by Secretary Robeson, whose building had languished for years. The second advisory board proposed a more realistic plan to commence rebuilding of the Navy, recommending the acquisition of only three "steel-protected" cruisers and a dispatch boat. A "steel-protected" cruiser was not a fully-armored vessel like those produced abroad. They did not have side armor but simply an armor-plate deck to protect engine spaces and lower levels from damage. American steel mills could not then roll plates suitable for cruiser hulls. The advisory board thus recommended the Navy commence its rebuilding with ships that were not state of the art. It also recommended resumption of work on the monitors. 22 Stat. 291, 293; 22 Stat. 472, 474, 476 (Mar. 3); Jones, All-Steam, All-Steel, 22 Program Manager at 3-4; Bennett, The Steam Navy of the United States at 775-77, 781-82, available at http://books.google.com/books; Swann, John

Roach, Maritime Entrepreneur at 174-75; H.R. EXEC. DOC. No. 47-28, pts. 1 and 2 ("Completion of Double Turreted Monitors") (1883); Hessen, Steel Titan at 42-43; Nagle, A History of Gov't Contracting at 231; Miller, The U.S. Navy: A History at 149-50; Perret, A Country Made By War at 274-75; Myerle, 31 Ct. Cl. at 135; H.R. Ex. DOC. No. 46-82, pts. 1 and 2 (1880); Navy Sec'y Ann. Rep. 1884 at 30-31, Rep. 1883 at 6-9.

President Arthur's Secretary of the Navy, William Chandler, urged American steelmakers to build plants for producing gun forgings and thick steel armor plate to protect ships, but they did not believe peacetime purchases would be of sufficient size to justify the start-up expense that they would incur. They could observe the monitors languishing in shipways for lack of funds and sought to avoid the heavy investment of capital necessary for machinery when orders appeared dependent on the budgetary whims of Congress. Chandler had to procure armor and ordnance to complete the Miantonomah from England, a situation deemed untenable by many Navy officials and politicians. He stated that, "[i]n view of the large amount of compound armor or of steel armor which will be required for the completion of the four other monitors, it is desirable...Congress should in some way encourage its manufacture in this country." During March 1883, Congress appropriated \$1.3 million to build the four vessels recommended by the new board (Atlanta, Boston, Chicago and Dolphin), which became known as the "ABCD" ships. With support of former Secretary Robeson, who had been elected a congressman from New Jersey, Congress also appropriated funds for installing machinery in the four monitors partially built. It additionally authorized appointment of another advisory board consisting of both Navy and Army officers to issue a report concerning the navy yard or arsenal deemed best for establishment of a "government" foundry and other possible means that the nation might employ to obtain the manufacture of heavy ordnance. 22 Stat. 477; Swann, John Roach, Maritime Entrepreneur at 175; Hessen, Steel Titan at 42; Nagle, A History of Gov't Contracting at 232; Cooling, Gray Steel & Blue Water at 40 & n.13; Myerle, 31 Ct. Cl. at 136; 22 Stat. L. 472, 474, 476, 477; Navy Sec'y Ann. Rep. 1884 at 9-11, Rep. 1883 at 3-4, 52-55.

John Roach, the only shipbuilder having an infrastructure already in place to roll steel plates and machinery to erect such plates, submitted the lowest bid on each of the ABCD ships and received all of the contracts. At the time, Roach was the largest and most productive shipbuilder in the country. He had been on the "cutting edge" of naval technology in America for years, serving as contractor for machinery on five Civil War ships and subcontractor for machinery on six others, and after the War constructing the machinery for 12 Navy ships, rebuilding four others, and supplying power plants for the USS Tennessee and Ranger. In sum, Roach had performed successfully under various Navy contracts and appeared an excellent contractor to build the ABCD ships. Roach's dispatch boat (Dolphin) contract included the same terms as his cruiser contracts and varied only in time allotted for completion and engine horsepower. It required supply of a bond guaranteeing performance and provided for payment to be made in 10 equal

installments as work progressed with 10% being withheld until commissioning of the ship (plus an initial withholding of \$8,000 releasable four months after the ship was in service). Lack of experience in preparing drawings and specifications during the prior decade, however, resulted in the Navy making mistakes in preparing the Dolphin plans. The advisory board ordered 50 changes in contract plans, nearly half of which required Roach to rip out work already completed and to rebuild. Other problems also plagued construction of the *Dolphin*. Navy inspectors rigidly enforced a requirement the steel plate have a minimum ductility, rejecting 16.6% of the heats by two companies retained to supplement Roach's own production. The plate subcontractors refused to honor their subcontracts due to the inspectors' actions, causing Roach to operate his own production facilities at full capacity 16 hours a day. Swann, John Roach, Maritime Entrepreneur at 151-52, 178-79, 181-83, 189-208; S. EXEC. DOC. No. 49-153 at 20-25 (Dolphin contract) (1886); Bennett, The Steam Navy of the United States at 777-82, available at http://books.google.com/books; Nagle, A History of Gov't Contracting at 232; Cooling, Gray Steel & Blue Water at 37-38, 51; Navy Sec'y Ann. Rep. 1884 at 3-4, 7, Rep. 1883 at 3-4, 56 (list of bids on ABCD vessels), at 57-60 (Chicago contract), at 61-62 (steel tests), at 63-67 (Boston contract, which was identical to Atlanta contract), at 69-72 (Dolphin contract); Miller, The U.S. Navy: A History at 150; Hackemer, The U.S. Navy & the Origins of the Mil. Indus. Complex at 128.

After surveying industry and traveling abroad to inspect sources of manufacture relied upon by Britain, France, Russia, and others, the Gun Foundry Board prepared a detailed report concluding:

The Board does not recommend the establishment of a Government foundry...which shall provide for the manufacture of steel and the fabrication of cannon. It considers that every inducement should be offered to attract the private industries of the country to the aid of the Government in providing ordnance for the Army and Navy, and that the steel manufacturers should be called upon to provide the material.

The report explained:

At present the steel manufacturers of our country are not prepared to produce the material required for the larger calibers, and the important question arises, what means shall be adopted to induce them to study the subject and embark in the manufacture on a large scale. They cannot be expected to do this as a sacrifice of their own interests. This object can only be achieved by holding out a fair prospect of ultimate

remuneration for the expenditures necessary to undertake the work, and this can only be done by the action of Congress.

If, then, Congress shall conclude to arm the country it will be necessary that a sum of money shall be fixed as a permanent yearly appropriation to be expended for this purpose.... With such a guarantee against loss the Board is satisfied that the required material for cannon will be forthcoming from our own steel works.

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It may be added that although the manufacture of armor plates for ships and fortifications was not referred to this Board for investigation, the erection of plant for providing modern cannon would go far towards reducing the outlay requisite to enable our great steel manufacturers to meet another pressing want of the Government.

The Board noted there were two possible methods to induce private firms to invest heavy capital outlays for a plant capable of producing heavy forgings. The nation could grant outright subsidies, as suggested by Hamilton a century earlier, or provide the necessary machinery to industry, as occurred in Russia and Briton. Alternatively, Congress could specify annual appropriations for ordnance procurement, as it did in the 1808 militia arms act. The board viewed the latter as the best method and urged that Congress establish set appropriations. Rear Adm. E. Simpson et al., Report of Gun Foundry Board reprinted as H.R. Exec. Doc. No. 48-97 at 48-49 (1884), available at http://books.google.com/books; Cooling, Gray Steel & Blue Water at 43-47.

After the presentation of this report, the Senate passed a resolution providing for appointment of a Select Committee to investigate the issues addressed by the board. The committee thereafter surveyed American industry and foreign manufacturers, and issued its own report concurring with the conclusions set forth by the Gun Foundry Board. The Committee stated that "armor plate and engines should be obtained wholly from private manufacturers"; "all needed private capital is ready for cheerful cooperation with the Government in whatever it may require;" "[p]roposals for armor and guns should require such quantities and extend over such a series of years as to justify private persons in securing the best plant"; and "only the guaranteed bids of persons having capital and experience should be considered" for such work. S. REP. No. 49-90, XIII, XXX (Select Comm. on Ordnance and War Ships Report), available at http://books.google.com/books; Cooling, Gray Steel & Blue Water at 48; Navy Sec'y Ann. Rep. 1884 at 30-31.

In the election of 1884, the political party controlling the Presidency changed for the first time since the Civil War and President Grover Cleveland appointed a wealthy New York lawyer, William C. Whitney, as Secretary of the Navy. Three days after the Secretary was sworn into office, the *Dolphin* completed a six-hour trial voyage. The Navy used an inferior coal as fuel, but the vessel developed an average horsepower of 2,118 and speed of 15.11 knots, pleasing the advisory board, which recommended the ship be officially received. Whitney questioned the wisdom of the recommendation and desired another trial, releasing the text of his request for a second trial to the newspapers before it was received by John Roach. Whitney believed his task was to "clean up" the Navy Department and used the ABCD contracts to launch a probe of prior departmental affairs. During a subsequent trial, the Dolphin obtained a speed of 15.5 knots and 2,240 horsepower. Whitney did not release the results of this trial to the newspapers. Instead, he said the new trial was to have been conducted on a stormy day with heavy seas, and the orders for the trial were given in his absence and a mistake so the trial was valueless. Shortly thereafter, Whitney asked the Attorney General for an opinion on the duties of the Navy regarding the Dolphin contract and the Attorney General promptly issued an opinion declaring the contract invalid. Acknowledging that the contract contained no "express covenant" as to ship speed, but simply clauses which bound the Navy to accept the ship on approval of the Advisory Board and provided that, even if the engines failed to maintain a horsepower of 2,300, the Navy-designed ship would be accepted if failure was not owing to defective workmanship or materials, he concluded the Navy was only authorized to enter into a contract requiring the vessel maintain a speed of 15 knots. He added that, since no contract existed with Roach, the large sums of monies the Navy paid him may be recovered. 18 Op. Atty. Gen. 207, 1885 U.S. AG Lexis 43, *14; Swann, John Roach, Maritime Entrepreneur at 209-25; Cooling, Gray Steel & Blue Water at 48, 51, 55, 57; Hackemer, The U.S. Navy & the Origins of the Military Indus. Complex at 130; 1 Navy Sec'y Ann. Rep. 1884 at 3-4, 232-33.

Roach was anxious to have the Navy accept the *Dolphin* and release the balance owed him because he was short operating capital due to: having \$556,910 invested in labor and materials for the four contracts; delays in building the *Dolphin* that prolonged the period he waited for payment after purchasing or fabricating materials; fire damage at his shipyard not covered by insurance; two shipwrecks which had caused the value of his stock in a mail steamship company to plunge and creditors demand he repay their loans since their steamship stock collateral was no longer sufficient; and a tight money market from the depressed conditions of 1884. With the Attorney General opinion also casting doubt on the validity of the other Navy contracts and indicating legal action to recover monies already paid, Roach (who was ill with cancer) felt he had no choice but to place his firm in "receivership," i.e. "bankruptcy." While Roach was the most technologically advanced shipbuilder of the era and among the firms surveyed about manufacture of steel armor, the government (as in earlier eras) did nothing to help alleviate Roach's operating capital problems even though it desired establishment of a domestic armor manufacturing capability. Thus, Roach's efforts to build a vertically-integrated firm that was capable of

constructing warships more efficiently than others were for naught. Hackemer, The U.S. Navy & the Origins of the Mil. Indus. Complex at 130; Swann, John Roach, Maritime Entrepreneur at 125-234; Leon Burr Richardson, William E. Chandler: Republican 302-04, 369-80 (1940); Hackemer, The U.S. Navy & the Late 19th-Century Steel Industry, 57 Historian 710.

Work on the ABCD ships ceased. Whitney wanted to complete the ships at a Navy Yard, but discovered none possessed the tools and facilities needed. As a result, Whitney took possession of Roach's Shipyard and works, assigning officers to manage the civilian laborers and direct construction, until the ships were complete. The Roach heirs subsequently filed suit in the Court of Claims concerning the Secretary's actions, but Congress passed a special relief bill for them before the Court ruled. Although the ABCD ships remained a topic of debate for years, they mark the beginning of the nation's transition to an "all-steel" Navy and are deemed the birth of the "New Navy." Swann, John Roach, Maritime Entrepreneur at 230, 234; Roach v. United States, 33 Ct. Cl. 519 (1898); Jones, All-Steam, All-Steel: White Squadron to Great White Fleet, 22 Program Manager, Nov.-Dec. 1993 at 4; Burr, US Cruisers 1883-1904: The Birth of the Steel Navy at 11.

Bethlehem Iron, suffering from an anemic market for steel rails and seeking to diversify, sent Joseph Wharton, a principal stockholder, to Europe during spring 1886 to confer with Henri Schneider of Creusot, France, and Joseph Whitworth of Sheffield, England. Wharton thought an alliance with a European company was the quickest and cheapest way to commence making structural steel, armor plate and heavy forgings in America. He hoped to corner the American market by acquiring European patent rights, machinery and technical assistance, and knew that Secretary Whitney preferred the type of armor and forgings that could be supplied only by Schneider and Whitworth from his private communications with Whitney. Wharton subsequently procured the rights and technical data from Schneider to make its armor in America in exchange for a share of profits on the armor. With assistance from a Navy Lieutenant, Wharton also purchased an open-hearth plant, machinery, and patent rights from Whitworth. Whitney was aware fully of these actions, but they were not known by other steelmakers. Cooling, *Gray Steel & Blue Water* at 66-69, 74-75; Engelbrecht & Hanighen, *Merchants of Death* at 52.

During 1886, Andrew Carnegie, principal owner of the largest steel works in the nation, sent Charles Schwab, a young protégé, to visit steel mills in Europe to examine their blast furnaces and rolling mills. Carnegie did not wish to use the Homestead plant he recently acquired in the economic downturn to expand his production of rails but to produce "structural steel." He anticipated that there would be increased demand for steel beams to construct multi-story structures and wished to have the ability to produce such beams with an open hearth. While Schwab reported that the open hearth process was not simple or able to achieve uniform results because no one knew how to control fully the (a) chemical reaction taking place in the furnace, (b) rate at which an ingot cooled, or (c)

congealing of impurities, Carnegie decided to invest significant capital to transform the Homestead works to an open hearth facility and appointed Schwab as Homestead's new general superintendent. Hessen, *Steel Titan* at 29-30; 43; Joseph Frazier Wall, *Andrew Carnegie* 533 (Oxford U. Press, NY 1970); Cooling, *Gray Steel & Blue Water* at 24-31, 72-73; Melvin I. Urofsky, *Big Steel and the Wilson Admin: A Study in Business-Gov't Relations* 88 (Ohio St. U. Press 1969).

In early August 1886, Congress enacted legislation authorizing \$1 million to obtain ordnance and the purchase of two "armored" cruisers (Maine and Texas), and specifying that material for all new vessels (except shafting) must be domestically made. 24 Stat. 215-17. Secretary Whitney promptly issued a circular which solicited bids for 1,310 tons of gun forgings and 4,500 tons of armored steel. The circular provided that preference would be shown to those who bid both on forgings and armor. Whitney then corresponded with the nation's steelmakers, urging them to engage in manufacture of armor and gun forgings, stating the Navy would allow "sufficient time for the successful bidder...to take the necessary steps in the way of creation of plant and initiating the manufacture." Carnegie responded that the machinery being erected at Homestead could make armor, but expressed concern about Navy specifications and inspectors. Carnegie believed manufacturers needed flexibility to do whatever was required to produce armor of a high quality, the inspectors abroad knew variations existed in armor and allowed for them, Navy inspectors often insisted on "technical points to an absurd degree," and he wished to deal with "practical men" who realized armor had variables and were prepared to allow for them. In response to its circular, the Navy received only four bids – one for armor from Cleveland Rolling Mill, two for forgings from Cambria Iron and Midvale Steel, and one for both armor and forgings from Bethlehem. Carnegie declined to submit a bid, asserting that the contract would entail excessive cost, few rewards, and too many "headaches." The Navy awarded the \$4 million contract to Bethlehem. Whitney rejoiced that the cost of armor and gun steel acquired was within 20 percent of the prices charged by Europeans. No one thought the prices bid excessive since Bethlehem was investing \$3.5 million in its plant and the contract price seemed necessary to realize a fair return upon investment. Cooling, Gray Steel & Blue Water at 64-69, 71-76, 83; Hessen, Steel Titan at 43-44; Miller, The U.S. Navy: A History at 151; Nagle, A History of Gov't Contracting at 230-31, 233-35.

While Congress continued to appropriate funds for additional armored vessels, Bethlehem experienced problems relocating an entire English steel plant to Pennsylvania. The presidency changed hands in 1889 and William Tracey, a New York judge and Civil War general, became Navy Secretary. He found the Bethlehem plant would not be ready by the contractually specified date, the projected delay in delivery of armor was affecting completion of the *Maine*, and Bethlehem was now promising armor would be delivered between June and December 1890. In May 1890, when the Secretary further found no deliveries of armor were likely to occur for another 15 to 18 months and his Navy ship construction programs were all facing indefinite delay, he offered an armor contract to

Carnegie, who was then in a position to deliver armor more than a year ahead of any other American steelmaker due to the Homestead operation. After a personal plea from the President, Carnegie agreed to deliver 6,000 tons of ordinary or "nickel-steel" armor at the same unit price set forth in the Bethlehem contract starting in June 1891. At an armor plate test requested by Tracy in September 1890, to the dismay of English plate makers and astonishment of munitions experts, only "harveyized" nickel-steel plate completely stopped the test rounds. The Navy, accordingly, decided nickel steel was the armor plate it truly desired, immediately secured a source of supply of nickel, and signed a contract with Augustus Harvey to use his process to harden the surface of steel. During December of 1890, Carnegie's Homestead works successfully produced the first nickel steel in the United States. With Bethlehem appearing unlikely to deliver armor before summer 1892, Tracy successfully established a second source of armor plate for the Navy. Cooling, Grav Steel & Blue Water at 93-96, 98, 101; S. REP. No. 54-1453 at 143-45 (1896) (Prices of Armor for Naval Vessels), available at http://books.google.com/books; Navy Sec'y Ann. Rep. 1892 at 14-17, 19-20, Rep. 1891 at 10-12, Rep. 1890 at 17-21; David Nasaw, Andrew Carnegie 381(Penguin Press 2006); Engelbrecht & Hanighen, Merchants of *Death* at 53-55.

Congress expressed its displeasure with Tracy's failure to advertise for bids on the additional ship armor. It included in the Navy's 1891 appropriation bill a clause that "no contract for the purchase of gun steel or armor for the Navy shall hereafter be made until the subject matter of the same shall have been submitted to public competition by the Department by advertisement." Bethlehem's delay in armor plate deliveries, however, continued and increased. Tracy told Bethlehem its deliveries had not approached 600 tons total and, at the present delivery rate, it would require three additional years to complete its contract. Cooling, *Gray Steel & Blue Water* at 100-01, 103; 27 Stat. 731-32.

During 1892, the union at Homestead demanded (in part) a 100% raise in worker pay for all nickel steel, which it claimed was more difficult for workers to make. While union leaders thought they could succeed with their demands due to government pressure on management to complete the armor contract, Carnegie stockpiled unfinished armor plates during the first half of 1892, undercutting the union's strike threat. In July 1892, although the majority of workers at Homestead were non-union, one of the more violent strikes in American history occurred. Management closed the plant for two weeks at the expiration of the union contract and announced it would replace those who did not return when the plant reopened. A 12-hour bloody battle began when 300 Pinkerton Guards arrived by barge to protect both the plant and "replacement" workers, resulting in several deaths. An unsuccessful attempt was also made to kill Henry Frick, a partner of Andrew Carnegie's and co-owner of the plant. Pennsylvania's Governor sent 7,000 militia men to town for several months to ensure peace. The union strike fund became depleted during fall 1892 and many strikers returned to jobs at the plant. Management thereby defeated the union, ousting it from the plant. Schwab, who had been promoted to superintendent of Carnegie's largest steel plant three years earlier at the age of 27, at

Carnegie's request, returned in October 1892 to replace the superintendent who ran Homestead during the strife. Hessen, *Steel Titan* at 30, 35-39; Wall, *Andrew Carnegie* at 531-33, 542-44, 546-48, 550-63, 579.

At the end of 1892, Carnegie Steel Company had a capitalization of \$25 million and was the largest steel company in the world. It satisfied fully its armor plate contracts of 1890, 1891, and 1892. Bethlehem, however, had not yet completed one of its armor contracts. Both companies were averaging about 280 tons of armor per month without penalties, but only Carnegie was earning "premiums" from the Navy for its side armor. Wall, *Andrew Carnegie* at 535, 537, 583; Cooling, *Gray Steel & Blue Water* at 115.

The presidency again changed. Grover Cleveland regained the White House and he appointed Hilary Herbert, a longtime Senator from Alabama, as his Navy Secretary. During September 1893, a Pittsburgh attorney told Herbert he represented employees of Homestead who had information regarding acts of armor fraud they would furnish the Secretary if given a financial reward. After consulting the Attorney General, Herbert agreed to pay the men 25% of any damages assessed against the Carnegie Steel Company and appointed a three-man board of inquiry. The men told the board, which conducted its proceedings in secret, Carnegie had plugged blow holes in plate, concealing them from inspectors, and re-treated specific plates Navy inspectors selected for testing without the knowledge of inspectors, making them better than others that were produced at the same time. Although blowholes are present in all steel plates, do not indicate weakness, and routinely are plugged to make a smooth surface, and the plates at issue (including those not re-treated) met the contractual minimum standard (except three which simply would be rejected by inspectors), the board found Carnegie to be guilty of fraud because it was receiving a "premium" for "superior work." The Secretary announced he was levying a fine of 15% of the price of all armor Carnegie sold during the period (2 November 1892, to 16 September 1893) and the press had a field day with that news. Andrew Carnegie believed the board to be "nothing more than a kangaroo court." He wrote the President that "[w]e have been accused, tried, found guilty and sentenced without ever having been heard." He asked that the firm be tried by a court, stated "Mr. Schwab and others" were "as incapable of attempting to defraud the government as the Honorable [Navy] Secretary himself," and reminded the President the firm had "[s]pent millions [of dollars of capital], subordinated every branch of [its] business to the Government's needs," and succeeded in "deliver[ing] the best armor ever made" within a year while another failed to deliver armor for years and "ships stood on the stocks." Schwab came to Washington to defend himself and his employer. He acknowledged some irregularities but denied a conspiracy to defraud the Navy. President Cleveland did not agree with Carnegie, a contributor to the opposing political party, that the firm should receive a court hearing. Although the President admitted the technical intricacies were beyond him, he concluded that Carnegie had defaulted on its Navy contract because a "large portion of the armor supplied was not of the quality which would have been produced if all possible care and skill had been exercised." The President, however, reduced the fine imposed to 10% or about \$140,000. Secretary Herbert also publicly praised the general quality of Carnegie's armor and stated publicly both the Navy and company could learn from the experience. Neither Carnegie nor the informants were happy. Carnegie demanded the Navy refund the fine, asserting the firm was the victim of unscrupulous employees. The informants asserted the Navy was covering up to protect the company. The House Naval Affairs Committee started its own investigation and, after more than 900 pages of testimony, determined "manifold frauds" had occurred. No criminal or civil charges of fraud, however, were ever filed. The principal result of this highly publicized matter was that Carnegie removed Schwab from responsibility for armor production to quell the uproar. Cooling, *Gray Steel & Blue Water* at 104, 117 n.7, 118; Navy Sec'y Ann. Rep. 1894 at 22; Hessen, *Steel Titan* at 44, 47-49; Nagle, *A History of Gov't Contracting* at 237-38; Nasaw, *Andrew Carnegie* at 466-68; Wall, *Andrew Carnegie* at 649-50; Hackemer, *The U.S. Navy & the Origins of the Mil. Indus. Complex* at 1-3, 9.

During 1892, the Army chose a new rifle, which used 30-caliber ammunition. This was the third change in caliber since the Civil War. While the Army used 50-caliber ammunition after the War, it switched to 45-caliber in 1873. Gatling said it cost his firm \$500,000 to replace equipment that changes in rifle caliber rendered useless. More than 13 new models of the Gatling gun also appeared from 1870 to 1900. Frequent changes in model meant short production runs and outmoded machinery, which kept the gun's cost high. Despite the cost, however, the Gatling remained the standard Army machine gun until 1903. Armstrong, Bullets and Bureaucrats at 78-79; Nagle, A History of Gov't Contracting at 224.

In 1893, after constructing experimental laboratories and performing over two years of development work, du Pont created "smokeless" powder which it sent to the different cartridge factories for testing. During the following six months, Du Pont made major changes in its method of manufacturing the powder, installed new machinery and buildings for powder manufacture, and was making a very fine grade which was deemed in every way to be better than the first. Du Pont, E.I. du Pont de Nemours and Company, A History at 146-47, available at http://books.google.com/books; Alfred D. Chandler & Stephen Salsbury, Pierre S. du Pont & The Making of the Modern Corp. 34-35 (Harper & Row 1971); see Lt. Willoughby Walke, Lectures on Explosives 271-72 (Artillery School Press, Ft. Monroe, VA, 1891); 1 War Sec'y Ann. Rep. 1897 at 101-03.

The Navy's need for armor carried Carnegie and Bethlehem through the economic depression existing during 1893 and 1894, but Congress appeared unlikely to appropriate any funds for warship construction during the next several years. Both companies thus sought business abroad to keep their armor plants running and skilled workers employed. The U.S. Navy welcomed and assisted the companies in obtaining foreign sales because it realized it could not supply enough work and wished to maintain a "domestic" armor industry. The British had dominated armor sales to Russia, which did not possess a plant capable of making armor, but Bethlehem and Carnegie bid to supply the armor for two

Russian warships. To the shock of Carnegie and the U.S. Navy, Bethlehem received the Russian contract at a per ton price of \$250, significantly less than the \$625 per ton price previously charged the Navy. After it obtained this foothold in the Russian market for armor, Bethlehem obtained a second contract to supply Russia at the price of \$524 per ton. Nasaw, Andrew Carnegie at 381-82; Kenneth Warren, Bethlehem Steel: Builder and Arsenal of America, 54-55 (U. of Pitt. Press 2008); Cooling, Gray Steel & Blue Water at 119-20; Navy Sec'y Ann. Rep. 1894 at 22, 248, available at http://books.google.com/books; Navy Sec'y Ann. Rep. 1895 at 206-07.

Due to the initial Bethlehem contract with Russia, the Senate Naval Affairs Committee initiated an investigation of armor prices charged the Navy. While some naval officials estimated armor likely could be made at a cost of about \$250 per ton, Bethlehem's president said the Navy's cost failed to include interest on investment, plant maintenance and depreciation, working capital, and other important costs. He asserted, if such costs were considered, manufacture cost was \$496.56 per ton, which did not include loss on rejected plates, cost of experiments, administrative expenses, or a fair profit. Mr. Carnegie subsequently testified the British government provided its armor manufacturers with steady work and, if the Navy procured 6,000 tons a year, armor manufacturing would be a highly profitable business. He added that, currently, "many departments of our works are making more money and have made more money on the[ir] capital" than had the armor department. Nagle, A History of Gov't Contracting at 123; Cooling, Gray Steel & Blue Water at 123, n.19; S. REP. No. 54-1453, at xv-xvi (1897) (Prices of Armor for Vessels of the Navy); H.R. REP. No. 54-151 (1897) (Navy Secretary Report on "Cost and Price of Armor"), available at http://books.google.com/books; 28 Cong. Rec. 6047-55, 6082-84, 6185-95, 6225-26, 6357 (1896); Senate Committee on Naval Affairs, Prices of Armor For Naval Vessels, 169-83, 185-90 (GPO 1896), available at http://books.google.com/books; S. EXEC. Doc. No. 53-56 at 2-3 (1895) (Navy Secretary letter in response to Senate resolution on prices paid for armor here and abroad), available at http://books.google.com/books.

In 1896, the Navy ordered 100,000 pounds of smokeless cannon powder from du Pont to be made pursuant to the Navy's formula, which utilized alcohol and ether unlike the du Pont powder. Historically, the Navy and Army used different powders and guns. This practice often complicated matters for manufacturers in times of war. Du Pont, E.I. du Pont de Nemours and Co. at 148, available at http://books.google.com/books.

The same year, Congress authorized two warships to help stimulate the economy. While Carnegie and Bethlehem offered to produce armor at a price of \$450 per ton (not including \$50 per ton for harveyizing), the Senate wanted a price of \$350 and included in the Act a provision the Secretary was "to examine into the actual cost of armor plate and the price of the same, and report to Congress by the end of the year" since no contract for armor would be let before that time. Herbert asked both companies for records relating to their manufacturing costs and price, but they declined to provide them because of concern

their competitors might obtain business secrets from the data sought. Herbert, therefore, began interviewing former Navy plant inspectors and others in an attempt to ascertain company costs. Some advised Herbert the two companies experienced losses of materiel, labor and plant time due to stringent Navy inspection standards, reducing profit and causing increased plant deterioration. When Herbert told the armor firms they had made sufficient profit to reimburse the cost of their plant and equipment and their prices needed to be reduced, Carnegie stated:

We make about 150,000 tons of finished steel per month and the two or three hundred tons of Armor we make per month demand greater attention and give more trouble than all the 150,000 tons. We shall be delighted if the Government will let us out of the Armor business. We can use the Capital in several lines of our business to better advantage.

Schwab, then superintendent of Homestead, became the Carnegie official in charge of armor sales and spent significant time addressing the Navy's concern that it was being overcharged. (Carnegie's \$3.3 million investment in its armor plant represented only 2% of its total investment and armor plate comprised less than 1% of the firm's total output.) Because the armor companies faced rigid specifications and inspections, Herbert reported to Congress that he deemed a fair armor price to be \$400 per ton. Based upon Herbert's report, the Senate Naval Affairs Committee determined a "fair" price for armor plate was between \$300 and \$400 per ton and added a provision to an appropriation for torpedo boats that the Navy was not allowed to pay more than \$300 a ton for its armor. The presidency again changed political parties and John Long became Secretary of the Navy. When he sought bids for warship armor in spring 1897 at \$300 per ton, the Navy received no bids. Cooling, Gray Steel & Blue Water at 120-33, 139; Hessen, Steel Titan at 91-94; Nagle, A History of Gov't Contracting at 240; 28 Cong. Rec. 6045-58, 6082-85, 6185-95, 6225-26, 6357; 29 Stat. 361, 378-79; 29 Stat. 648, 664-65; Navy Sec'y Ann. Rep. 1899 at 8, 61-63, Rep. 1897 at 21, Rep. 1896 at 26-28; H.R. Doc. No. 54-151, at 8-10, 20, 39-42 (1897) (Secretary of the Navy Report on Cost and Price of Armor); S. Doc. No. 53-1453, at xvi-xx (1897) (Prices of Armor for Vessels of the Navy).

Long appointed a board to investigate the cost of building an armor plant. The board estimated the cost of a plant capable of producing 6,000 tons of armor a year to be in excess of \$3.7 million. Carnegie told Schwab, who had become President of Carnegie Steel in April 1897, to offer to sell the firm's armor plant to the Navy for \$2 million, but the Navy did not purchase the plant. The Navy's Ordnance Chief believed that it could "purchase armor more cheaply than it c[ould] manufacture it, and regard[ed] the making of armor as a proper adjunct to a great commercial steel plant." Long recommended Congress raise the price the Navy could pay for armor to \$400 per ton. While Congress was reviewing this issue, the *USS Maine* exploded in the Havana harbor. Congress, believing war with Spain might be imminent, appropriated \$50 million for national

security, including a major program for warship construction. Congress, realizing the need for warships, authorized the Secretary to pay in the range of \$400 per ton for armor. Cooling, *Gray Steel & Blue Water* at 140-44; Navy Sec'y Ann. Rep. 1897, at 5-6, 288-90; 31 Cong. Rec. 3458-79 (1898); 30 Stat. 369, 389-90; Hessen, *Steel Titan* at 68, 94-95; Wall, *Andrew Carnegie* at 653; Nagle, *A History of Gov't Contracting* at 244, 249-50.

When Congress officially declared war with Spain in April 1898, there were no large stockpiles of arms, ammunition, clothing, supplies or equipment. Available surplus clothing was not suitable for issue to troops that would be training and serving in tropical climates. The Navy did not have enough powder for two hours of major engagement. Its magazines were empty because prismatic powder was not being bought due to invention of smokeless powder and a lack of knowledge concerning the new powder's storage life. Mobilizing, equipping, and supplying the military was once again a major task for the War Department. It authorized procurement without advertising to expedite delivery. The American Navy defeated both Spain's Atlantic and Philippine squadrons and, in August 1898, the war ended only weeks after its start. The war demonstrated that Navy ships were worthy of battle, the Navy could mount overseas expeditionary operations, and the "Mahan" concept of heavily-armored battle fleets was vital to the nation's naval policy. Cooling, Gray Steel & Blue Water at 144-46; 1 Amer. Mil. Hist. 322-23, available at www.history.army.mil/books/amh-v2/amh%20v2/index.htm; Kreidberg, History of Mil. Mobilization in the U.S. Army at 167; Nagle, A History of Gov't Contracting at 249-50; du Pont, E.I. du Pont de Nemours and Co. at 152-53, available at http://books.google.com/books.

At the conclusion of the war, the Navy obtained monies from Congress to build a smokeless powder plant at Indian Head, Maryland, where powder could be made to the Navy's own formula. The Navy obtained the plans and blueprints for its plant from du Pont at no cost and, according to a Congressman, du Pont "assisted...in every possible way...doing everything possible to make the venture a success." The Army later desired its own smokeless powder plant and also obtained plans and blue prints from du Pont at no cost to build a plant in New Jersey. Engelbrecht & Hanighen, Merchants of Death at 32; Hix, Rethinking Governance of the Army's Arsenals & Ammunition Plants at 20, available at http://books.google.com/books; du Pont, E.I. du Pont de Nemours & Co. at 154, available at http://books.google.com/books.

After the war, the Navy continued to desire additional vessels, but wished to change the type of armor it used. Krupp, a German defense contractor, developed steel that included both chromium and nickel, producing an armor that was stronger and 25% lighter than harveyized nickel steel. Because Krupp was to receive a royalty of \$45 per ton and its steel had a more complicated and detailed manufacturing process, industry spokesmen said it would cost \$545 per ton. In 1899, however, Congress specified that the Navy pay no more than \$400 per ton for armor. Carnegie and Bethlehem declined to

provide Krupp armor for that price. The Navy then entered into a contract with Carnegie for harveyized armor at \$400 per ton for 25% of its requirement. After the Secretary received Congressional authorization to pay in excess of \$400 per ton, the Navy entered into another five-year contract with Carnegie, the only bidder, for Krupp armor at \$460 per ton for the remainder of its requirement. Cooling, *Gray Steel & Blue Water* at 146, 150-53; Johannes R. Lischka, *Armor Plate: Nickel & Steel, Monopoly & Profit, in War, Business, & American Society: Historical Perspectives on the Military-Industrial Complex*, 43, 44-46 (Benjamin Franklin Cooling ed., 1977); Hessen, *Steel Titan* at 98-102; Navy Sec'y Ann. Rep. 1899 at 8, 61-63, 487-91; 30 Stat. 1045.

At the turn of the century, Secretary Long recommended recession of the price limitations on armor procurement and the Navy's Chief of Ordnance told Congress "[i]t is not likely that armor could or would be more cheaply produced by the Government than it could be bought, unless all consideration of interest on the value of the plant and on working capital is discarded." After much discussion, Congress appropriated \$4 million to the Navy to "procure armor of the best quality at reasonable and equitable prices" and, if such prices were unattainable, "to procure a site for and to erect thereon a factory for the manufacture of armor" with the \$4 million appropriated even though the estimate to build such a facility was then almost \$5 million. Later that year, the Navy received bids for armor from Carnegie, Bethlehem, and newcomer Midvale Steel, which subsequently withdrew its bid. Carnegie and Bethlehem agreed to supply Krupp armor at \$420 per ton, with the Navy assuming liability for fees owed Krupp and Harvey that were about \$34.50 per ton. For the next four years, Congress allowed the Secretary discretion to determine fair and equitable prices for armor and did not impose any price ceiling for armor. Cooling, Gray Steel & Blue Water at 150, n.23; Navy Sec'y Ann. Rep. 1900 at 14-15, 573-74; 31 Stat. 684, 707 (1900); 31 Stat. 1108, 1132-33 (1901); 32 Stat. 673, 690-91 (1902); 32 Stat. 671, 690-91 (1903); 32 Stat. 1197, 1202-03 (1904).

When Andrew Carnegie decided to sell his controlling interest in Carnegie Steel, Schwab proposed that the company combine with other steel firms in a holding company producing and selling all products made of iron and steel. Carnegie decided the company would "forward integrate," i.e., sell finished goods, prompting J.P. Morgan (America's most important banker and owner of other steel companies) to agree to combine firms, creating "U.S. Steel," a company with a total capitalization of \$1.4 billion and the first billion dollar corporation in history. Nagle, A History of Gov't Contracting at 246; Lischka, Armor Plate: Nickel & Steel, Monopoly & Profit, in War, Bus. & Amer. Society at 48-50; George, The Emergence of Industrial America at 71, 85; 7 Faulkner, The Economic History of the U.S., Decline of Laissez Faire at 165, available at http://books.google.com/books; Urofsky, Big Steel & the Wilson Admin. at 88.

In fall of 1901, while president of U.S. Steel, Schwab bought Bethlehem Iron Company for \$7.5 million. When a merger of that company with others owned by E.H. Harriman did not materialize, he sold the company to Morgan for the price he had

paid. Several months later, Schwab resigned as president of U.S. Steel, repurchased Bethlehem from Morgan for \$10 million, and then sold Bethlehem via stock transfer to the new U.S. Shipbuilding Company, a holding company he owned with several others. The next year, however, U.S. Shipbuilding filed for bankruptcy and its subsidiaries reorganized as the "Bethlehem Steel Company." Schwab, who became the new company's President, told reporters he would "make the Bethlehem plant the greatest armor plate and gun factory in the world." Gray Steel & Blue Water at 167; Hessen, Steel Titan at 149-63, 166-69; Lischka, Armor Plate: Nickel & Steel, Monopoly & Profit, in War, Bus., & Amer. Society at 46, 49-52; Urofsky, Big Steel & the Wilson Admin. at 88.

During the same period, Du Pont acquired voting control of other powder firms through stock purchases. It obtained almost complete control of all companies selling powder and explosives who were members of the GTA. John K. Winkler, *The du Pont Dynasty*, 162 (1935), available at http://books.google.com/books; *United States v. E. I. du Pont de Nemours & Co.*, 188 F. 127, 134-48 (C.C. D. Del. 1911), modified in part, 273 F. 869 (D.C.D. Del. 1921).

In the early 1900s, under President Theodore Roosevelt, the Navy launched a large shipbuilding program. It sought a 48-battleship fleet, second only to Great Britain's. The capacity to produce armor plate was not sufficient to meet the Navy's needs and the steel companies were "specially requested - almost commanded - to increase or to double...producing capacity" by the government. The Navy recognized technological advances required change in past practice. The United States historically mobilized only when war was apparent, but armored battleships could not be mass produced quickly enough once hostilities began. They required large sums of money, special facilities, materials and manpower, and detailed and lengthy planning to construct. The giant, steampropelled, steel-plated, heavily-armed warship could not be procured in the same manner as horses, uniforms, rations or other standard service supplies. Drawing upon its more than four decades of experience in contracting to acquire "technically sophisticated items," the Navy understood it needed to balance various interests to obtain its desired warships. It was now dealing with large, wealthy contractors who were not necessarily desirous of its business. Moreover, as a result of the major investment of capital necessary to construct warships, the Navy needed to maintain a "domestic mobilization base" for continued warship production that some today might call a military-industrial complex that was acceptable not only to it, but also to contractors and to the Congress (which was keeping a watchful eye on the Navy's requests and actions). Cooling, Gray Steel & Blue Water at 158, 165, 166, n.8; Nagle, A History of Gov't Contracting at 229-30; Armor Plant for the United States: Hearing Before the S. Comm. on Naval Affairs, 64th Cong. 6, 33-34 (1916) (Statement of Eugene G. Grace, President of Bethlehem Steel), available at http://books.google.com/books; see H.R. Doc. No. 59-193 at 10-14 (1906) (Niles Report); see Navy Sec'y Ann. Rep. 1906 reprinted in 2 The Abridgement 1906 at 1223, 1241-42, 1309, 1315-16, available at http://books.google.com/books.

During 1904, Midvale Steel complained to Congress the "firm suffered from lack of appreciation and encouragement," while the Navy's longtime suppliers, Carnegie and Bethlehem, received favored treatment. Midvale submitted the low bid of \$398 per ton for armor, but the Navy awarded it only one third of the armor being procured because the Navy believed the firm was not capable of satisfying the delivery schedule for all of the armor required. As a result, the Congress specified in a 1905 appropriation that the Secretary was to make "a thorough inquiry...as to the cost of armor plate and of an armor plant," and report to Congress. When the Secretary failed to submit a report, the Congress specified in the 1906 appropriation that "no part of this appropriation shall be expanded for armor...except upon contracts for such armor...when awarded to the lowest bidder, having in view the best results and most expeditious delivery." When the Navy next solicited for armor, Midvale bid \$345 per ton, the lowest price ever received by the Navy and considerably less than was being paid by foreign governments. The other two producers agreed to match Midvale's price. The Secretary awarded Midvale half of the armor requirement and split the remainder among the other two producers. Cooling, Gray Steel & Blue Water at 170, 172-73, 174, n.23; Navy Sec'y Ann. Rep. 1906 at 21-23, 514; 33 Stat. 324, 350-51 (1905); 34 Stat. 553, 583 (1906).

During early 1905, two men approached the War Department about purchasing their "flying machine." The Department rejected the purchase offer without examining the machine made by the Wright Brothers. When the Wrights again approached the Department in fall 1905 stressing they offered a complete machine and would permit performance testing, the Department stated it did not "care to formulate any requirements for the performance of a flying machine" and such a "device must have been brought to the stage of practical operation without expense to the United States" before it would take further action. The Army, which moved cavalry by horseback and its equipment on mules, failed to comprehend the importance of the technological advance offered. It was interested only in purchasing devices developed fully at contractor expense with private capital. Richard Solibakke, *The First Successful Gov't Contract*, 8 Pub. Cont. L.J.195, 197-98 (1976); Murray Rubenstein & Richard M. Goldman, *To Join With The Eagles: Curtiss-Wright Aircraft 1903-1965*, 3, 11 (Doubleday & Co. 1974); Nagle, *A History of Gov't Contracting* at 267.

The next year, the Navy board appointed to review armor plate costs, which was known as the "Niles Board," reported that expenditures for armor plant were in excess of \$3.5 million for Midvale, \$5.6 million for Bethlehem, and \$5.9 million for Carnegie. It stated that estimates for the Navy to build its own armor plant ranged from \$3.5 million to \$4,339,271. The Niles Board elected to adopt the 1897 report of the Armor Factory Board concerning the details of armor plant cost and that board's \$3.75 million estimate for plant construction cost. Listing variables in both labor and materials for armor plate production, the Board allowed report readers to draw their own conclusions concerning production cost, simply highlighting the existence of higher production costs when only partial plant capacity was being used. The Board did not list or address administrative

and general expenses, insurance expense, taxes, interest on plant investment, working capital and other costs a company normally considers part of its "total" production cost. The same year, the Navy's Ordnance Chief reported, while competition in the production of armor plate was commendable, it had "so reduced the prices of armor...a condition now exists whereby the small prospects for demands for armor in the immediate future may result in seriously reducing the resources in this country for this special material" because "the element of profit depends so largely on that of output." H.R. Doc. No. 59-889, at 1-2 (1906) (Cost of Armor and Armor Plant); H.R. Doc. No. 59-193, at 4, 19-21, 28-31 (1906) (Cost of Armor Plate and Armor Plant); H.R. Doc. No. 55-95, at 3, 18-20 (1897) (Report of Armor Factory Board); Cooling, Gray Steel & Blue Water at 173, 175-76; Navy Sec'y Ann. Rep. 1906 reprinted in 2 The Abridgement 1906 at 1223, 1241-42, 1309, 1315-16, available at http://books.google.com/books.

When the Navy next solicited bids for armor in summer of 1907, the producers increased their bids by \$50 to \$70 per ton. Midvale bid highest. When all three firms agreed to provide armor at \$420 per ton for class A and \$400 a ton for other classes, the Navy divided its requirement with Bethlehem receiving 3,579.34 tons, Carnegie 3,538.07 tons, and Midvale 2,258.81 tons. Navy Sec'y Ann. Rep. 1907 at 12, 464; Cooling, *Gray Steel & Blue Water* at 177-78.

During July of 1907, the government brought suit against du Pont for violation of the Sherman Antitrust Act, 26 Stat. 209. It asserted that du Pont had a "complete monopoly of the production and distribution of smokeless ordnance powder and...a monopoly of 95 per cent of the production and distribution of gunpowder and high explosives other than smokeless ordnance powder." Winkler, *The du Pont Dynasty* at 164-66, *available at* http://books.google.com/books; Engelbrecht & Hanighen, *Merchants of Death* at 35; *United States v. E. I. du Pont de Nemours & Co.*, 188 F. at 129, 145.

In 1908, after receiving a note from President Roosevelt, the Army entered into a three-page contract with the Wrights for their flying machine stating it would pay an extra \$2,500 for every mile the machine flew over 40 miles per hour with the maximum bonus being \$10,000. The Army, therefore, clearly continued to desire an operable plane developed by a contractor, and did not wish to contract for "design" of a flying machine. The Wrights delivered their machine to Fort Myer in August of 1908, it was flown over the Fort while the press and thousands of spectators observed, and they received \$5,000 above the base contract price of \$25,000 because their machine exceeded the specified speed by about 2.5 miles per hour. The next year, the Wrights organized the first aircraft company, the Wright Company, with a capitalization of \$200,000. Rubenstein, *To Join With The Eagles* at 15, 17-18; Nagle, *A History of Gov't Contracting* 266-69.

During this era of "trust busting," some Congressmen believed the Navy was dealing with "trusts" in procuring shipbuilding, powder, and armor. The 1907 Navy appropriation stated the Secretary:

[S]hall not build any of the vessels...authorized in such navy-yards as he may designate should it reasonably appear that the persons, firms, or corporations, or the agents thereof, bidding for the construction of any of said vessels have entered into any combination, agreement, or understanding the effect, object, or purpose of which is to deprive the Government of fair, open, and unrestricted competition in letting contracts.

The 1909 appropriation stated "no part of any appropriation made...for the purchase of powder shall be paid to any trust or combination in restraint of trade nor to any corporation having a monopoly of the manufacture and supply of gunpowder in the United States, except in the event of extraordinary emergency." While a Senator additionally sought to require the Secretary to solicit bids from foreign armor producers, no such provision was added to an appropriation when it was shown that the armor prices paid by foreign nations exceeded those charged the Navy. 34 Stat. 553, 582-83 (1906); 34 Stat. 1200, 1203-04 (1907); 35 Stat. 754, 759, 777-78 (1909); Cooling, *Gray Steel & Blue Water* at 178-79; Winkler, *The du Pont Dynasty* at 168, *available at* http://books.google.com/books.

In 1911, the government filed suit against U.S. Steel for violating the Sherman Anti-Trust Act. At approximately the same time, du Pont was held in violation of the Sherman Act. The court asked du Pont and the government to present a joint plan for the firm's dissolution and reorganization. Military officials testified that du Pont's smokeless powder organization should remain "intact." Because du Pont had eliminated most of its competitors, it was not possible for the court to restore the *status quo ante*. Accordingly, the court split du Pont's assets among three companies (du Pont, Atlas Powder Co., and Hercules Powder Co.), but kept all the smokeless powder operation assets within du Pont because to do otherwise "would tend to destroy the practical and scientific cooperation now pursued between the Government and [du Pont]." Winkler, *The du Pont Dynasty* at 171, available at http://books.google.com/books; Engelbrecht & Hanighen, Merchants of Death at 35; United States v. E. I. du Pont de Nemours & Co., 188 F. at 151-55.

From 1909 through 1912, Congress continued to appropriate monies to expand the Navy. In awarding contracts for armor, the Navy divided its requirements almost equally among the three domestic producers, with all of the bidders agreeing to the low price that was offered. Producers and the Navy all believed that this method of "equitable sharing" preserved stability in the industry and the Navy's mobilization base for armor. Cooling, *Gray Steel & Blue Water* at 179-80; Navy Sec'y Ann. Rep. 1912 at 212-13, Rep. 1911 at

222, Rep. 1910 at 346, Rep. 1909 at 403; see, e.g., Bethlehem Steel Corp. v. United States, 191 Ct. Cl. 141, 150-51, 423 F.2d 300, 305 (1970) (military viewed rigid adherence to procurement from lowest bidder as gradually freezing out competition and leading to single source procurement).

Promising "change," Woodrow Wilson became President in 1913 and appointed Josephus Daniels, a populist newspaper editor and publisher, as his Secretary of Navy. Daniels was said to have a "profound suspicion that...every corporation with a capitalization of more than \$100,000 was inherently evil." The American Antitrust League began deluging the new administration with correspondence claiming armor producers were engaged in a conspiracy to fix prices in violation of the Sherman Act that had continued for years. The League did not offer any details in support of its claims but asserted that evidence would be forthcoming if the government offered to pay a sizable reward, citing the 1893 armor plate scandal. While Daniels acknowledged privately that savings estimates for a Navy armor plant ignored depreciation, insurance, taxes, interest on investment, and certain other costs, and that there may be little or no savings from the government's manufacture of armor, he was a proponent of such a plant because he thought it would give the Navy leverage in dealing with its contractors. He believed "no objections on the ground of public policy st[oo]d in the way of a Government plant" and such a policy already existed in manufacture of powder and guns. In July of 1913, he sent the Senate a report urging construction of a government plant at the earliest time. During August 1913, when Daniels opened bids for battleship Arizona armor, he found all three producers bid \$454 per ton, believed identical bids proved industry collusion, publicly disclosed the bids in an attempt to secure lower prices, had armor executives travel to Washington, told them of his displeasure with their bids and desire they return the next day without occurrence of "another coincidence," and was not happy when his second meeting with them failed to produce different results. When Daniels told the firms that the Navy would not pay extortionate prices, they replied that they were entitled to a fair profit since they originally built their armor plants at the government's request. An industry publication wrote Daniels had a practice of disclosing bids without awarding a contract and that "[t]here has never been any question about the standing in the business world of a[n]...individual who invites bids, makes them public and then...clubs a still lower price." Daniels, however, decided once again not to award a contract, sought new bids two months later, received lower bids, and decided to award the entire contract for armor to Midvale (the low bidder), but learned Midvale could not complete all work on time and the Navy again had to split its requirement among producers. Cost of Armor Plate and its Manufacture, Secretary of Navy letter of 12 July 1913 responding to Senate resolution of 27 May 1913 reprinted in Navy Sec'y Ann. Rep. 1913 at 43-69; Hessen, Steel Titan at 217-18, 220; Cooling, Gray Steel & Blue Water at 185, 189-91, 194-96; Urofsky, Big Steel & the Wilson Admin. at 119, 123-27; Nagle, A History of Gov't Contracting at 271-72.

Contrary to Daniels's opinion, the producers' initial bids were perfectly rational. When a firm underbids a competitor, it expects to receive the entire quantity. The Navy, however, was dividing its orders equally among all producers that agreed to supply armor at the lowest price bid. The producers, therefore, recognized a low bid simply decreased profits for all and bid a mutually acceptable price to produce armor. Daniels, however, resolved to stop the producers' behavior, no matter how rational it might be under the circumstances. He argued for "no private gain in war preparation" and spoke about the government producing all munitions to stop arms makers' "5 per cent" extortion, i.e., profit. Not since Callendar Irvine had a government official advocated so vociferously for the government's production of arms. Hessen, *Steel Titan* at 217-18; Nagle, *A History of Gov't Contracting* at 272-73; Cooling, *Gray Steel & Blue Water* at 180, 188, 196, 198; Urofsky, *Big Steel & the Wilson Admin*. at 241-42; Navy Sec'y Ann. Rep. 1913 at 10-13, Rep. 1914 at 8-9, 14-15, 21-22.

While Congress debated appropriating funds for construction of an armor plant, the start of World War I in August 1914 focused attention upon other matters. Industry, which experienced a recession in 1913 and 1914, was receiving orders from European combatants despite the United States having officially declared its neutrality. Schwab returned from Europe with over \$50 million in contracts from the Allies for Bethlehem. The Navy was considering a military preparedness program. The German sinking of the Lusitania, a ship carrying American passengers, during May 1915 expedited the military planning efforts. On 10 December 1915, an Army board advised the War Secretary it was "unanimously and emphatically of the opinion that the Government ought not to establish a monopoly in the production of any of its war material, and ought not to manufacture its own war material to the exclusion of patronage of private manufacturers capable of aiding it." The Army thus established the policy it would obtain supplies from "private manufacturers" and operate its own factories only "for the purpose of establishing standards, of understanding costs of production, of insuring that attention is given to improvement, and of qualifying its officers in all respects as experts with respect to the material needed." Kreidberg, History of Mil. Mobilization in the U.S. Army at 195, 326, 337; Nagle, A History of Gov't Contracting at 282-83.

With increasing demand for steel and higher steel prices, Daniels considered the Navy to be even more at the mercy of the armor plate manufacturers whose policy he said was "to make the [Navy] pay prices much beyond a fair profit." Daniels sought bids for two new ships, but no firm submitted a bid within the congressionally specified limit. He also sought preference from manufacturers for Navy ship and materiel orders, but industry indicated it was working on a "first come, first served" basis and he should have foreseen the demand being experienced. In his 1915 Annual Report, Daniels blasted the steel companies. He said armor makers fixed prices and claimed there was no relation between their cost of production and bid prices. The Chairman of the Senate Committee on Naval Affairs, Benjamin "Pitchfork" Tillman, who had advocated a government armor plant in the 1890s, offered to assist Daniels in obtaining a Navy armor plant. Tillman

considered the armor producers to be "greedy capitalists, who have the Government by the throat" and thought "the inordinate profits [armor producers] have been making... are not going to be relinquished without much squealing." His committee issued a 1915 report calling for a government armor factory. Further complicating matters for industry, pacifists desiring the nation stay neutral in the European war charged munitions makers with fomenting "war fever." For example, a North Carolina Congressman said munitions makers were seeking to get the nation into war with Germany to reap profit. Wisconsin Sen. Robert La Follette, Sr., similarly said "[w]hat do Morgan and Schwab care for...peace when there are big profits in the world war?" The Navy League, which had been founded with the encouragement of President Roosevelt to argue for a strong Navy, was accused of being a front for the steel industry. The League, however, fought back – revealing that an Illinois Congressman had offered to call off the attack on it if it would support a bill for government manufacture of munitions. While President Wilson had never proposed the government operate a manufacturing plant either in competition with, or as a yardstick for, private enterprise, he elected to aid Sen. Tillman in securing the passage of an armor plant bill in hopes of obtaining support from pacifists for his military readiness program. During 1916, Sen. Tillman held hearings on an armor plant, and called the chairman of both Bethlehem (Eugene Grace) and Midvale (Alva Binkey) as witnesses. Both offered to show firm cost and profit figures privately to Daniels and to provide armor at \$395 to \$402.50 a ton if the Navy guaranteed a 5-year, 40,000-ton price-stabilized program, but Daniels and Tillman desired a Navy plant and ignored the offers. Fearing loss of about \$20 million in private investment, armor makers announced that, if the Navy built its own plant, they would raise the price of armor by \$200 per ton prior to operation of the Navy plant in order to amortize fully their plants. The nation's press seized on this threat and urged a Navy plant be built to show the government could not be robbed, extorted, or exploited. Shortly thereafter, on 21 March 1916, the Senate voted in favor of the Navy armor plant. Cooling, Gray Steel & Blue Water at 197-203; Hessen, Steel Titan at 219-23; Urofsky, Big Steel & the Wilson Admin. at 84-85, 110-15, 129-39; Nagle, A History of Gov't Contracting at 250-51, 273; Navy Sec'y Ann. Rep. 1915 at 57-60.

Hoping to defeat the legislation in the House of Representatives, Schwab sent a series of 12 statements on the issue of a Navy plant to each member of Congress and ran advertisements signed by him and Grace in 3,257 newspapers across the country. One of the latter stated:

We have allowed irresponsible assertions to be made for so long without denial that many people now believe them to be proven facts. We shall make the mistake of silence no longer. Henceforth we shall pursue a policy of publicity. Misinformation will not be permitted to go uncorrected.

Schwab also distributed flyers stating:

SUPPOSE THIS WAS YOUR BUSINESS! If the Government had asked you to invest your money in a plant to supply Government needs; and after the plant was built, and had become useful for no other purpose, the Government built a plant of its own, making your plant useless and your investment valueless – would that seem fair?

This is precisely what Congress is planning for the Government to do with reference to our investment of \$7,000,000 in an armor plant.

Schwab offered to "manufacture armor plate for the Government of the United States at the actual cost of operation plus such charges for overhead expenses, interest, and depreciation as the Federal Trade Commission may fix" for whatever period the Navy designates. Schwab's appeals won praise in the press for candor and reasonableness, but the House approved the armor plant provision during June. Hessen, Steel Titan at 222-26; Engelbrecht & Hanighen, Merchants of Death at 183-85; Nagle, A History of Gov't Contracting at 274-75; Cooling, Gray Steel & Blue Water at 203; Urofsky, Big Steel & the Wilson Admin. at 142-46; The Bethlehem Steel Co. Appeals to the People Against the Proposal to Expend \$11,000,000 of the People's Money for a Gov't Armor Plant at 13-53 (Bethlehem Steel Co. 1916), available at http://www.archive.org/details/bethlehemsteelco00bethrich.

The same month, a District Court in New Jersey held United States Steel had not violated the Sherman Antitrust Act. The court found that the company faced vigorous and strong competition, its competitors were united in testifying the company's conduct had been fair, and the company's practices were not viewed as eliminating competition but encouraging it. *United States v. United States Steel Corp.*, 223 F. 55, 61, 68, 78, 114 (D.N.J. 1915), aff'd, 251 U.S. 417 (1920). President Wilson's Attorney General said the United States would seek review by the Supreme Court. Urofsky, Big Steel & the Wilson Admin. at 82.

During summer 1916, Bethlehem began a \$40 million expansion program to satisfy its European contracts. By fall, Schwab announced the firm would spend \$90 million within two years on plant improvement and expansion. U.S. Steel similarly commenced expansion – it made over \$28 million in capital expenditures during 1916. Urofsky, Big Steel & the Wilson Admin. at 91, 105; Kenneth Warren, Industrial Genius: The Working Life of Charles Michael Schwab 166 (U. of Pitt. Press 2007); William Bradford Williams, Munitions Manufacture in the Philadelphia Ordnance District 311 (1921), available at http://books.google.com/books.

President Wilson signed the Naval Appropriations Act, 39 Stat. 556, 563, during August 1916. Besides an armor plant, the act authorized the construction of 66 vessels within one year. While "cost-plus" contracts had been abandoned by Congress during the Revolutionary War, Congress allowed the Secretary to enter into contracts on the basis of "actual cost, plus a reasonable profit," 39 Stat. 617, if he believed such a contract was the most expeditious and economical means. Construction of so many naval vessels was without precedent. The Navy's yards were almost filled to capacity. The Secretary, therefore, had to engage private shipbuilders to construct the ships. He entered into contracts with private shipbuilders for 59 of the authorized vessels but failed to do so for 4 battle and 3 scout cruisers. The battle cruisers were large ships and had never before been built in the U.S. No scout cruiser had been built for over a decade. Shipbuilders were unwilling to submit "fixed-price" bids within the funding authorized due to uncertainty surrounding construction of a vessel not recently built and shortages of labor and materials occurring as a result of the war in Europe. While shipbuilders submitted proposals for entering into "cost-plus" cruiser contracts, Daniels did not accept any of those proposals. He did not like such contracts because they provided no incentive to be efficient and contractors would earn a profit regardless of final contract cost. He thought such contracts would result in profiteering, corruption, and administrative accounting nightmares. In January 1917, Daniels told Congress he was unwilling to allow firms to earn exorbitant profits at Navy expense and he wanted \$12 million to expand cruiser construction capabilities at Navy yards. An industry trade journal asserted the cost-plus cruiser proposals deserved "a better reception [from the Navy] than antagonism and suspicion." Bethlehem Steel's Fore River Yard, which had refused profitable merchant ship orders to hold ways open for Navy vessels, complained Daniels did not understand the basic economics of running a shipyard. It contended that "[o]verhead costs...were far greater than Daniels believed, and profits much less." It added, if Navy yards properly calculated overhead expenses when reporting their construction costs, the Navy would realize government-built ships were actually more expensive than those produced in private yards. 39 Stat. 616-17; William J. Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. 7, 9, 11, 13-14 (1996), available at http://www.istor.org/stable/2944447; Cooling, Gray Steel & Blue Water at 206; William J. Williams, Shipbuilding & the Wilson Admin.: The Development of Policy, 1914-1917 at 107-09, 147-51 (unpublished doctoral thesis available at www.dtic.mil/cgi-bin/GetTRDoc?AD= ADA218028&Location=U2&doc =GetTRDoc.pdf); Navy Sec'y Ann. Rep. 1916 at 11.

On 31 January 1917, Germany's submarines began attacking all vessels found in a "war zone" it had established around Great Britain. Ships flying the American flag or a flag of another neutral nation were treated the same as ships flying the flag of a nation at war with Germany, i.e., sunk without warning. During a two-month period, Germany sank so many merchant ships that, if its submarines continued sinking ships at the same rate, the yearly tonnage of ships sunk would be more than twice the annual tonnage of ships ever built by shipyards in neutral and allied countries combined. Germany's goal

was to defeat Britain "through shortage of supplies." The Navy thought future conflict was going to be a duel between battleships and did not anticipate war with ships being sunk by submarines. It thus was scrambling to determine how to deal with the menace. The same day the President severed diplomatic relations with Germany, Daniels drafted an amendment to the naval appropriations bill then being debated giving the Navy the right to commandeer, if necessary, private plants building naval vessels, armor, shells and other necessary supplies, and "operate them in the public interest." Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. at 10, 16, 18, 15, available at http://www.jstor.org/stable/2944447; Williams, Shipbuilding & the Wilson Admin.: The Development of Policy at 155-56, available at www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028& Location=U2&doc=GetTRDoc.pdf.

On 1 March 1917, newspapers published stories revealing a secret message had been intercepted and decoded, which offered Mexico the return of western parts of the United States if it joined forces with Germany and attacked the United States. Feelings of crisis created by the threat of war led both parties to support Daniels' commandeering proposal.²

On 4 March, Congress passed the Naval Appropriations Act of 1917, which allowed the President to seize private shipyards, payment of "reasonable" compensation to shipyard owners for use of their property and owners to bring suit if the compensation was unsatisfactory. The Act granted the Navy more than \$192 million for new vessels, an "emergency fund" of \$115 million, and \$12 million to expand Navy yard facilities. The Act again authorized the use of cost-plus contracts to procure vessels. Daniels did not wish to allow the Navy to fall victim to the practice of contracting based on "what the traffic would bear." He believed adherence to the Navy's "cost-plus-fair-profit" standard

² During the Civil War, Congress ratified President's Lincoln war power act of seizing certain telegraph and railroad lines to restore communications from the capital that had been disrupted by Confederate sympathizer sabotage. 12 Stat. 334. Other than that act and the Navy's use of John Roach's shipyards to complete the ABCD ships, the government's takeover and operation of a firm producing war supplies lacked precedent. The "prospect" of such a seizure, however, did not. In enacting the Army Appropriations Act, 39 Stat. 619, 645, and National Defense Act of 1916, 39 Stat. 166, 213, respectively, Congress provided for possible seizure of domestic transportation systems, and plants making necessary military supplies or those that could readily be transformed to do so, and payment to owners of "just compensation." See generally 2 Amer. Mil. Hist. 25 (Maurice Matloff ed. 1996); Miller v. United States, 78 U.S. 268 (1871); Navy Sec'y Ann. Rep. 1917 at 31; Williams, Shipbuilding & the Wilson Admin.: The Development of Policy at 155-60, available at www.dtic.mil/cgibin/GetTRDoc?AD=ADA218028&Location=U2&doc=GetTRDoc.pdf.

(supported by well informed cost accounting inquiries) would make manufacturers justify their claims, expose inefficiency, and bring to light the wide margin of profits he believed they used for commercial accounts. Because no accepted cost accounting standards then existed that could be used in administering cost contracts, he appointed a "Compensation Board" chaired by Admiral W.L. Capps, to "insure [the] correct ascertainment of cost and guard against [contractor] extravagance." The week the President signed the law, Daniels met with private ship builders, told them he was expecting to receive their cooperation, he would commandeer their plants if he did not, the Navy needed submarines in 9 months and destroyers in a year even though the best time for producing such vessels previously had been 18 months and 2 years, respectively, and they should not seek to earn larger than normal profit on the Navy's contracts. Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. at 12-14, available at http://www.jstor.org/stable/2944447; J. Franklin Crowell, Government War Contracts 156 (Oxford U. Press N.Y. 1920), available at http://books.google.com/books; see Kingsbury v. United States, 68 Ct. Cl. 680 (1930).

On 15 March 1917, Daniels awarded "cost plus 10%" contracts to construct four Navy battle cruisers because such contracts were the only means by which shipbuilders would contract. Three days later, Germany sank three American merchant ships. Within two days of the sinking, on 20 March 1917, President Wilson's cabinet recommended he ask Congress for a declaration of war against Germany. Four days after the cabinet did so, on 24 March, Daniels opened proposals for new destroyers and found only enough to construct 24 destroyers when the Navy desired 74. The Navy now deemed destroyers to be the most "efficient offensive vessel against submarines," but American shipyards were filled to near capacity with other Navy and merchant vessels under construction. Daniels immediately awarded cost-plus contracts for 24 destroyers and announced that he would award the same contract for others, but no other ship builders stepped forward. Williams, Shipbuilding & the Wilson Admin.: The Development of Policy at 159, 164, 166-67, available at www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028&Location= U2&doc=GetTRDoc.pdf.

On 2 April 1917, President Wilson, who had been re-elected on a peace platform, spoke to a joint session of Congress. A formal declaration of war with Germany issued four days later. When the nation entered the war, it did not have reserves of equipment or established industrial mobilization processes necessary to promptly equip and support a large modern military. Newly-developed tanks, submarines, poison gas, and airplanes had been altering the concept of "chivalrous" warfare in Europe for three years, but such items were not readily available in the nation and could not be quickly produced. The nation suddenly was in a race to mobilize and field a well-equipped military. For the most part, to secure its wartime supplies, the government relied on the nation's system of private enterprise. While authorized to seize and operate industry, the government rarely did so and specifically sought to disturb the nation's private enterprise system as little as possible. The government began awarding contracts to privately-operated industry at a

furious pace and urged industry to deliver its needed items with the greatest possible speed. Formal advertising was abandoned for the most part and contracts entered into by "negotiation," usually on a cost-plus basis. Many contractors refused to enter into fixed-price contracts requiring them to gamble on the prices of raw materials and labor, which were changing frequently and presented a significant risk of loss. Williams, Shipbuilding & the Wilson Admin.: The Development of Policy at 168, available at www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028&Location=U2&doc=GetTRDoc.pdf; Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. 15, 17, available at http://www.jstor.org/stable/2944447; Cooling. Grav Steel & Blue Water at 206; 2 Amer. Mil. Hist. at 20-22, 24-28, 30-31 (Maurice Matloff ed. 1996), available at www.history.army.mil/books/amh-v2/amh%20v2/ index.htm; Kreidberg, History of Military Mobilization in the United States Army at 168; Urofsky, Big Steel & the Wilson Admin. at 84-109, 115-16; Staff of S. Temporary Nat. Econ. Comm., 76th Cong., Investigation of Concentration of Econ. Power 43-44, 50, 52 (Monograph No. 19, Comm. Print 1940); H. Struve Hensel & Richard G. McClung, Profit Limitation Controls Prior to the Present War, Law & Contemp. Probs. 187, 193-94 (1944); F. Trowbridge vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B.J. 305, 306, 312 (1970); Rockwell Int'l Corp., ASBCA No. 46544, 96-1 BCA ¶ 28,057 at 140,097-98, aff'd, 109 F.3d 1579 (Fed. Cir. 1997); United States v. Bethlehem Steel Corp., 315 U.S. 289, 302 (1942) (quoting Rep. of Chief of Construction Div., War Sec'y Ann. Rep. 1919 at 4147 ("no sane man would bid on a lump-sum contract under such conditions, unless perchance he should treat the matter as a pure gamble and include an excessive margin in his proposal for unforeseen contingencies")); Theodore Wesley Graske, The Law of Gov't Defense Contracts 4, 17 (1941).

About 200 builders and contractors met with defense officials in Washington, DC, to discuss the enormous task of building camps and cantonments within four months to house and train American troops. The Army's Quartermaster General determined after the meeting that, due to the emergency and lack of certainty regarding the facilities' size and location, the best method of proceeding was not competitive bidding, but negotiation of cost-plus contracts with construction firms known to timely complete their work and produce quality results. He awarded cost-plus contacts to build 16 cantonments, which each covered over 2,000 acres and had buildings to house 40,000 men, drilling grounds, a rifle range, depot, storehouses, 1,000-bed hospital, 25 miles of roads, and sewer system to maintain sanitary conditions. He also awarded cost-plus contracts for 16 camps, which each had tents with wood floors to house National Guard soldiers, mess shelters, baths and lavatories, heating and lighting systems, storehouses, and training areas. The camp and cantonment contracts were for about \$300 million of construction. Crowell, Gov't War Contracts at 81-87, 90-95, available at http://books.google.com/books.

Both the Army and Navy tried to limit profits on cost-plus war contracts. The War Department used a ceiling of 10 percent profit on cost-plus contracts for its construction of cantonments. 1 War Sec'y Ann. Rep. 1917 at 28, Rep. 1918 at 1319, Rep. 1919 at

4138-42; James R. Withrow, Jr., *The Control of War Profits in the United States and Canada*, 91 U. Pa. L. Rev. 194, 200 (1942); Crowell, *Gov't War Contracts* at 85, available at http://books.google.com/books. The Navy also adopted a policy of having contracts allow no more than 10 percent of actual cost as profit. Navy Sec'y Ann. Rep. 1917 at 33, Rep. 1918 at 685, Rep. 1919 at 570-76, Rep. 1920 at 147-48; Withrow, *The Control of War Profits in the U.S. & Canada*, 91 U. Pa. L. Rev. at 200.

Although the nation's capacity for manufacturing gun powder had increased to about 1.25 million pounds per day, the majority of which was at Du Pont plants due to the significant demand for powder by England and France since 1914, the Army asked Du Pont to consider further expanding its powder making capability. The Army believed more gun powder plants were necessary because current powder capacity likely would not be sufficient to supply its own war needs, let alone others. Maj. Gen. William Crozier, Ordnance and the World War: A Contribution to the History of American Preparedness 244-46, 281-82 (1920), available at http://books.google.com/books.

At the start of the war, the Army trained with obsolete guns or guns "cut from wood" due to lack of weapons. Before America entered the war, its gun manufacturers were operating at near capacity filling orders for England and France. Remington and Winchester Repeating Arms both had reorganized their plants, adjusted their machinery, and introduced new equipment to make "Enfields," the model rifle used by Great Britain. While the U.S. Army wanted to place large orders for "Springfield" rifles, it determined that retooling of the plants to make its model would require months, time it did not have. The Army considered the "Enfield" inferior to its "Springfield" model, but elected to buy the manufacturer's machinery for making Enfields, which was owned by England, and procure modified "Enfield" rifles that would accept American ammunition because the production of such rifles could begin almost immediately. A number of arms makers had incurred losses on their fixed-price European contracts, which had ended or were ending, due to increased labor and material costs arising from the war and were reluctant to enter into such contracts with the U.S. Army. To obtain its needed rifles, the Army's Chief of Ordnance purchased from England necessary equipment located in rifle makers' plants and entered into cost-plus contracts with the rifle makers for supply of rifles. Richard Beamish & Francis A. March, America's Part in the World War 306 (1919); Engelbrecht & Hanighen, Merchants of Death at 186-87; 2 Amer. Mil. Hist. 34, available at www.history.army.mil/books/amh-v2/amh%20v2/index.htm; Crowell, Gov't War Contracts at 103-05, 116-18, 121-28, 134, available at http://books.google.com/books; Huston, The Sinews of War: Army Logistics at 320-21; see, e.g., Winchester Mfg. Co. v. United States, 75 Ct. Cl. 710, 711-14 (1932), cert. denied, 290 U.S. 628 (1933); Winchester Mfg. Co. v. United States, 72 Ct. Cl. 106, 107-10 (1930), cert. denied, 284 U.S. 633 (1931).

The government's contracting effort desired that many businesses invest large sums in start-up costs and capital improvements. While the government took steps to encourage such investment, such as furnishing advance payments (as had occurred with

respect to the production of muskets), and allowing the Navy to make partial payments from time to time during progress of work done under all Navy contracts, but not in excess of work already completed, businesses frequently were reluctant to invest their money in capital improvements. They recalled what happened during prior wars - a major drop in demand at war's end and manufacturers left with unamortized, unused production capability. Moreover, military technology in 1917 was more complex and expensive than in prior eras, and industrial prerequisites for furnishing war material incorporating that technology had assumed new financial dimensions. As a result of technological change, there was an ever increasing likelihood war material produced might become outdated or obsolete prior to the expiration of its useful life and its manufacturer having amortized fully the plant equipment used to produce that material. There additionally was the possibility that the government might decide to commence producing the material in its own plant, as occurred with respect to armor plate, before full amortization of plant equipment or other capital improvements made occurred. For these reasons, along with the fact many manufacturers, such as Bethlehem Steel, already had invested major capital to expand their plants for European war contracts, agencies were faced for the first time with the issue of how to increase contractor production capability without contractor funding. Because the government primarily wished to rely upon the expertise and ingenuity of private enterprise in obtaining supplies during the emergency, the initial response to this issue often was to do what the Army had done in procuring rifles - award a cost-plus contract with respect to supply and contractor plant expansion. See Int'l Arms & Fuze Co. v. United States, 101 Ct. Cl. 297, 303-05, 311-14 (1944); Winchester Mfg Co., 75 Ct. Cl. at 711-14; Winchester Mfg Co., 72 Ct. Cl. at 107-10; Western Cartridge Co. v. United States, 61 Ct. Cl. 482, 483-90, 494-95, 501 (1926); Gilbert v. United States, 60 Ct. Cl. 1005, 1006-09 (1925), cert. denied, 271 U.S. 660 (1926); Twin City Forge & Foundry Co. v. United States, 60 Ct. Cl. 673, 674-75 (1925), modified per stipulation, 274 U.S. 763 (1927); Holmes, Progress Payments to Government Constr. Contractors Under the Standard Form, 35 George Washington Law Review 962 (1967); 20 Comp. Gen. 917 (1941); Cooling, Gray Steel & Blue Water at 163, 281-82, 295.

With 75 years of experience procuring sophisticated items from private industry and an established procurement organization that was centralized (except for the purchase of ordnance), the Navy quickly advertised and awarded contracts for 36,000 items, which substantially satisfied most Navy requirements for a year and caused the Army's Chief of Staff to complain that the Navy had cornered the market for many supplies before other government agencies even determined their requirements. While businessmen serving in government on a "dollar-a-year" basis advocated award of negotiated cost-plus contracts to increase production and avoid disruption to the civilian economy, the Navy continued to advertise and compete most contracts. It was determined to secure the lowest possible prices for war supplies and prevent any hint of profiteering. Secretary Daniels vetoed a May 1917 contract for forgings that the predecessor of the War Industries Board (WIB) desired be awarded to Bethlehem Steel. He refused to accept the assertions of Bethlehem

and the WIB predecessor that the contract prices were necessary to finance needed plant expansion. John K. Ohl, *The Navy, the War Industries Board, & the Indus. Mobilization for War 1917-1918*, 40 Mil. Affairs 17-19 (1976), *available at* http://jstor.org/stable/1986844; Crowell, *Gov't War Contracts* at 138, *available at* http://books.google.com/books; Paymaster Gen. Ann. Rep. 1918 at 24-25, 91.

Secretary Daniels believed the major issue facing the Navy was the procurement of additional destroyers. While organizing merchant vessels into convoys guarded by destroyers had reduced ships sunk by Germany, merchant tonnage sunk remained unacceptably high, exceeding newly launched tonnage by nearly two to one. Daniels made inquiries at vards that had never done naval work to see if they would accept destroyer contracts, but his efforts were for naught. American plants not building warships were overflowing with orders for merchant vessels, which also were required to counter the submarine threat. Thus, the only immediately apparent means of obtaining shipway space to construct more destroyers was to halt work on existing Navy contracts and use that "freed-up" space. Daniels and the Navy, however, were reluctant to delay most other Navy construction. It therefore was dawning on Daniels and the Navy that the problem was not simply to build more destroyers, but to expand existing yards in which ships might be constructed. In sum, new shipbuilding capacity had to be created on a scale never before seen. Daniels therefore began searching for ways to increase destroyer production in accordance with existing policy, which was to encourage, financially and otherwise, the construction and maintenance of shipyards by private interests. Williams, Shipbuilding & the Wilson Admin. at 167, 170, available at www.dtic.mil/cgi-bin/ GetTRDoc?AD=ADA218028&Location=U2&doc=GetTRDoc.pdf; Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. at 20-21, available at http://www.jstor.org/stable/ 2944447; Kreidberg & Henry, History of Mil. Mobilization in the U.S. Army at 328-29; see Ann. Rep. of U.S. Shipping Board 1917 at 6-7, 12, 14, available at http://books.google.com/books; Ann. Rep. of U.S. Shipping Board 1918 at 33-36, 120-23, 129-37, available at http://books.google.com/books; Report of Director General Charles Piez to the Board of Trustees of the U.S. Shipping Board Emergency Fleet Corp. 13-14, 78-81, 123-32 (30 Apr. 1919), available at http://books.google.com/ books; Report of the President of the U.S. Shipping Board Emergency Fleet Corp. to the Board of Trustees at 25-26 (1 Aug. 1919).

The United States Shipping Board, which was created pursuant to the Shipping Act of 1916, 39 Stat. 78, 729, to encourage, develop, and create a merchant marine and regulate carriers by water engaged in foreign and interstate commerce, also canvassed ship building yards, and found them full of orders and booked for a year to a year and a half ahead. It therefore appeared that the Board would have to compete with the Navy and foreign ship owners for space on the limited number of shipways in procuring new steel merchant vessels. Because new tonnage was desperately needed to maintain the "bridge of ships" from the U.S. to Europe with supplies and war material necessary for survival of Britain and France, the Shipping Board created a corporation for the purchase,

construction and operation of merchant vessels, which it named the Emergency Fleet Corporation (EFC), and appointed Maj. Gen. George Goethals, who was famous for overseeing completion of the Panama Canal, as the Corporation's General Manager. Williams, Shipbuilding & the Wilson Admin. at 170, 187, 196, 206, 243-44, available at www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028&Location=U2&doc=GetTRDoc.pdf; see Pressed Steel Car Co. v. United States, 62 Ct. Cl. 191, 192 (1926), aff'd & remanded on counterclaim per stipulation, 273 U.S. 780 (1927).

From April to July 1917, Goethals explored the possibility of building a standard design steel ship. He asked three prominent business executives – the owner of Chester Shipbuilding (W. Averell Harriman, who acquired John Roach's shipyard), Chairman of the Board of New York Shipbuilding (George Baldwin), and naval architect and Vice President of Submarine Boat Corporation (Henry Sutphen) – to examine if ship parts could be fabricated in bridge and tank shops and then transported to a shipyard for assembly similar to an automobile assembly line. Constructing "fabricated" or standard-design ships was a radical concept. Previously, large ships were all "custom" built with each hull part bent, molded, and fashioned at shipyard shops. After studying the fabrication concept, all three men believed that it allowed for production of numerous steel vessels without requiring large numbers of highly skilled ship workers, who were in short supply. The presidents of U.S. Steel and Stone & Webster (a giant engineering firm), and officials of two major bridge builders, plus the Board's own naval architect, also were enthused about the concept. Goethals requested necessary approvals from the President, sought congressional appropriations, and arranged to obtain steel necessary to build the ships. To acquire additional vessels, on 15 June 1917, Gen. Goethals met with Bethlehem and other shipbuilders and requested that they submit formal proposals for the construction of steel merchant ships. While Goethals tried to persuade Bethlehem to enter into a "lump-sum contract," it refused. It insisted on the so-called "half-savings" form of contract, which it had originated to accommodate desires by the government to provide an incentive for cost reduction in cost plus contracts. It proposed construction of steel merchant ships on the basis of actual cost plus a "fixed fee" per vessel, with the company receiving in addition to fixed fee one-half of any savings between estimated and actual cost of vessels furnished. During June and July 1917, however, disputes erupted between Goethals and the Shipping Board Chairman, which delayed Goethals' efforts to enter into contracts for merchant vessels and ultimately resulted in both men submitting their resignations to the President. Williams, Shipbuilding & the Wilson Admin. at 197-209, 219-20, 222-25, 237, 243, 246-47, 257, 259, 261-64, 269, available at ww.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028&Location=U2&doc= GetTRDoc.pdf); Warren, Industrial Genius at 169; Bethlehem Steel Corp., 315 U.S. at 316-17.

During the same period, Secretary Daniels decided to halt construction on some naval vessels and award contracts for 50 destroyers to the shipyards performing work on those contracts and other shipyards. He said the private shipyards would have to remodel

and enlarge, alter their methods, double their working forces, and train new personnel to build destroyers. Daniels also decided to acquire about 150 standard-design destroyers. He asked Navy personnel to develop a plan for such destroyers. Williams, *Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I*, 60 J. Mil. Hist. 21, 25-27, available at http://www.jstor.org/stable/2944447.

When France requested a corps of airplanes be sent for the 1918 campaign, the U.S. Army Signal Corp (predecessor of the U.S. Air Force) scrambled to obtain mass production of aircraft in the United States. Adequate facilities for large scale production of airplanes did not exist. Prior year aircraft production was less than 800, most of which were planes bought by foreign nations to "train" pilots. While Europeans had been using airplanes as bombers, bomber escorts, scouts, and fighters, for about three years, the U.S. Army had not determined fully its tactical objectives for use of aircraft and there was no American-made aircraft deemed suitable for "combat." The Army proposed production of 22,000 airplanes (including both battle and training craft) by 1 July 1918 and Congress appropriated more than \$600 million for that purpose. Noble Lee Snaples, Jr., Institutionalizing Aircraft Procurement in the U.S. Navy, 1919-1925 at 3, 31-32 (unpublished doctoral thesis 1999), available at http://www.snaples.com/lsnaples/ dissertation/chapter iv.htm; 38 Stat. 930; 39 Stat. 582-86; Nagle, A History of Gov't Contracting at 289-99; C.M. Culver, Fed. Gov't Procurement – An Uncharted Course Through Turbulent Waters, Contract Mgmt 5 (1985), available at http://www.gsacncma. com/files/US-FP-Hist.pdf; Crowell, Gov't War Contracts at 243-44, available at http:// books.google.com/books; 4 Aircraft Journal 489-91, available at books.google.com/ books?id=PKExAQAAMAAJ1919 - Aeronautics; Benedict Crowell, America's Munitions 1917-1918 (Report of Assistant Secretary of War, Director of Munitions) 235-36, 239.

In-July 1917, the Army's Chief of Ordnance, who awarded nearly 16,000 contracts in 1917, which were valued at over \$5 billion and included the expenditure of \$325 million to increase industry manufacturing capability, issued a 26-page "booklet" entitled "Instructions to Accountants." The booklet, which was distributed to accountants in his office's finance division, cost-accounting section, stated with respect to "SPECIAL PURCHASES FOR INCREASING FACILITIES":

- 81. Special purchases of buildings, machinery, equipment, and the like may be made by the contractor on the authority of the contracting officer and such authority must be contained in writing in every instance.
- 82. The contractor will be reimbursed by the United States for such special purchases upon presentation of Public Voucher, Form No. 325, supported by the evidence required on Summary of Special Purchases, Form No. 1613.

83. The cost-accounting section will return to contractor any public voucher or summary of special purchase that are not accompanied by original vendor's invoice, architect's estimate, or engineer's certificate. All such documents must be approved by contractor, Ordnance inspector, and accountant in charge.

84. The accountant in charge will verify the following

details in connection with each purchase:

First. Obtain written authority of contracting officer and determine whether the purchase made conforms in every particular thereto.

Second. Obtain certification of Ordnance inspector that the property is received in good order, conforms to all specifications, and is necessary in connection with the execution of contracts for the United States.

Third. Obtain "work order" or "cost record" of contractor in which is contained the details of cost incident to the installation or erection of the property; also freight bills paid by contractor in order to present a complete cost in connection with each purchase on the Summary of Special Purchases, Form No. 1613, all of which must have the approval of the Ordnance Inspector.

85. The cost of such special purchases is not subject to any addition for profit to the contractor unless otherwise specified in contract.

86. The accountant in charge and Ordnance inspector will render semiannually a complete return of property owned by the United States as required by existing regulations and will keep records that will make it possible for them to check the correctness of the physical count reported by them.

87. The accountant in charge will instruct the contractor to open a special account, where such purchases are involved, as follows:

1. Special purchases made for United States

Debit this account with the payments made by contractor on account of special purchases of buildings, machinery, equipment, special appliances, etc., and all expenses in connection therewith, that has been purchased on authority of the contracting officer, and that becomes the property of the United States.

Credit this account with the cash received from the United States in payment therefor.

Instructions to Accountants Attached to Cost Accounting Section Fin. Div. Office of the Chief of Ordnance War Dep't, 18-19 (GPO 11 July 1917) (bold emphasis added). Similarly, with respect to government-furnished material, the booklet stated:

- 64. The contracting officer will contract for certain materials from various sources of supply, subject to orders for delivery by the Chief of Ordnance. Material so contracted for will be paid for by the United States upon proper evidence of receipt thereof at the plant of contractor. The contractor will make no disbursements from its own funds in payment therefor, but will be held accountable for the quantity delivered to it.
- 65. Profit will accrue to the contractor on the cost of such material only as it is used in the manufacture of the articles contracted for, unless otherwise specified in contract, such usage to be reported on Public Voucher, Form No. 325, supported by Summary of United States Materials Used, Form No. 1612, which will be submitted to cost accounting section on the last day of each month. [Emphasis added]

Id. at 15.

On 31 July 1917, an interdepartmental conference consisting of delegates from the Departments of War, Navy, and Commerce, Federal Trade Commission, and Council of National Defense, issued recommendations concerning contracts and the treatment of costs for all government departments. The conference recommended that fixed-price contracts be used where fair terms could be obtained, but stated that cost-plus contracts could be used where the manufacturing was novel or difficult or where the contractor lacked plant equipment or working capital to perform the work. Because, with use of a cost-plus contract, "[t]he temptation is great to the contractor to inflate his own costs, as well as the costs of subcontractors, and the task of the United States is difficult and burdensome in checking and determining proper costs," the conference recommended "a fixed profit of a definite sum of money per article be agreed upon instead of a percentage of cost." To encourage contractors to reduce costs, the conference stated the fixed-profit agreed upon could be adjusted "so that the contractors may share in the saving of, or be charged with part of the excesses of, actual cost over estimated cost." The conference emphasized, however, that a cost-plus contractor should "receive no profit beyond that definitely specified in his contract." Uniform Contracts & Cost Accounting Definitions & Methods, 3-7, 20 (GPO July 1917); Graske, The Law of Gov't Defense Contracts at 18.

The week the interdepartmental conference issued its recommendations, two Navy admirals asked Bethlehem, which owned two shipyards specializing in Navy construction work (Fore River near Boston and Union Iron Works in San Francisco) to submit to it a proposal for construction of "150 additional destroyers of a comparatively simple type." Five days later, on the date that the conference recommendations were issued, Bethlehem advised it could build all the destroyers desired through the expansion of its ship building facilities. The admirals asked Bethlehem for details. Bethlehem (and its chief executive, Charles Schwab), which had been addressing concerns that manufacturers were profiting excessively from Navy contracts for armor for nearly a quarter of a century and had seen Congress authorize the Navy to build its own armor plant, replied it would build at "no profit to itself" two new "assembling yards" located near its shipyards performing Navy work, both of which would possess up to 20 shipways and various shops for production of turbines, boilers, and other equipment necessary for the destroyers. Bethlehem added: its only profit would come from the sale of each destroyer assembled, "assembling yards" and related shops built "would be the property" of the Navy; and it would deliver to the Navy the first standard-design destroyer nine months after authority to proceed and the last nine months later. Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. 28, available at http://www.jstor. org/stable/2944447; Williams, Shipbuilding & the Wilson Admin. at 330, available at www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028&Location=U2&doc= GetTRDoc.pdf.

While he previously had dismissed the idea of fabricating standardized destroyers on an assembly line as impractical, the Navy's chief of ship building advised Daniels the first week of August that, if Bethlehem's proposal was accepted, he believed the Navy would be able to obtain the number of destroyers it deemed necessary. Because he was concerned about entrusting destroyer construction to only one company, Daniels asked all firms specializing in Navy work to meet with him. The same week that the Navy broke ground on its new armor plant located in Charleston, West Virginia, the Secretary met with Bethlehem, Bath Iron Works, New York Shipbuilding, Cramp and Sons, and Newport News. While the Secretary previously thought nothing of awarding armor requirements to only one firm, he questioned the wisdom of having one destroyer fabricator and asked each to study the possibility of increasing capacity to handle some part of the fabricated destroyer program. After receiving written information from each firm, he decided that Bethlehem would fabricate 85 standard-design destroyers and Newport News, Cramp, and New York Shipbuilding would fabricate the remaining 65. While the Navy had awarded the March 1917 destroyer contracts on a cost plus 10% basis, the standard-design contracts awarded adhered to the proposal of Bethlehem Steel and the recommendations of the interdepartmental conference issued days before that proposal. They provided for the payment of actual cost plus "a fixed profit" per ship, i.e., \$135,000 or 9% of estimated cost of \$1.5 million per destroyer. The contracts did not provide for the payment of a percentage profit on the cost of assembling new plant to

produce those ships or for any other profit specifically associated with such costs. Under the contracts, the only way a contractor could receive profit beyond that "fixed per ship" was to produce the ships it delivered for a sum less than their estimated cost. As suggested by the interdepartmental conference, the contracts provided the parties would split any savings between actual and estimated destroyer cost, i.e., a contractor would receive 50% of difference between the estimated and actual cost as additional profit. Thus, the Navy solved its dilemma of how to obtain new destroyers when all existing shipyards were filled to capacity and shipyards were unwilling to invest money in capital improvements necessary because they believed there was likely to be little demand for destroyers after the war. The Navy paid shipyards – with **no** provision for profit – their cost of acquiring new plant necessary to assemble the fabricated destroyers under costplus-fixed-fee contracts to supply such destroyers. Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. at 29-31, available at http://www.jstor.org/stable/2944447; Williams, Shipbuilding & the Wilson Admin. at 331-40, available at www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA218028 &Location=U2&doc=GetTRDoc.pdf; The Cabinet Diaries of Josephus Daniels 1913-1921 at 189-90, 193, 201-02 (ed. E. David Cronon, U. of Neb. Press 1963); see Kingsbury v. United States, 68 Ct. Cl. at 680-81.

Because large-scale production of aircraft frames and engines was deemed novel and accurate data to make satisfactory estimates of production costs was not available, the Signal Corps awarded cost-plus contracts to perform that work. Like the Bethlehem "half-savings" contracts for destroyers, most of the aircraft contracts specified a fixed profit per unit based on estimated aggregate cost and the receipt by the contractor of a "premium" (additional profit) if actual per unit cost incurred was less than the estimated cost per unit (often referred to as the provisional "bogey cost"). Established aircraft companies, such as Standard Aero and Curtiss, as well as newly-formed firms, such as Dayton-Wright and Fisher Body, received airframe contracts. Other companies (Lincoln Motor Co., Packard Motor Car, Ford Motor Co., General Motors Co., and Nordyke & Marmon Co.), which had never made engines for airplanes, received contracts to produce most of the newly-designed "Liberty" engines. In many cases, the Signal Corps agreed to pay for construction of plants to produce the aircraft frames and engines. The Corps also entered into additional cost-plus contracts to ensure harvest of sufficient "spruce" lumber for airframes, spinning of cotton to cover airframe wings, production of chemicals necessary for the "dope" applied to wings to make them airtight, and harvest of sufficient castor beans for manufacture of aircraft motor lubricant. Snaples, Institutionalizing Aircraft Procurement in the U.S. Navy, 1919-1925 at 33, available at http://www.snaples. com/lsnaples/dissertation/chapter iv.htm; Crowell, Gov't War Contracts at 235, 243-45 (citing Rep. of Charles E. Hughes on Aircraft Production Investigation, Oct. 25, 1918, Cong. Rec., Dec. 30, 1918, Appx. A at 906), available at http://books.google.com/books; Crowell, America's Munitions 1917-1918 (Rep. of Assistant Secretary of War, Director of Munitions) at 243-44, 249, 251, 269, 274, 280; see Dayton Airplane Co. v. United States, 21 F.2d 673, 683 (6th Cir. 1927).

On 26 July 1917, Admiral Capps, Chairman of the Navy's Compensation Board handling cost-accounting issues, replaced Gen. Goethals as General Manager of the EFC. Admiral Capps had spent many years supervising the building of ships for the Navy and had learned that, if contracts were not carefully drafted, Congress would hold the agency responsible for abuses likely to occur as a result. He, therefore, placed a "hold" upon all EFC contracts until he had an opportunity to review and possibly rewrite them to furnish the government greater protection. The EFC legal staff resigned en masse on 10 August 1917 to protest the Admiral's action. A month earlier, Goethals had initiated negotiations with three firms – American International Corporation (AIC), Submarine Boat Corp., and the Merchant Shipbuilding Corp. (a firm newly formed by W. Averell Harriman) – for the award of contracts to fabricate 200 merchant vessels at newly-created shipways. When Gen. Goethals was unsuccessful in persuading the firms to agree to a fixed fee, he offered them an "agency" form of contract where a firm would take no financial risk and simply supply "an organization to take charge of the work." Under such a contract, the government would pay the cost of creating new plant necessary to perform the contract and own the plant created. Admiral Capps proposed the fee or profit be a "set sum per ship" equivalent to 5% of the ship's estimated cost and that the set sum be subject to certain penalties which could not lower the fee or profit below 4% of estimated cost. When Harriman's firm agreed to accept Admiral Capps' proposal, the others did likewise and, during September 1917, all three signed contracts providing EFC would pay the cost of creating new shipways to fabricate merchant ships, but pay no profit with respect to such costs. As the President of AIC stated in a report to the firm's stockholders –

The contract does not provide that the agent shall receive remuneration for the work of designing and constructing the yard. It is to receive a fixed fee for its services in constructing each ship, one-half payable when such ship is half built, the remainder when the ship is completed and accepted by the United States Government. No remuneration whatever except this fixed fee per ship is to be paid to the American International Corporation or to its associates....

AIC's contract for work at "Hog Island" was mired in controversy from the outset. Some asserted the men behind AIC knew more about the ways of Wall Street, than shipways, and questioned paying them millions to oversee newly-created shipways for fabrication of merchant vessels. The Shipping Board's first Chairman testified before Congress:

The question of profiteering at Hog Island was the only one between Gen. Goethals and myself when we handed in our resignations.

I felt that, in a great transaction like this work, where the Government itself, and its power, was the main reliance for the success of the enterprise, anything that looked like a profiteering payment to the great people on top who could well have given us for nothing the services of these five or six men, would be simply an invitation to every laboring man, from the lowest unskilled laborer up, to demand a wage on a similar basis; and that instead of getting us more ships and faster ships, this kind of overloading of profit at the top would impede the progress of the work, by starting strikes and labor disputes up and down the scale of labor organization.

It is greatly to the credit of the gentlemen who have succeeded us that a very much lower and fairer figure was fixed on for the acquisition of this skill that these men had to give.

John Franklin Crowell, a past president of Duke University and economic commentator, wrote three years after contract award:

The real credit for... reduction in contract fees, from one of 10 per cent of costs to one of 5 per cent or less, was partly due to the...criticism as reflected in Congress. There was much current discussion adverse to cost-plus contracts, especially of the percentage type. But it was also due to the infusion of the [N]avy's fair price policy into ship awards, by the advent of Admiral Capps as General Goethals' successor in the Fleet Corporation.

Crowell, Gov't War Contracts at 187, 189-90, 194-95, 209-10, 212-13, 214-18, 224-25, available at http://books.google.com/books; Williams, Shipbuilding & the Wilson Admin. at 370-78, available at www.dtic.mil/cgi-bin/GetTRDoc?AD= ADA218028& Location=U2&doc=GetTRDoc.pdf); U.S. Shipping Board Emergency Fleet Corp.: Hearings on S. Res. 170 Before the Comm. on Commerce, 65th Cong. 236-40, 260-79, 747-77 (contracts), 1960 (Harris Connick, Vice President of Amer. Int'l Shipbuilding), 2021 (Dwight Robinson, President of Amer. Int'l Shipbuilding), 2432 (statement of William Denman, former Chair, U.S. Shipping Board) (1918) available at http://books.google.com/books; Warren, Industrial Genius at 169; see Pressed Steel Car Co. v. United States, 62 Ct. Cl. at 192.

The 927-acre site selected for performance of AIC's contract for merchant vessels was a wild swamp in September 1917 lacking sewer, water, telephone, electrical power, and all other necessities associated with 20th century manufacturing. Within a year, AIC

converted that swamp, which was known as "Hog Island," into the largest "shipyard" in the world employing 34,000. At a cost to EFC of nearly \$65 million, Hog Island had 250 buildings (workshops, hospital, 5 mess halls, 12 restaurants, cafeteria, trade school, 4 fire stations, police station, YMCA, hotel, etc.), 80 miles of railroad track, 21 miles of road, facilities necessary to receive and store 300 railcars of material per day, 3 million feet of underground wiring, facilities necessary for water, sewage, and electrical power, and piers for 50 shipways. While referred to as a "shipyard," Hog Island was an "assembly plant" for ships. AIC contracted with 88 steel fabricators across America, such as bridge makers, car plants, and others equipped for the shaping and punching of steel, to perform such work in accordance with blueprints it furnished, and then ship the steel fabricated to Hog Island where parts were stored and delivered to hulls as needed. "Eighth Wonder of the World" was the title of an article on Hog Island appearing in Le Journal of Paris. Edward N. Hurley, *The Bridge to France* 78-82 (1927), available at http://onlinebooks. library.upenn.edu/webbin/book/lookupid?key=olbp35575; Beamish & March, America's Part in the World War at 361-63; Warren, Industrial Genius at 172; Crowell, Gov't War Contracts at 219, available at http://books.google.com/books; see Pressed Steel Car, 62 Ct. Cl. at 192-94.

EFC's other two contracts for fabricated steel merchant vessels were performed near sites previously doing shipbuilding work and did not require as great an expense for new plant. Submarine Boat added 28 shipways in Newark where it previously built 550 submarine chasers made of wood for England. The cost to EFC of those shipways and related workshops was \$17 million. Merchant Shipbuilding added 12 shipways at Bristol adjacent to its Chester Shipyard. The cost to EFC of the shipways and related workshops was \$12 million. Hurley, The Bridge to France at 22-23, 77, available at http://onlinebooks.library.upenn.edu/webbin/book/lookupid?key=olbp35575; Crowell, Gov't War Contracts at 217-18, available at http://books.google.com/books.

After U.S. entry into the war, du Pont sold smokeless gun powder to the Army at a price less than the Army's cost of producing such powder in its New Jersey plant and lower than ever previously charged. During fall 1917, the U.S. government recognized massive armies were needed in Europe and existing powder production would need to be twice du Pont's capacity in October 1917. Since there was no commercial attraction to building plant which would become useless when hostilities ended, the Army's Ordnance Chief, Maj. Gen. Crozier, contacted du Pont about building and operating at government expense new plant that would produce one million additional pounds of powder per day. Du Pont proposed to build and operate such a plant under an agency contract where it would act as a government "agent." For constructing the needed plant estimated to cost \$90 million, du Pont would be reimbursed all construction costs, plus 7% of those costs to cover preparation of plans, procurement of sites, non-local engineering supervision and the services of buying and forwarding necessary material, and 8% of those costs to cover non-local administration, pro rata share of overhead, and profit, or payment of a total fee of 15% of cost over and above actual construction cost reimbursement. With respect to

manufacturing of powder, which was estimated to cost \$250 million, du Pont would be reimbursed manufacturing costs plus 5 cents per pound for each pound delivered and 50% of the difference between actual powder manufacturing cost and the estimated cost of 44.5 cents per pound. Du Pont desired to assume no financial risk associated with the new contract and was concerned that a court or some arbitrary government official might later assert the Ordnance Department had exceeded its lawful powers in entering into the contract, as occurred with John Roach regarding construction of ABCD ships. Because it did not wish to expose the assets of the firm and its shareholders to claims of liability under an implied warrant of authority on all related contracts signed by it as agent of the government, du Pont created a subsidiary corporation (the Du Pont Engineering Co.) with only \$5,000 capitalization for entry into the contract and transfer of all employees assigned to perform the work. The subsidiary executed the contract on 25 October 1917 and committed in excess of \$3 million for the work, i.e., promptly purchased options on two possible plant sites, bought Betts Machine Company in Wilmington for purpose of manufacturing much of the machinery needed to equip the new powder plant, and placed orders exceeding \$2.3 million for other needed machinery. Six days later, on 31 October 1917, du Pont received a telegram from Secretary of War Baker, which essentially cancelled the largest contract ever awarded by the American government as of that date and stated:

I have just had presented to me the details of the proposed contract with regard to increased capacity for powder production. This matter is large intricate and important. Do nothing about it until you hear further from me. Stay all action under the order until I can acquaint myself thoroughly with all features of the matter.

Chandler & Salsbury, Pierre S. du Pont & The Making of the Modern Corp. at 401, 403, 406-10, 414; Crozier, Ordnance & the World War: A Contribution to the History of Amer. Preparedness at 247-48, 250-52, 254, 267, available at http://books.google.com/books.

Because the War Secretary declined to ratify the contract after review, the Army's Ordnance Chief proposed as an interim measure an agreement for construction of plant to produce only 400,000 pounds of powder per day with a reduced fee for the construction work. The War Secretary also declined to approve this agreement. Du Pont, therefore, proposed it construct a plant for one million pounds per day, as initially sought, with all questions of compensation for work it performed resolved by a Board of Arbitration. The War Secretary declined to accept this proposition too. During December of 1917, the War Secretary awarded a contract for the construction and operation of a 500,000 pounds plus per day powder plant to American Smelting and Refining, which had no experience with building or operating powder plants and had suggested the War Secretary contract with Du Pont for such work, but submitted a proposal after being advised Du Pont wanted compensation unacceptable to the government. American Smelting, a copper

producer, was to receive no fee or profit for construction of the powder plant in West Virginia. During hearings held by the Senate in January of 1918, a Senator questioned the War Secretary about an offer by Du Pont to build and operate a new powder plant at cost. The Secretary responded that Du Pont never offered to erect a plant without compensation, its offer was to build a plant for a fee of 15%, and it would have received "a gross profit of \$20 to \$40 million" from its offer. The New York Times published an article about the Secretary's statements, which furthered concern at Du Pont that it would be blamed if a shortage of powder occurred. On 29 January 1918, after further discussion with American Smelting, which was concerned about building a powder plant in the time required, and the War Secretary, who had been convinced by Maj. Gen. Crozier and American Smelting that assistance from Du Pont was vital to increased powder production, Du Pont's subsidiary agreed to act as agent in building and operating a powder plant for production of 500,000 pounds per day in Tennessee called "Old Hickory." For building the plant, Du Pont was to be reimbursed for construction costs and receive no fee or profit, except for payment of \$500,000 for construction plans and 3% of costs incurred (capped at a total of \$1.5 million) for various "services" provided. Shortly after ground was broken for the plant, the War Department desired to increase plant capacity from 500,000 to 900,000 pounds per day. The parties modified the contract to increase capacity and altered the profit or fee which was to be received by Du Pont for construction. While Du Pont was to receive a limited fee under the January contract, because it wanted to pay bonuses to personnel for their work and otherwise have a free hand in performing contract work, it requested that it receive **no** fee or profit for the construction under the revised contract and such monies were eliminated from the revised contract. During 1918, Du Pont constructed Old Hickory, which consisted of more than 1,100 buildings covering eight-square miles, and an entire town accommodating 30,000 individuals (plant workers and their families) necessary for plant operation. For this construction effort costing nearly \$90 million, Du Pont received no profit. Crozier, Ordnance & the World War at 255-60, 263, 266, 268, available at http:// books.google.com/books; Chandler & Salsbury, Pierre S. du Pont & The Making of the Modern Corp. at 411, 413-15, 417-21; Williams, Munitions Manufacture in the Philadelphia Ordnance District at 385-88, available at http://books.google.com/books.

When EFC requested Bethlehem bid on a lump sum basis to construct various vessels, Bethlehem refused due to the "unprecedented conditions surrounding the Labor and Material market," and proposed they be constructed under the bonus for savings form of cost plus contract it used in building ships for the Navy. Bethlehem notified the EFC by letter in January 1918 it "cannot undertake any capital expenditures at its expense," if its proposals to build troop ships and tankers do not meet with EFC approval Bethlehem is prepared to accept an order to construct the vessels on such terms as may be personally determined by the EFC general manager, and it was making this subsequent offer because of the vital emergency confronting the nation. The same day, the EFC acquiesced to use of the "half-savings" form of cost contract for 13 additional contracts with Bethlehem for

construction of tankers and troop ships. United States v. Bethlehem Steel Corp., 113 F.2d 301, 303 (1940), aff'd, 315 U.S. 289, 317-19 (1942).

The failure of the Army Signal Corps to meet aircraft production goals by summer 1918 and the conduct of four investigations into the contracts awarded for aircraft frames and engines (one by a presidential friend (Mt. Rushmore sculptor Gutzon Burglom), two by members of the Senate Committee on Military Affairs, and one by Charles E. Hughes, a former Supreme Court Justice appointed as an independent counsel by the Attorney General) caused President Wilson to issue an Executive Order, No. 2862, on 20 May 1918 transferring responsibility for aviation from the Signal Corps to two new agencies reporting to the War Secretary. Charles A. Ravenstein. The Organization & Lineage of the U.S. Air Force 3 (Office of Air Force History 1986), available at www.afhso.af.mil/ shared/media/document/AFD-100928-056.pdf; Crowell, Gov't War Contracts at 236-37, available at http://books.google.com/books; Snaples, Institutionalizing Aircraft Procurement in the U.S. Navy, available at http://www.snaples.com/lsnaples/ dissertation/chapter iv.htm; Report of Charles E. Hughes on Aircraft Production Investigation, October 25, 1918, Cong. Rec., Dec. 30, 1918 Appx. A, at 883-914; see 40 Stat. 556; S. Comm. on Mil. Affairs, S. Rep. No. 555, 65th Cong., 2d Sess., at 3; Aircraft Production: Hearings before the Subcommittee of the Committee on Mil. Affairs, S., 65th Cong., vol. II (1918).

During 1918, in accordance with the July 1917 interdepartmental conference, the Navy promulgated a "standard form" for cost-plus contracts involving manufacturing. The standard-form contract provided, in pertinent part:

The Department will pay the contractors a profit of (percentage of cost of product or stated amount per unit) completed and accepted hereunder and also actual cost of production, defined in sub-paragraphs (a) to (e) below. No profit will be allowed on costs under sub-paragraph (e)....

- (a) Cost of all direct labor definitely ascertainable as necessary for and employed exclusively in the manufacture of the articles contracted for hereunder.
- (b) Cost of all direct material definitely ascertainable as necessary for and devoted exclusively to the articles contracted for hereunder....
- (c) A proper proportion of overhead expenses....
- (d) The foregoing items of cost shall apply as above specified to all labor, direct or indirect, and material involved, in the manufacture of product under this contract, whether the same

be actually applied to product accepted or not accepted by the department, provided that in the judgment of the department the contractor takes due precaution to prevent carelessness and unnecessary damage to material.

(e) Cost of machinery and equipment, patterns and drawings and temporary structures needed for the utilization and protection thereof acquired exclusively for and devoted exclusively to NAVY work; [subject to approval in advance. Title shall vest in the department.]

Navy Paymaster Gen. Ann. Rep. 1918 at 94-96 (emphasis added); Crowell, Gov't War Contracts at 146-47, available at http://books.google.com/books.

Very unexpectedly, Germany initiated discussions about ending the war during fall 1918. On 8 November, Germany was swept by revolution and the Kaiser fled into exile, ending World War I. Williams, *Josephus Daniels & the U.S. Navy's Shipbuilding Program*, 60 J. of Mil. Hist. at 33-34, *available at* http://www.jstor.org/ stable/2944447; *Pressed Steel Car*, 62 Ct. Cl. at 197.

During the War, the government built or financed, among others, 16 of 92 plants engaged in manufacture of powder and explosives and 5 of 18 new gun factories of various kinds, 8 plants for manufacture of toxic gas, gas masks and gas shells, and 4 nitrate plants. The Navy also paid for about 45 additions to private shipyards and built its own facilities at a cost of over \$50 million. Huston, *The Sinews of War: Army Logistics* at 319-20; Kreidberg & Henry, *History of Mil. Mobilization in the U.S. Army* at 328-29; Navy Sec'y Ann. Rep. 1920 at 152.

After the War, many of the new facilities built were sold for much less than their construction cost. Shipbuilders bought shipyards from the government for a fraction of their value. For example, Newport News Shipbuilding paid \$2 million for facilities built by the government at a cost of \$10 million. In some cases, the sale was pre-arranged as an option in the contract, which authorized reimbursement of the costs for constructing the shipyard. For example, the New York Shipbuilding Company agreed to construct a yard at government expense on company land only after the government agreed to allow it to buy the \$14 million facility after the war for \$500,000. With respect to the fleet of merchant vessels the Shipping Board had purchased, Congress was not willing to embark on a long-range program of public operation. It thus enacted the Merchant Marine Act of 1920, 41 Stat. 988, directing the Shipping Board to sell as many vessels as possible to corporations of predominately American ownership. The Shipping Board's low prices, easy terms, and guarantees against operational losses for vessels sold lured a number of private firms to invest considerable private capital in the shipping industry and kept afloat

a sizable merchant marine through the 1920s. Preliminary Rep. of the Special Comm. On Investigation of the Munitions Industry pursuant to S. Res. 206 (73d Congress) at 4, 8, 9, 345-46, 349-51 (74th Cong., 1935) (Naval Shipbuilding), available at http://www.archive.org/details/munitionsindustr00unit; Kaufman, The War Profiteers at 12-13.

In January 1919, the Chairman of the 1917 Interdepartmental Conference, who was chief of the Division of Cost Accounting of the Department of Commerce, published a book on cost accounting specifically dealing with cost plus contracts awarded by the government. In addressing "equipment" as an item of cost under cost-plus contracts, the book stated:

BETTERMENTS AND EQUIPMENT

Treatment of Additions and Special Facilities

Expenditures for special facilities, which usually are in the nature of a betterment, may be charged as cost when they are exclusively employed on cost-plus work, providing that the contract authorizes the charge. In all other cases, they should be charged to a Betterment account and be subject to depreciation, of which the cost-plus contracts would bear their proportionate share.

Unless clearly stated in the contract itself, expenditures of the above character should not be treated as a part of the normal costs, but should be reimbursed and profit should be added only when the betterment is manufactured in the plant. All purchases of betterments, where provided for in the contract, should be reimbursed without profit. Some contracts do not allow profit on increased or special facilities whether purchased or manufactured in the plant.

J. Lee Nicholson & John F. D. Rohrbach, *Cost Accounting* 487, 497-98 (1919) (emphasis added), *available at* http://books.google.com/books. In addressing replacement of equipment, the book stated:

REPAIRS, RENEWALS, AND REPLACEMENTS

Method of Treatment

Repairs, renewals, and replacements sometimes require special treatment. If the buyer has supplied the contractor with machinery or has reimbursed him for its purchase or for the erection of buildings, the ownership of such property is vested in the buyer. Wherever such expenditures are made directly and only for cost-plus work, they become a direct charge; when used for commercial work as well, the charge should be made to overhead. The cost-plus contract should bear no part whatever of the cost of the contractor's machinery if used by him for commercial work only.

Wherever replacements of machinery are made necessary by cost-plus work and a purchase is made, the contractor is entitled to reimbursement, but profit should not be added.... [Emphasis added]

Id. at 501-02.

During 1919, Congress refused to accept that, while it had appropriated more than \$1 billion for aviation, fewer than 200 combat aircraft had made it to the front. It focused on failures such as the \$6.5 million spent on canceled fighter production and nearly \$6 million spent on light bombers destroyed because of structural problems. It convened another inquiry into aviation expenditures. As a result of this further investigation, many concluded the industry profited unduly from the war. They believed aircraft contractors arrived at a bogey (estimated cost) sufficiently high to ensure themselves a wide margin between estimated and actual cost, guaranteeing themselves receipt of a large premium in addition to specified profit. Snaples, *Institutionalizing Aircraft Procurement in the U.S. Navy*, ch. IV, available at http://www.snaples.com/lsnaples/dissertation/ chapter_iv.htm; Crowell, Gov't War Contracts at 237, 240-42, available at http://books.google.com/books; see, e.g., Dayton Airplane Co., 21 F.2d at 683.

In March 1920, the Supreme Court found for U.S. Steel in the government's antitrust suit, concluding that no monopolistic control had been exerted. While the armor plant being built by the Navy had broken ground in August 1917, its construction was plagued by a variety of issues, including payment of overtime, union versus nonunion construction, legal battles about water rights, and the need to advertise for machinery. Further, due to the War, the Navy gave priority to shipbuilding, rather than building of a manufacturing plant, delaying completion of the project. To complete the plant, the Navy

expended more than projected. The plant did not pour its first steel until February 1921. It operated only for a short period and closed when its operating costs were shown to be twice those of privately-owned armor plants. Cooling, *Gray Steel & Blue Water* at 208, 210-12, 218-19; Warren, *Industrial Genius* at 167; *United States v. U.S. Steel*, 251 U.S. 417 (1920); Justin Salisbury, *History of the South Charleston Naval Ordnance & Armor Plant*, 20 W.Va. Historical Society Quarterly, April 2006, at 1-2, *available at* www. wvculture.org/history/wvhs2002.pdf.

Due to the government's poor record of getting munitions to actual combat theaters in Europe, the immediate consideration for the armed services after the War was establishment of a program for rapid transformation of industry to "war production" in the event of another conflict. Congress enacted the National Defense Act of 1920, 41 Stat. 759, 764-65, to increase the efficiency of wartime procurement, directing the Assistant Secretary of War to make "adequate provision for the mobilization of material and industrial organizations essential to wartime needs." Hensel & McClung, *Profit Limitation Controls Prior to the Present War*, L. & Contemp. Probs. at 200.

Allegations of profiteering continued to haunt industry after the War. Such allegations led to passage of the Budget and Accounting Act of 1921, which established the position of Comptroller General as an agent of Congress responsible only to Congress and as the sole authority to determine if payments of public funds were authorized by law and if appropriated funds were available for payment. The Act additionally established the General Accounting Office (GAO) as an arm of the "Legislative Branch" and removed that function from the Executive, i.e., Department of the Treasury. The newly created GAO was an audit and investigatory office with real enforcement powers concerning receipt, disbursement, and utilization of public funds and settlement and adjustment of claims, strengthening Legislative Branch control over government financial matters. Because the Comptroller General reserved the right to post audit determinations of the need for goods and services and of the lawfulness of their purchase, the Act also strengthened Legislative Branch control over federal procurement. By law, the heads of Executive departments or disbursing officers could request advance decisions from the Comptroller General on any question involving a payment to be made by them or under them, which decision would control the General Accounting Office. 42 Stat. 20, 23-24; 3 Comp. Gen. 545 (1924); 2 Comp. Gen. 784 (1923); Graybar Elec. Co. v. United States, 90 Ct. Cl. 232, 244 (1940); The Big "L", Amer. Logistics In World War II 99-100 (Alan Gropman ed., Nat. Def. U. Press 1997), available at http://www.ibiblio.org/ hyperwar/USA/BigL; 28 Stat. 207 (1894). Lt. Col. Russell N. Fairbanks, Personal Service Contracts, 6 Mil. L. Rev. 2 (Dep't of Army Pamphlet No. 27-100-6 1959); Culver, Federal Gov't Procurement – An Uncharted Course through Turbulent Waters, Contract Mgmt. at 6, available at http://www.gsacncma.com/files/US-FP-Hist.pdf.

Before World War I, the government entered into fixed-price contracts through the use of formal advertising and competitive bidding to procure needed items and services,

allowing it to keep costs to a minimum. With the shift to "negotiated procurement" and cost-plus contracts during the hectic days of World War I, contractors had unprecedented opportunities to pad costs and make excessive profits. Following the War, the government returned to competitive bidding as a method for reducing profit on contracts. The "bonus for cost savings" or incentive feature used by the Navy, EFC, Signal Corps and others on cost-plus-fixed-fee contracts, whereby the contractor received a percentage of the difference between its estimated and actual production costs, in addition to fee, was not viewed favorably in hindsight. It was said such contracts "lead to waste, foster abuses, and impose an almost intolerable burden of cost accounting," hindering rapid production. According to the report on the aircraft industry by Charles E. Hughes, estimated costs for such contracts were "placed so high [that] the contractor had every reason to expect that the actual cost would be much less" and that it was guaranteed a profit fixed at 12.5% to 15% of the estimated cost. A post-war Federal Trade Commission report revealed that profit on World War I contracts ran well above 10% in several industries. For example, net earnings of U.S. Steel (expressed in terms of total capital invested) jumped from 5.2% in 1915 to 24.9% in 1917, while return on investment of some smaller steel companies was over 300% during 1917. Public concern arose over the existence of widespread profiteering on war contracts. Both the Republican and Democratic party platforms in 1924 contained plans to control profits realized from war production and the American Legion sought legislation to eliminate war profiteering. During 1925, EFC brought suit against Bethlehem to "disgorge averred unconscionable profits" it had received on the 1918 half-savings contracts for the construction of various vessels. Bethlehem Steel Corp., 315 U.S. at 306; United States v. Bethlehem Steel Corp., 23 F. Supp. 676 (D. Pa. 1938), aff'd, 113 F.2d 301 (3rd Cir. 1941). aff'd, 315 U.S. 289 (1942); Rockwell Int'l Corp., ASBCA No. 46544, 96-1 BCA ¶ 28,057 at 140,100 n.10; 57 Cong. Rec. 883, 885, 906 (1918) (Report to Att'y General on Aircraft Production Investigation); Robert Braucher & Covington Hardee, Cost-Reimbursement Contracts With the United States, 5 Stan. L. Rev. 4, 13 (1952); vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B.J. at 305-06; Hensel & McClung, Profit Limitation Controls Prior to the Present War, L. & Contemp. Probs. at 194-95, 201.

Conclusion of World War I "reduced the aviation industry to chaos." Within months, over \$100 million of contracts were cancelled. As a result, 90% of the industry underwent liquidation. A 1923 investigative committee concluded the industry "would disappear as a part of the industrial base absent remedial action." Because both the military and Congress realized the importance of aircraft in any future military action due to use of aircraft in World War I, it was believed that Congress needed to take action to stimulate growth of the aircraft industry in America. To do so, Congress elected once again to "group" the nation's deemed requirements and appropriate monies needed for such requirements over a specified period as it had done with early procurement of rifles and armor. Congress enacted the Air Corps Act of 1926, 44 Stat. 780, 784, which created an Air Corps of 1,800 airplanes and whatever number of airships the military deemed necessary for training purposes, authorized procurement by the military of up to 400

aircraft a year, and specified the total increase in equipment shall be distributed over a five-year period. The Big "L" at 120, available at http://www.ibiblio.org/hyperwar/USA/BigL; Culver, Fed. Gov't Procurement – An Uncharted Course through Turbulent Waters, Contract Mgmt. 6-7, available at resources.ncmahq.org/.../Publications%20by%20NCMA%20Member.

Between the armistice ending the first World War and the outbreak of World War II, Congress considered approximately 200 bills and resolutions addressing limitation of war profits. During 1934, when President Roosevelt sought money to increase the size of the Navy, see, e.g., 78 Cong. Rec. 1601 (1934), a storm of criticism arose in Congress and Sen. Borah made his famous "Take the Profit Out of War" speech, 78 Cong. Rec. 3688-92 (1934). While Congress authorized the naval construction program, it did so only after limiting profits to be realized by builders of new warships and aircraft for the Navy. Under the Vinson-Trammel Act, 48 Stat. 503, 505, all profits in excess of 10% of the contract price realized by a contractor were to be recaptured. Moreover, pursuant to a Senate resolution, Senator Nye began hearings on his famous "Munitions Investigation." Among other things, Sen. Nye examined World War I contractors' acquisition at bargain rates of facilities built at government expense. Rockwell, 96-1 BCA ¶ 28,057 at 140,100; Withrow, The Control of War Profits in the United States & Canada, 91 U. Pa. L. Rev. 194, 205 (1942); Margaret M. Worthington & Louis P. Goldstein, Contracting with the Fed. Gov't § 4.1 at 83 (4th ed., 1998); S. Res. 206, 73rd Cong. (1934); vom Baur, Fifty Years of Gov't Contracts, 29 Fed. B.J. at 305, 318-19; Hensel and McClung, Profit Limitation Controls Prior to the Present War, 10 L. & Contemp. Probs. at 187, 199, 200-02, 205-08; Roy Blough, Problems of Corporate Taxation in Time of War, 10 L. & Contemp. Probs. 108, 115-16 (1943); S. REP. No. 74-944, pt. 4, 27-28 (1936); S. REP. No. 74-944, pt. 1 (1935).

The Nye committee recommended that the government own all facilities necessary to produce all warships, powder, rifles, pistols, machine guns, projectiles, and armor plate. In sum, it sought nationalization of most of the nation's arms industry. The Nye committee's recommendations, however, were not adopted and subsequently denounced. Then Senator Harry Truman, for example, criticized them as "pure demagoguery in the guise of a congressional investigating committee." Kaufman, *The War Profiteers* at 19-20 (1970); Harry S. Truman, 1 *Memoirs: Year of Decisions* 190 (1955); Nagle, *A History of Gov't Contracting* at 352-55.

In 1936, however, when Congress decided to expand the nation's merchant marine, it included in the legislation the profit limitation of the Vinson-Trammel Act, directed that when computing contract profit no salary to any individual greater than \$25,000 per year be considered as part of cost of building a ship, and mandated that shipbuilders' "construction costs, and overhead expenses" be scrutinized to determine if they "were fair, just and not in excess of a reasonable market price." 49 Stat. 1985, 1998-99. Moreover, during 1939, Congress extended the Vinson-Trammel Act limitation

of profits to contracts for acquisition of Department of War aircraft. 53 Stat. 560. Rockwell Int'l Corp., ASBCA No. 46544, 96-1 BCA ¶ 28,057 at 140,103; Hensel & McClung, Profit Limitation Controls Prior to the Present War, L. & Contemp. Probs. at 187, 202-04; Withrow, The Control of War Profits in the U.S. & Canada, 91 U. Pa. L. Rev. at 206.

During March 1938, Nazi Germany took control of Austria. Most Americans wished to avoid participation in another world war if possible. Due to events in Europe, however, the nation commenced a limited "preparedness campaign." During June 1938, Congress authorized the Secretary of War to begin to enter into "educational contracts" for munitions of war of special or technical design, noncommercial in character, with commercial concerns to familiarize commercial and manufacturing establishments with manufacture of such munitions and accessories. Congress exempted these contracts from legal requirements for advertising and award to the lowest bidder, specifying bids were to be solicited only from such establishments the Secretary deemed "competent in time of war" to manufacture the class of munitions and award was to be made to bidders the Secretary judged would "best serve the interest of the United States" and "promote the cause of national defense." Congress authorized inclusion in these contracts of a "complete set" of tools, fixtures, and other special appliances required for production of such munitions, specifying "title to all such facilities shall remain in the Government." Pursuant to its new authority, the War Department awarded various small-volume orders as learning exercises. For example, it awarded Chrysler orders for production of artillery shells, cartridge cases for field guns, fuses for bombs, and recoil mechanisms for field artillery pieces. Also, its Chemical Warfare Service awarded orders for manufacture of gas masks to Goodyear Tire and Rubber Co., Firestone Tire and Rubber Co., and Johnson & Johnson Co., none of which previously had made such masks. During construction of the new mask plants in Akron, Ohio, Fall River, Massachusetts, and Chicago, Illinois, Time Magazine described the latter orders as follows:

For the three companies the deal was designed as a labor of love. The contracts will meet expenses, leave **no profit**. The project is educational, designed to acquaint the manufacturers with war materials production. From their experience the Army expects to get accurate cost and production figures for use when war comes. Incidentally the Army will control three plants which can in six weeks make enough gas masks for the 1,000,000 soldiers that the U. S. mobilization plan expects to put in the field within six months after a declaration of war. [Emphasis added]

Congress ultimately appropriated about \$50 million for such educational orders. 52 Stat. 707-08; *The Chem. Warfare Service: From Lab. to Field* 241-44 (Ctr. Mil. Hist., D.C. 1959), *available at* www.history.army.mil/html/books/010/10-2/CMH_Pub_10-2.pdf;

6 The Army Air Forces in World War II: Men & Planes at 300-01, available at www. ibiblio.org/hyperwar/AAF/VI/index.html; Walter P. Chrysler Museum, Chrysler Goes to War, Ch. 7 at 1-2 (2009), available at wpchryslermuseum.org/document.doc?id=72; The Big "L" at 103, available at http://www.ibiblio.org/ hyperwar/USA/BigL; Expansion of Indus. Facilities under Army Air Forces Auspices 1940-1945 at 17-18, 88-89 (Army Air Forces Historical Studies: No. 40, 1946), available at http://www.afhra.af.mil /studies/numberedusafhistoricalstudies.asp; Harry C. Thomson & Lida Mayo, The Ordnance Dep't: Procurement and Supply 19-20, 35 (Ctr. Mil. Hist., D.C. 1960), available at www.history.army.mil/catalog/pubs/10/10-10.html; Nagle, A History of Gov't Contracting at 391.

While the Navy had not possessed authority to enter into negotiated "cost" contracts since World War I, during April of 1939, Congress empowered it to contract on a "cost-plus-a-fixed-fee" basis for construction of "off-shore" bases. Congress specified that approval of the President was required for any such contract, the contractor's fee was not to exceed 10% of estimated contract cost, and the Navy was to conduct negotiations with at least three firms before entering into such a contract, 53 Stat. 590-91. Vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B.J. at 305, 319-20; 2 Amer. Mil. Hist. 75-76 (M. Matloff ed., 1996), available at www.history.army.mil/books/amh-v2/amh% 20v2/index.htm; Withrow, The Control of War Profits in the U.S. & Canada, 91 U. Pa. L. Rev. at 206-07; Navy Dep't, Bureau of Yards and Docks, Some Commentaries on Cost-Plus-Fixed-Fee Contracts with Particular Reference to U.S. Navy Contracts under the Bureau of Yards and Docks in Gov't Constr. Contracts 9-10 (1940); Office of Gen. Counsel, Dep't of the Navy, Navy Contract Law 3 (1949); Nagle, A History of Gov't Contracting at 392.

The Navy promptly awarded cost-plus-fixed-fee contracts for work in the Pacific Islands, Alaska, and San Juan, which were nearly identical in phraseology. The contracts provided:

ARTICLE 7. The Contractors shall provide all plant and equipment required for the accomplishment of the work under this contract, but no article or piece of equipment costing in excess of \$200 shall be purchased and none shall be rented at a rental rate in excess of \$100 per month except after prior approval in writing by the Contracting Officer or a duly authorized representative.

The rental compensation for items of plant and equipment owned or controlled by the Contractors shall be calculated on the basis of cost to the Contractors with no allowance for profit. [Emphasis added] ARTICLE 27. The Government hereby covenants, promises, and agrees to and with the Contractors, in consideration of the covenants and agreements on the part of the Contractors herein contained, being strictly performed and kept by the Contractors, as specified herein, to pay or cause to be paid to the Contractors the sum of the actual net cost to the Contractors of the materials actually furnished and the services and labor actually performed under the terms of this contract, plus a fixed fee....

It is further agreed that the term "actual net cost" shall include specifically but not necessarily exclusively the following:

(a) The actual net cost to the Contractors of all items of plant and equipment purchased by them for the Government with the approval of the Contracting Officer and the amount of rental approved by the Contracting Officer for plant and equipment owned or procured by the Contractors under the provisions of ARTICLE 7 hereof, for use in connection with the work under this contract....

Attached to the contracts was a Cost and Rental Schedule for plant and equipment providing:

It is not unusual for a contractor to undertake work for less than an equitable fee, if he can arrange for the use of the plant owned by him at rentals that represent a profit to him. To avoid this situation, compensation for the use of contractor's equipment should be on the basis of cost to him, with **no** allowance for profit, if plant rentals are to be kept free from any influence on the general fee to be paid for his services. [Emphasis added]

In a 1940 Navy publication on "cost contracts," the Navy official principally responsible for the contracts explained:

The contracting corporations, being owners of various items of plant which would be required and would be suitable for the work, particularly dredging plant, it appeared wise to predetermine equitable rentals therefore, as a material item of cost, and to include a rental schedule in the contracts. It was agreed that, in line with the general intent of the contracts, the rentals should equal the cost of each item to its owner during the time it was used for the benefit of the work. No profit was allowed, as all profit was figured as part of the fee. (Emphasis added.)

Further, the following year, during hearings before the Senate Committee on Naval Affairs, Admiral Morrell, Chief of the Bureau of Yards and Docks, testified with respect to equipment rentals:

The ordinary large building contractor... retains comparatively little equipment.

...[H]e buys the equipment for the job – it pays him to do that – and at the end of the job, he sells it to a small contractor or an equipment dealer. It is only the smaller contractors who maintain equipment because they do the smaller pieces of work which are not sufficiently large to finance the equipment needed for that job.

Now the big contractors, the big operators like the Turner Construction Co. or the Geo. A. Fuller Co., buy special equipment for the job because it pays. They usually get new equipment, in good shape, and they "take the guts out of it," so to speak. Then they sell it and charge up the difference between the cost and selling price to that job. It pays them to do that.

Now, then there is the case of what we call a "heavy contractor," the fellow who builds dams and roads and water-front structures. He usually has a lot of expensive equipment, such as dredging equipment, which he cannot afford to buy and sell for each job.

He retains that equipment as a part of his "stock in trade." You will notice...there is a description and table of plant rentals.... The underlying principle is that a contractor who is doing a piece of work for us must make no profit from his equipment. His equipment must be rented to us at what we consider to be the cost to the contractor. [Emphasis added]

ADM Morrell added that, on small operations, "[w]e agree to pay the contractor a rental for his equipment without allowing any profit." (Emphasis added.) When the Navy reissued its publication on "cost contracts" with additional information three years later, it reiterated the policy which had been adhered to by it since World War I and set forth in its first publication that there was to be "no profit" paid on equipment/plant under cost reimbursement contracts. Graske, The Law of Gov't Defense Contracts at 124-25; Navy Dep't, Bureau of Yards and Docks, Some Commentaries on Cost-Plus-Fixed-Fee Contracts with Particular Reference to U.S. Navy Contracts under the Bureau of Yards and Docks at 13-15, 27, 36, 40; Navy Dep't, Bureau of Yards and Docks, Notes on the Use of the Cost-Plus-A-Fixed-Fee Form in Gov't Constr. Contracts at 22, 27, 63, 74, 80.

During April of 1940, Germany invaded Denmark and Norway. A month later, it invaded four more countries – Netherlands, Belgium, Luxembourg and France. On 16 May 1940, with the fall of France imminent, President Franklin Roosevelt asked a joint session of Congress to enact legislation and appropriate over a billion dollars for: (1) the purchase of equipment of all kinds for the Army; (2) the replacement or modernization of existing military equipment; (3) increasing facilities available to produce everything needed for the Army, Navy, and national defense; and (4) speeding up all existing and new military contracts awarded. He explained: "new powers of destruction incredibly swift and deadly hald been developed"; enemy troops could now sweep through territory at the rate of 200 miles a day and land in fields or parachute into towns by airplane; "[n]o old defense is so strong that it requires no further strengthening and no [possible] attack...so unlikely or impossible that it may be ignored"; and "new techniques of modern war" meant military implements must be "available to meet any lighting offensive" and the "facilities for production" of the implements ready to turn out munitions and equipment at top speed." The President added that, while industry produced 6,000 military aircraft one year earlier and 12,000 the past year, it needed to "be geared up" to "turn out at least 50,000 planes." Dr. James P. Tate, The Army & Its Air Corps: Army Policy Toward Aviation 1919-1941, Air University Press, 185-188 (1998); FDR's Fifty Thousand Airplanes, 92 Air Force Magazine 66 (June 2009) (reprint of "Ominous Days," President Franklin D. Roosevelt Address at Joint Session of Congress (16 May 1940)), available at http://www.airforce-magazine.com/ MagazineArchive/Documents/2009/June%202009/0609keeper.pdf; Withrow, The Control of War Profits in the United States & Canada, 91 U. Pa. L. Rev. at 206; Philip Shiman, Forging the Sword at 6, available at www.denix.osd.mil/cr/.../95-10092-FORGING THE SWORD; Expansion of Indus. Facilities at 25, 73; The Big L at 20, available at http://www.ibiblio.org/hyperwar/USA/BigL7; Smith, The Army & Econ. Mobilization at 128-29, available at www.history.army.mil/catalog/pubs/1/1-7.html.

The number one problem facing government during the summer of 1940 was how to bring about the necessary expansion of the nation's industrial plants to meet defense

needs. Government planning after World War I focused on items needed to wage future war rather than on industrial capacity required to produce those items in the quantities needed. Modern warfare, i.e., the "blitzkrieg" or "lightning war" technique utilized by the Nazis, required significant numbers of aircraft and tanks. A considerable expansion of existing facilities and the construction of new plants appeared imperative. Significant thought needed to be given to how our country might become what was later referred to as the "arsenal of democracy." Means to finance industrial expansion were required that would not delay construction and production, and would not accelerate the inflationary factors inherent in a wartime economy. While the government recognized that new facilities having little or no commercial value after the war, such as a plant to produce tanks or shells, likely needed to be built at government expense, it preferred the use of "private capital" to finance industry expansion whenever practicable. Gerald T. White, Financing Industrial Expansion for War: The Origin of the Defense Plant Corp. Leases, 9 J. Econ. Hist. 156-57, 159 (1949), available at http://www.jstor.org/stable/2113638; Reginald C. McGrane, The Facilities and Constr. Program of the War Production Board & Predecessor Agencies May 1940 to May 1945 at 11 (1945) (Historical Reports on War Admin.: War Production Board, Special Study No. 19); Hans A. Klagsbrunn, Some Aspects of War Plant Financing, 33 The Amer. Econ. Rev. 119 (1943), available at http://www.jstor.org/stable/1818994; Charles A. Ravenstein, The Organization and Lineage of the U.S. Air Force at 6 (Office of Air Force History 1986), available at www.afhso.af.mil/shared/media/document/AFD-100928-056.pdf; U.S. Navy Dep't Office of Gen. Counsel, Navy Contract Law 10 (1949); Irving Brinton Holley, Jr., Buying Aircraft: Materiel Procurement for the Army Air Forces 295 (Ctr. Mil. Hist., D.C. 1964), available at www.history.army.mil/catalog/pubs/11/11-2.html; Shiman, Forging the Sword at 6, available at www.denix.osd.mil/cr/.../95-10092-FORGING THE SWORD.

The nation's aircraft industry already had expanded to meet demands of foreign purchases. The French and British had contributed about \$72 million toward accelerating airframe production and aircraft manufacturers receiving foreign orders themselves had financed numerous plant additions. During the prior year, plants for airframes, engines, and propellers had been enlarged by about a third. Many companies were reluctant to expand further. After the lean years experienced during the Great Depression, many did not have sufficient funds for additional expansion, were not sure whether funds sufficient for desired expansion could be borrowed due to financial institution lending limits, and were loath to undertake the entire risk of expanding because of fear that at the end of the war emergency they would be left with excess, useless plant to which their capital was committed. Manufacturers did not wish to find themselves heavily overcapitalized or overindebted at war's end, risking reorganization or bankruptcy. The experience of the first World War and severe recession that followed were still fresh memories for many. Businessmen were concerned about depreciation and obsolescence that would be allowed for expanded plant in determining "profit" under both federal tax law and the Vinson-Trammel Act, which limited the profit they could make on Navy and War Department aircraft contracts. Some proposed

that Congress allow rapid amortization of the cost of new defense facilities to encourage the flow of private capital into plant construction. Holley, Buying Aircraft at 294-96; The Big "L" at 122, available at http://www.ibiblio.org/hyperwar/USA/BigL; 6 The Army Air Forces in World War II: Men & Planes at 303-04 (W.F. Craven & J.L. Cate ed. 1955), available at www.ibiblio.org/hyperwar/AAF/VI/index.html; White, Financing Indus. Expansion for War: The Origin of the Defense Plant Corp. Leases, 9 J. Econ. Hist. at 159, available at http://www.jstor.org/stable/2113638; McGrane, The Facilities and Constr. Program of the War Production Board at 7, 8, 12, 17; Klagsbrunn, Some Aspects of War Plant Financing, 33 Amer. Econ. Rev. at 119, available at http://www.jstor.org/stable/1818994; Shiman, Forging the Sword at 7, available at www.denix.osd.mil/cr/.../95-10092-FORGING THE SWORD.

In the U.S., there was no plant dedicated to the large-scale production of tanks. Days after the British evacuation from Dunkirk in early June 1940, the War Department asked Chrysler Corporation to produce tanks at a self contained, permanent tank arsenal paid for by the government. Chrysler knew nothing about the manufacture of tanks but agreed to build such a plant at cost and subsequently produce tanks. It built a quartermile-long plant on a 113-acre site 17 miles from Detroit at a cost of about \$200 million, which was paid for by War Department appropriations. Chrysler constructed the plant under a "government ownership" type of contract, which resembled the Agency contracts used in World War I to build Hog Island and other shipyards. The tank plant was among the first government-owned, contractor-operated (GOCO) facilities, which before the end of the year included smokeless powder plants built by Hercules and Du Pont, respectively, in Virginia and Indiana. GOCOs were a new unprecedented arrangement where typically a plant was designated a "military installation" and a small "military staff" remained on site to inspect work and serve as a contractor liaison. Shiman, Forging the Sword at 6-7, 30, available at www.denix.osd.mil/cr/.../95-10092-FORGING THE SWORD; U.S. Navy Dep't Office of Gen. Counsel, Navy Contract Law at 239 (1949); McGrane, The Facilities and Constr. Program of the War Production Board at 13; Walter P. Chrysler Museum, Chrysler Goes To War 8-10, available at http://wpchryslermuseum.org/document.doc?id=72; John Desmond Glover, Defense "Lending": 1918 and 1941, 19 Harv. Bus. Rev. 197, 206; Army Environmental Command, Army Ammunition Production During the Cold War (1946-1989) at 3-3 to 3-5 (2009), available at aec.army.mil/usaec/cultural/ammo-storage02.pdf; Steve Gaither & Kimberly L. Kane, The World War II Ordnance Dep't's Gov't-Owned Contractor-Operated (GOCO) Indus. Facilities: Indiana Army Ammunition Plant Historic Investigation, U.S. Army Materiel Command Historic Context Series Report of Investigations No. 3A at 13, 15-16 (1995); Smith, The Army & Econ. Mobilization at 497-99, available at www.history.army.mil/catalog/pubs/1/1-7.html; Thomson & Mayo, The Ordnance Dep't: Procurement & Supply at 32, 105-06, 110-12, available at www.history.army.mil/catalog/pubs/10/10-10.html; see, e.g., 5 Fed. Reg. 4391-93 (summary of Hercules smokeless powder plant GOCO contract), 4393 (summary of

Gadsden, Alabama Ordnance Plant GOCO contract with Lansdowne Steel); Fed. Cartridge Corp. v. United States, 111 Ct. Cl. 372, 373-74, 77 F. Supp. 380 (1948).

While outright government ownership (with contractor operation) meant the military bore the entire cost of construction at once when there were heavy demands on its available appropriations, War Department Ordnance (and other military components) believed they had little choice but to employ GOCO contracts if they were to acquire the goods they needed. Because a manufacturer who expands fixed plant to produce goods used principally for waging "war," such as tanks and ordnance, looks almost exclusively to the government for a market for its goods, ultimate safety of the monies (fixed capital) it devotes to plant expansion is contingent on receipt of orders in a volume sufficient to recoup the monies (fixed capital) committed. From the perspective of "private finance," absent such order volume, there is excessive risk of loss and a plant expansion project is unsound. With respect to goods used principally to wage war, it generally is impossible to predict if sufficient volume will be ordered, necessitating government financing of plant expansion for such goods. Glover, Defense "Lending", 19 Harv. Bus. Rev. at 197, 199; Holley, Buying Aircraft: Materiel Procurement for the Army Air Forces at 296, available at www.history.army.mil/catalog/pubs/11/11-2.html; McGrane, The Facilities & Constr. Program of the War Production Board at 13; Smith, The Army & Econ. Mobilization at 496-97, available at www.history.army.mil/catalog/pubs/1/1-7.html.

In the National Defense Act of 13 June 1940, 54 Stat. 365, 368, Congress appropriated more than \$265 million for the procurement of airplanes and more than \$133 million for the procurement or production of ordnance materiel, machinery, and supplies. One day later, in the Naval Expansion Act of 14 June 1940, 54 Stat. 394-95, Congress authorized the construction of a significant number of Navy aircraft carriers, cruisers, submarines, and airplanes, and appropriated \$35 million for shipbuilding ways and docks, and essential equipment and facilities at naval establishments to build or equip any ship, plus up to \$6 million for essential equipment and facilities at establishments (either private or naval) to produce armor or armament. Within two weeks, on 26 June 1940, in the First Supplemental National Defense Appropriation Act, 54 Stat. 599, 602-03, 610, Congress authorized an extra \$293 million for aircraft, \$90 million for ordnance, and \$150 million to expedite production of equipment and supplies for the Army for emergency national defense purposes, including procurement of production equipment, erection of structures, acquisition of land, and furnishing of Governmentowned facilities at privately owned plants. Smith, The Army & Econ. Mobilization at 129, available at www.history.army.mil/catalog/pubs/1/1-7.html.

Two days later, on 28 June 1940, in a further act to expedite the national defense (which was commonly referred to as the "Speed-Up Act"), 54 Stat 676, Congress created another exception to the requirement that government contracts be advertised and bid. It authorized the Navy to "negotiate contracts" for the "acquisition, construction, repair, or alteration of complete naval vessels or aircraft or any portion thereof" when the Navy

determined "the price is fair and reasonable." Congress, however, expressly specified: "the cost-plus-a-percentage-of-cost system of contracting shall not be used under the authority granted;" the cost-plus-a-fixed-fee form of contract was not barred if deemed necessary; and any fixed fee to be paid a contractor under this authority or any War Department contract shall not exceed 7% of the estimated cost of the contract. 54 Stat. 677; Navy Dep't Office of Gen. Counsel, Navy Contract Law at 4, 9; Expansion of Indus. Facilities at 26, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp; Nagle, A History of Gov't Contracting at 399-403; Culver, Federal Gov't Procurement – An Uncharted Course through Turbulent Waters, Contract Mgmt. 10, available at resources.ncmahq.org/.../Publications%20by% 20NCMA%20Member.

In the Speed-Up Act, Congress additionally created an exception to the long-established statutory ban prohibiting "advance" payments on government contracts. It authorized the Navy to make advance payments to contractors in amounts not exceeding 30% of contract price. While the Navy possessed authority since 1911 to make payments under its contracts "as the work progressed," taking a lien on all materials and work in progress in connection with which payment was made, an act of 31 January 1823 (3 Stat. 723), expressly prohibited advances of public moneys and payment for services or articles which have not at the time of payment been rendered or delivered, necessitating Congress's action. The furnishing of advance payments to industry was to help manufacturers satisfy "working" or operating capital financial burdens associated with (a) greatly expanded sales and (b) increased cost carrying over the term or life of contracts. To help alleviate contractor financial burdens with respect to "fixed" capital, Congress also authorized the Navy to furnish to contractors "necessary buildings, facilities, utilities, and appurtenances thereto on Government owned land or elsewhere" needed to effectuate the purposes of the Speed Up Act. 54 Stat. 680; Smith, The Army & Econ. Mobilization at 246, available at www.history.army.mil/catalog/pubs/1/1-7.html; Holley, Buying Aircraft: Materiel Procurement for the Army Air Forces at 373, available at www.history.army.mil/ catalog/pubs/11/11-2.html; U.S. Navy Dep't Office of Gen. Counsel, Navy Contract Law at 4, 9; Expansion of Indus. Facilities at 28, 30, available at http://www.afhra.af. mil/studies/ numberedusafhistorical studies.asp; Nagle, A History of Gov't Contracting at 400-02; Culver, Fed. Gov't Procurement - An Uncharted Course through Turbulent Waters, Contract Mgmt 10, available at resources.ncmahq.org/.../Publications% 20by%2 0NCMA% 20Member; see 10 C.F.R. § 81.10(f)(2)(ii) (1940); 34 C.F.R. § 8.2404(f) (1939).

Congress directed that, in the case of construction of a naval vessel or Army or Navy aircraft governed by the Vinson-Trammel Act, the ceiling on contract profit was lowered to 8%, and the Navy or War Secretary shall certify to the Commissioner of Internal Revenue: (1) the necessity and cost of "special additional equipment and facilities acquired" to facilitate "the completion of such naval vessel or Army or Navy aircraft or portion thereof in private plants;" and (2) the percentage of cost of "special additional equipment and facilities" to be charged against the contract or subcontract.

Congress stated that the Secretary's certification was binding absent objection by the Commissioner within five days of certification receipt. Congress added that the cost to be charged against the contract shall for purposes of Vinson-Trammel be considered "a reduction of the contract price of the contract or subcontract." 54 Stat. 677-78; 5 Fed. Reg. 2590-92 (1940).

The next day, 29 June 1940, President Roosevelt issued an Executive Order providing:

- (6) No certification shall be made to the Commissioner of Internal Revenue with respect to any special additional equipment and facilities unless adequate measures have been taken by the Secretary of the Department concerned--
- (a) To protect the interest of the Government in such special additional equipment and facilities, the cost, or portion of the cost, of which is borne by the Government and is chargeable against the contract or subcontract . . .; and
- (b) To provide that throughout the useful life of such special additional equipment and facilities the Government shall be given priority in the use thereof and that such special additional equipment and facilities shall be preserved for national defense purposes.

Exec. Order No. 8465, 5 Fed. Reg. 2453 (1940).

On 2 July 1940, Congress enacted additional legislation to expedite strengthening of the national defense granting the Secretary of War authority similar to that of the Navy Secretary. 54 Stat. 712. It authorized him to: enter into contracts without advertising as long as the cost-plus-a-percentage-of-cost system of contracting was not used; make advance payments to contractors not exceeding 30% of the contract price of supplies or construction; and provide for the furnishing of Government-owned facilities at privately owned plants. *Id.* at 712-14; *Expansion of Indus. Facilities* at 27-28, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp; see Muschany v. United States, 324 U.S. 49, 60-61, n.12 (1945).

While there had been discussion of using a CPFF form of contract in the event of a future war, no appropriate contract forms or clauses were ready for use when Congress authorized the War and Navy Departments to enter into such contracts. Initially, the War Department's declared policy was to oppose use of CPFF contracts. As manufacturers again refused to enter into fixed-price contracts due to fear of rising costs, however, it became clear the War Department would have no choice but to enter into CPFF contracts.

More than a month after Congress authorized use of such contracts, no CPFF contract form suitable for procuring aircraft was available. As an interim stopgap measure, the War Department began issuing "letters of intent" authorizing aircraft manufacturers to begin preliminary production steps with full assurance of indemnification while the parties' negotiators resolved the details of a formal contract. Holley, *Buying Aircraft* at 332, 334-36, *available at* www.history.army.mil/catalog/pubs/11/11-2.html; *see* 10 C.F.R. § 81.4 (1940); 34 C.F.R. §§ 8.1015, 8.1053, 8.1055, 8.2400 (1939).

In early August 1940, more than two months after President Roosevelt called for obtaining 50,000 aircraft, the War Department possessed contracts for only 33 additional aircraft. Industry was reluctant to enter into contracts until resolution of issues regarding financing of plant expansion and action by Congress on five-year amortization for new defense plant under the tax code, which industry desired to avoid the burden of carrying excessive plant charges for 10 or 20 years after the war emergency. Holley, *Buying Aircraft* at 296, 301, *available at* www.history.army.mil/catalog/pubs/11/11-2.html.

The urgent need for aircraft production caused the government to solicit the auto industry to produce aircraft engines, as occurred during World War I. Packard Motor Car agreed to build Rolls Royce aircraft engines under license but wished to use needed new plant and equipment to also produce such engines for Britain. Some in the government proposed manufacturers include the cost of new facilities needed for production as part of the unit price charged under their supply contract. While such an approach appeared to be simplest, the War Department, which was attempting to prevent escalation of supply prices due to limited appropriations, and some in industry did not favor it. Remembering the multiple investigations into aircraft contracts awarded during World War I, Packard desired that a contract providing for receipt of plant and equipment avoid any appearance it was receiving a windfall at contract conclusion as a result of retention of production facilities and eliminate any possibility of future censure. Other firms solicited to assist with aircraft production, such as Bendix Corporation, expressed similar concerns. Holley, Buying Aircraft at 301, available at www.history.army.mil/catalog/pubs/11/11-2.html; White, Financing Indus. Expansion for War, 9 J. Econ. History at 156, 166, 170, 174, available at http://www.istor.org/stable/2113638; Shiman, Forging the Sword at 9, available at www.denix.osd.mil/cr/.../95-10092-FORGING THE SWORD; Clifford Durr, The Early History of Defense Plant Corp., 6-8, 11-13, 16, 19-21, 33-34 (1950); Klagsbrunn, Some Aspects of War Plant Financing, 33 Amer. Econ. Review at 119, 120, available at http://www.jstor.org/stable/1818994.

On 12 August 1940, the Secretary of War requested the Comptroller General issue an opinion on whether the War Department may legally enter into a contract for delivery of aircraft providing the cost of additional new plant facilities requisite to performance is included in the price the government pays for the aircraft and, for payment purposes, such part of the price shall be segregated and paid to the manufacturer at the rate of 20% of

cost per year with any unamortized cost balance paid during the year within which the contract is completed or terminated. In response, the Comptroller General stated:

[A]s to moneys appropriated for the War Department for national-defense purposes for the fiscal year ending June 30, 1941, the Secretary of War is expressly authorized by the act of July 2, 1940,...to provide for the necessary construction, etc., of plants, buildings, facilities, etc., for the development, manufacture, maintenance and storage of military equipment, munitions and supplies, including Government-owned facilities at privately owned plants and the expansion of such plants; to provide for the purchase, manufacture, etc., of military equipment, munitions and supplies "at such places and under such conditions as he may deem necessary," and "to enter into such contracts...as he may deem necessary" to carry out such purposes, and that, so far as contracts for the construction or manufacture of any Army aircraft, or portion thereof...the act of June 28, 1940,...recognizes that the contract price may include the cost of additional equipment and facilities required...and, in effect, authorizes and requires the segregation of such additional costs from the balance of the contract price for the purpose of determining excess profits under section 3 of the Vinson-Trammell Act..., as amended. Moreover, there can be no doubt that where a contractor must incur costs for the expansion of his plant facilities for the performance of a particular contract...and the expanded facilities are, or might be, of little or no expected future use or value...to the contractor, such costs naturally would be included in the contract price, and, if not segregated as a separate item, would be included in the form of increased prices for the contract supplies. In view of these consideration, this office perceives no legal objection to provisions in such contracts for the segregation of such costs and for the separate payment thereof, as a part of the contract consideration, instead of paying such costs indirectly as a part of the unit prices of the equipment or supplies to be furnished, particularly as the Government may thereby be protected by the proposed correlative provision which, in effect, would require the contractor (1) to rebate to the Government the reasonable value to the contractor of the expanded facilities upon completion of the contract or contracts, or (2) to transfer such facilities to the Government. If expansion costs are included

in the contract unit prices, the Government will indirectly pay for the expansion but will obtain no interest in the facilities so paid for, whereas, by segregating such costs for direct payment as proposed, the Government's equitable interest in such facilities will be recognized and fixed, and whatever may subsequently be recouped therefrom will be just so much additional advantage to the Government, without being unfair to the contractor. [Emphasis added]

20 Comp. Gen. 95 (1940).

Within days of the Comptroller General issuing his opinion, the Treasury Department jointly issued with the Navy and War Departments a revised regulation for the Vinson-Trammel Act, which was referred to as "Treasury Decision 5000," 1940-2 C.B. 397. Rockwell Int'l Corp., ASBCA No. 46544, 96-1 BCA ¶ 28,057 at 140,103-04; Paul M. Trueger, Accounting Guide for Defense Contracts 1 (3rd ed. 1960). With respect to calculating a contractor's cost and profit, Treasury Decision 5000 (T. D. 5000) provided:

Sec. 26.8...In the case of a contract made on a cost-plus-a-fixed-fee basis the total contract price is the actual, rather than the estimated, cost of performing the contract plus the stipulated fee and any other amounts received by the contracting party for performing such contract.

For the purposes of the act and these regulations, the contract price of a contract or subcontract shall be reduced by the part of the cost of special additional equipment and facilities acquired by the contracting party and chargeable against the contract or subcontract in pursuance of a certification made by the Secretary of the Department concerned in accordance with the provisions of section 4 of the act. See Executive Order No. 8465 and Joint Rules issued under such order (I.R.B. 1940-30, 15).

Sec. 26.9...(a) General rule.— The cost of performing a particular contract...shall be the sum of (1) the direct costs, including therein expenditures for materials, direct labor and direct expenses, incurred by the contracting party in performing the contract...; and (2) the proper proportion of any indirect costs...incident to and necessary for the performance of the contract. [Footnote omitted]

T.D. 5000, 76 Treasury Dec., Int. Rev., No. 7 at 19 (15 Aug.1940). T. D. 5000, § 26.9(c)(5)(D) stated that indirect costs included:

Fixed charges and obsolescence... such as...depreciation and obsolescence of special equipment and facilities necessarily acquired primarily for the performance of the contract or subcontract, except special additional equipment and facilities with respect to which the Secretary of the Department concerned has made a certification binding upon the Commissioner of Internal Revenue...in the case of such contract or subcontract.

T.D. 5000, 76 Treas. Dec., Int. Rev., No. 7 at 21 (15 Aug. 1940).

After the Nazis began bombing Britain during August, the military planned vastly increased purchases of war munitions. While Congress had appropriated large sums for military preparedness, most of those appropriations were needed for arsenal type facilities (such as GOCO powder and ordnance plants) and thus inadequate. Astronomical sums were believed necessary for defense preparation, but Congress was not prepared to pass such legislation when it remained unclear if our country was going to enter the war. It therefore was evident that, if defense plant expansion was to occur successfully, monies other than appropriations would also need to be used. *Rockwell Int'l*, 96-1 BCA ¶ 28,057 at 140,104; White, *Financing Indus. Expansion for War*, 9 J. Econ. History at 160, available at http://www.jstor.org/stable/2113638; U.S. Navy Dep't Office of Gen. Counsel, *Navy Contract Law* at 233, 237 (1949).

Despite prior agitation for complete government ownership and operation of the munitions industry, see, e.g., S. REP. No., 74-944, pt. 7 (1936), the government made every effort to enlist private industry to build and operate plants needed to produce both required munitions and commercial goods. "Whenever practicable, the use of private capital to finance war production was encouraged in preference to direct Government financing." U.S. Navy Dep't. Office of Gen. Counsel. Navy Contract Law at 10 (1949). Where new plant subsequently could be used for peacetime production, industry generally was willing to finance the plant by charging its expense against operations. However, if new plant would be of little or no use after the war due to an overabundance of production facilities, the deduction for depreciation allowed to industry for federal income tax purposes generally was not adequate to return facility investment and reflect the "actual income" industry earned during the war. The only way in which the cost of a productive facility ever is recovered is through proceeds received from sale of products produced at that facility and our tax laws always have permitted industry to recover a portion of those proceeds "tax-free" through allowance of a deduction for "depreciation" of the facility. Depreciation is based upon the "physical life" of a facility, which often extends far beyond anticipated end of a war. While our tax code also allows a deduction

for "obsolescence," a concept related to physical life, industry generally found it difficult to establish the existence of "obsolescence" for tax purposes because "obsolescence" resembles a loss in capital value due to shift in demand, cyclically low production, and other purely market-related factors during periods of business decline. As a result, any taking of deductions for obsolescence usually occurred significantly past the reporting period of war profits earned, which often were taxed at high rates pursuant to a special war profits tax, as occurred during World War I. Simply put, manufacturers did not want to undertake much capital investment needed for expanded wartime production without assurance the loss of value they experienced during the crisis could be deducted from their wartime profits. After the long, lean years of the Great Depression, industry did not have funds for high risk investments and insisted that Congress pass legislation ensuring it would be able to take the cost of wartime facilities as deductions on its income tax contemporaneously with the period of emergency. *Indus. Mobilization*, 54 Harv. L. Rev. 293, 305 (1941); Blough, Problems of Corporate Taxation in Time of War, 10 L. & Contemp. Probs. at 108, 112, 114, 117-18; Holley, Buying Aircraft at 297, available at www.history.army.mil/catalog/pubs/11/11-2.html; Clifford D. Clark, Economic Appraisal of Depreciation Policy, 29 The J. of Bus. 28, 29 (1956), available at http://www.jstor.org/stable/2351191; Thomas E. Jenks, Tax Problems of Wartime Plant Expansion, 10 L. & Contemp. Probs. 149, 150 (1943); Smith, The Army & Econ. Mobilization at 456-60, available at www.history.army.mil/catalog/pubs/1/1-7.html; United States v. Allen-Bradley Co., 352 U.S. 306, 307 (1957); S. REP NO. 22894. 76th Cong. 16 (1940); White, Financing Indus. Expansion for War, 9 J. Econ. History at 159, available at http://www.jstor.org/stable/2113638; 6 The Army Air Forces in World War II: Men & Planes at 307, available at www.ibiblio.org/hyperwar/AAF/VI/index.html; Hearings on H.R. No. 10263, 76th Cong. 3d Sess. 63, 76, 188 (1940); McGrane, The Facilities & Constr. Program of the War Production Board & Predecessor Agencies May 1940 to May 1945 at 7-8, 17 (Historical Reports on War Admin.: War Production Bd., Special Study No. 19); Glover, Defense "Lending", 19 Harv. Bus. Rev. 197, 206; Expansion of Indus. Facilities under Army Air Forces Auspices 1940-1945 at 33, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp; see generally Gen. Elec. Co. v. Delaney, 251 F.3d 976, 978 (Fed. Cir. 2001) (depreciation is "a charge to current operations which distributes the cost of a tangible capital asset, less estimated residual value, over the estimated useful life of the asset"); Karen L. Manos, 1 Gov't Contract Costs & Pricing 783-86 (Thomson West 2004) (CAS 409, Depreciation of Tangible Capital Assets).

During early fall, as anticipated, in the Second Revenue Act of 1940, 54 Stat. 975, Congress imposed, in addition to normal income tax, an excess profits tax on abnormally high profits deemed due to the large expenditures it was making for the national defense. The tax applied to all corporate profits and gains over and above what Congress deemed to be a fair and normal return for the corporate business taxed. Comm'r v. South Texas Lumber Co., 333 U.S. 496, 497 (1948); Rockwell Int'l, 96-1 BCA ¶ 28,057 at 140,104; 54 Stat. 974-98. Congress "suspended" profit limitations set forth in the

Vinson-Trammel Act in the Second Revenue Act, 54 Stat. 1003-04, for any year in which the excess profits tax applied. The military, however, continued to utilize T.D. 5000, often incorporating the decision in contracts for purpose of defining reimbursable contract costs. Rockwell Int'l, 96-1 BCA ¶ 28,057 at 140,104; Hensel & McClung, Profit Limitations Prior to the Present War, L. & Contemp. Probs. 187, 204 (1944); Holley, Buying Aircraft at 379-80, available at www.history.army.mil/catalog/ pubs/11/11-2.html; Trueger, Accounting Guide for Defense Contracts at 1; Expansion of Indus. Facilities under Army Air Forces Auspices 1940-1945 at 35, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp; R. Elberton Smith, The Army & Econ. Mobilization 282 (Ctr. Mil. History 1991), available at www.history.army.mil/catalog/pubs/1/1-7.html; Howard Finney, Defense Contracts, The Alumni Rev. at 4 (Sept. 1941), available at calteches library caltech.edu/79/01/ Finney.pdf; see, e.g., Northrop Aircraft, Inc. v. United States, 127 F. Supp. 597, 600, 130 Ct. Cl. 626, 631-32 (1955); Bell Aircraft Corp. v. United States, 100 F. Supp. 661, 695, 120 Ct. Cl. 398, 442 (1951), aff'd, 343 U.S. 860 (1952) (per curiam by equally divided Court); N. Amer. Aviation, Inc. v. United States, 67 F. Supp. 1007, 1015, 107 Ct. Cl. 69, 74 (1946).

To encourage private investment in needed defense plant expansion, in the Second Revenue Act, 54 Stat. 998-1003, Congress also amended the federal tax code to authorize industry to deduct annually from taxable income an amount equal to 20% of expenditures for "emergency" facilities, regardless of actual economic life of the facilities, provided they were certified as "necessary in the interest of national defense," thereby permitting full plant "expensing" or "depreciation" within five years (likely duration of the crisis). In addition to buildings, equipment, and other items customarily subject to depreciation, Congress added "land" directly connected with necessary production facilities, 54 Stat. 1001, to the items that could be "expensed" in order to facilitate expansion of shipyards. Each contractor desiring accelerated expensing had to file an application with the military within specific time limits for certification by the military and set forth in "Appendix A" to its application a complete listing of the land, buildings, machinery, and equipment acquired for war production. Congress referred to the new deduction as "amortization" and specified it be taken only "in lieu of" deductions available for depreciation and obsolescence. 54 Stat. 999. Thus, amortization was a substitute for depreciation and, for tax purposes, emergency facility cost was to be expensed, and thereby recovered free of tax, only once. With respect to government contracts, until passage of the Renegotiation Act of 1943, the U.S. military believed the amortization privilege operated simply as a tax device and did not serve as a license for contractors to charge higher prices under government contracts by passing on the difference between amortization and normal depreciation to the government. It read tax amortization provisions as requiring "contract prices" be established on the basis of "normal" depreciation, not the accelerated rate of amortization allowed for tax purposes. Accordingly, a business electing amortization received three benefits: (1) its supply of internal funds (operating capital) was greater than it otherwise would have been during the amortization period; (2) its investment risk

was less because it could expense the full cost of new facilities over a short time period when the probability of sufficient profits was greater than in the post-amortization period: and (3) its total tax bill over the life of the facilities was lower if post-amortization rates of taxation were less than during the emergency, as historically occurred. In sum, rapid amortization enabled businesses to reduce their federal income taxes with the net result being that a large part of emergency facility cost was, at least temporarily, borne by the government through a reduction in tax receipts. United States v. Allen-Bradley Co., 352 U.S. 306, 307 (1957); Nat. Steel Corp. v. United States, 190 Ct. Cl. 31, 419 F.2d 398 (1969); Arkansas-Oklahoma Gas Co. v. Comm'r, 201 F.2d 98 (8th Cir. 1953); U.S. Navv Dep't Office of the Gen. Counsel, Navy Contract Law at 4, 238 (1949); Thomas E. Jencks, Tax Probs. of Wartime Plant Expansion, 10 L. & Contemp. Probs. at 149-51, 155-56 (1943); John Perry Miller, The Pricing Effects of Accelerated Amortization, 34 The Rev. of Economics and Statistics 10, 11, 13 (1952), available at http://www.jstor. org/stable/1928020; Smith, The Army & Econ. Mobilization at 456-61, available at www.history.army.mil/html/books/001/1-7/index.html; Clark, Economic Appraisal of Depreciation Policy, 29 J. Bus. at 28-29, 31, available at http://www.jstor.org /stable/2351191; Finney, Defense Contracts, The Alumni Rev. at 4, available at calteches.library.caltech.edu/79/01/Finney.pdf; White, Financing Indus. Expansion for War, 9 J. Econ. History at 157, available at http://www.jstor.org/stable/2113638; Expansion of Indus. Facilities under Army Air Forces Auspices 1940-1945 at 34, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp.

Other than GOCO contracts, four methods developed during 1940 to finance complete plants, additional capacity or equipment for performance of defense supply contracts. Under the first method, a contractor utilized his own monies to acquire new facilities, hold title to those facilities and privately operate the facilities. The contractor received no reimbursement for the cost of the facility, other than through the expensing of normal depreciation. For purposes of determining federal taxable income, however, if the contractor obtained certification the facility was "necessary in the interest of national defense," it could substitute for normal depreciation it deducted from gross income an amount sufficient to depreciate or "amortize" the facility cost, including land, over a 60-month period. Because the Second Revenue Act imposed Excess Profits Tax up to 95% of a company's adjusted excess profits net income, the rapid amortization deduction for emergency facilities was a tremendous inducement for the investment of private capital in defense plant expansion. That industry was prompt to take advantage of amortization is evident from Navy figures showing that, by December 1942, the Navy alone had issued 3,523 necessity certificates for emergency facilities aggregating over a billion dollars and other data showing that, during the last half of 1940, aircraft companies elected to invest \$83 million to expand their capacity. U.S. Navy Dept., Office of the Gen. Counsel, Navy Contract Law at 4, 238 (1949); Shiman, Forging the Sword at 6, available at www.denix.osd.mil/cr/.../95-10092-FORGING THE SWORD; Holley, Buying Aircraft at 309, available at www.history.army.mil/catalog/pubs/11/112.html; Expansion of Indus. Facilities under Army Air Forces Auspices 1940-1945 at 78, 87, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp.

While some businesses lacked sufficient capital to acquire additional facilities even if they availed themselves of amortization, commercial banks across the country were willing to lend more than \$3 billion to finance emergency plant acquisition if the banks received adequate security for their loans. The banks deemed a statute prohibiting assignment of claims against the government an obstacle to their receipt of the necessary security. Due to its unwillingness to appropriate sums necessary for war preparedness, Congress had little choice but to modify the long-standing claim assignment bar if it desired successful war preparation. In the Assignment of Claims Act of 1940, 54 Stat. 1029, Congress permitted the assignment of claims to financing institutions for monies due under government contracts with payment not being subject to reduction or set-off for indebtedness arising independently of the contracts, thereby establishing a foundation for the second emergency expansion financing method. McGrane, The Facilities & Constr. Program of the War Production Board & Predecessor Agencies at 12; U.S. Navy Dep't, Office of the Gen. Counsel, Navy Contract Law at 10, 237-38 (1949); 86 Cong. Rec. 12803 (1940); Indus. Mobilization, 54 Harv. L. Rev. 293, 306-07; Financing By Assignment of Gov't Contracts: Expanding The Assignee's Risk, 60 Yale L. J. 548 (1951); White, Financing Indus. Expansion for War, 9 J. Econ. History 172, available at http://www.jstor.org/stable/2113638; see McGowan v. Parish, 237 U.S. 285, 294 (1915); Nutt v. Knut, 200 U.S. 12, 20 (1906); 20 Comp. Gen. 95 (1940) (No. B-11756).

Under the second financing method, which was developed to promote private bank participation, a business in conjunction with the award of a government supply contract (a) entered into an Emergency Plant Facility (EPF) contract listing in detail in schedule A new facilities to be acquired and providing for government reimbursement of new facility cost over 60 months commencing at facility completion, with reimbursement accelerated if facility supply contracts ended before the 60-month period, and (b) borrowed monies necessary to pay for its acquisition of the new facilities from a private bank after legal assignment to the financing institution of its claim to reimbursement by the government. The contractor held title to the facility until the end of the reimbursement period, when title transferred to the government unless the contractor exercised an EPF contract option to purchase the facility. Although government payments reimbursing the contractor for the cost of the facility generally were treated by the Internal Revenue Commissioner as "taxable income," rather than "capital receipts," a contractor could elect to expense or amortize the facility cost over 60 months for federal income tax purposes, avoiding any impact on the amount of its income and tax. Most importantly, for purposes of these appeals, Article 6 of the standard EPF contract ("Determination of Costs") expressly provided "[t]he true cost of the facilities provided for hereunder to be paid by the Department shall not include any profit to the contractor." (Emphasis added) E.g., 5 Fed. Reg. 4147 (1940); Lake Erie Eng'g Corp. v. McGowan, 268 F.2d 341 (2d Cir. 1959) (EPF contract with Navy provided contractor was to finance and construct needed facilities at its own expense and be

reimbursed in 60 installments, but make no profit); Shaffer v. United States, 128 Ct. Cl. 299, 306, 337, 340, 121 F. Supp. 656, 659, cert. denied, 348 U.S. 864 (1954); Irving Trust Co., Emergency Plant Facilities Contract to Expedite Nat. Defense at 1-2 (1940). Thus, an EPF contract was pure reimbursement of "cost," i.e., a cost only contract, just like contracts for additional production facilities during World War I. Moreover, whenever an EPF contract, which was sometimes referred to as a "bankable" contract, was used to expand production capabilities, the prices charged to the government for goods produced by the new facility under a supply contract could not include charges for amortization or depreciation because the military was reimbursing the contractor for its new capital expenditures apart from the unit price, i.e., in an EPF contract. See, e.g., Shaffer, 128 Ct. Cl. at 307, 121 F. Supp. at 659-60. Concealment of overcharges by inclusion of depreciation or amortization charges in the end unit price, or possible double reimbursement, was thereby also made more difficult. 5 Fed. Reg. 4147-51 (1940); Irving Trust Co., Emergency Plant Facilities Contract to Expedite Nat. Defense at 1-3, 11, vol. 13 (1940); U.S. Navy Dep't Office of the Gen. Counsel, Navy Contract Law at 233, 237-38 (1949); Indus. Mobilization, 54 Harv. L. Rev. at 293, 305-07; Smith, The Army & Econ. Mobilization at 477-81, 483-85, available at www.history. army.mil/catalog/pubs/1/1-7.html; Durr, The Early History of Defense Plant Corp. at 16; Jenks, Tax Problems of Wartime Plant Expansion, 10 L. & Contemp. Probs. at 159-62; Indus. Mobilization, 50 Yale L. J. 250, 280-81; Holley, Buying Aircraft at 297-98, available at www.history.army.mil/catalog/pubs/11/11-2.html; Shiman, Forging the Sword at 7, available at www.denix. osd.mil/cr/.../95-10092-FORGING THE SWORD; White, Financing Indus. Expansion for War, 9 J. Econ. History at 164, 171-72, available at http://www.istor.org/stable/2113638; Smith, The Army & Economic Mobilization 467, 47681 available at www.history.army.mil/catalog/pubs/1/1-7.html; McGrane, The Facilities and Constr. Program of the War Production Board at 5/15; Expansion of Indus. Facilities at 37-38, available at http://www.afhra.af.mil/studies/ numberedusafhistoricalstudies.asp; T.D. 5016, § 19.126-6 (8 Oct. 1940); Finney, Defense Contracts, The Alumni Review at 3, available at calteches.library.caltech.edu/79/01/Finney.pdf; Baboquivari Cattle Co. v. Comm'r, 47 B.T.A. 129, 138-39 (1942), aff'd, 135 F.2d 114 (9th Cir. 1943).

In sum, unlike a GOCO contract where a contractor received reimbursement for new plant as it incurred such cost, under a standard-form EPF contract, a contractor was responsible for designing and constructing necessary emergency plant and "initially" bore the cost of that facility with funds borrowed based upon the security of its EPF contract providing for government reimbursement commencing at facility completion. The government commitment to reimburse fully facility costs over 60 months, together with other rights and options conferred in the EPF contract, "gave rise to a first class security for hypothecation for private financing during the [pre-war] scarce money period," reduced the risk of a supply contractor to a minimum since the government "ultimately" assumed facility cost, and imposed no immediate burden or drain on Congressional appropriations. In addition, because the government acquired title to the facility at completion of reimbursement, there was no possibility of a direct windfall or gain to the supply contractor from facility construction. U.S. Navy Dep't Office of Gen.

Counsel, Navy Contract Law at 237 (1949); White, Financing Indus. Expansion for War, 9 J. Econ. History at 172-73, available at http://www.jstor.org/stable/2113638; Holley, Buying Aircraft at 298, available at www.history.army.mil/catalog/pubs/11/11-2.html.

EPF contracts were used principally in the latter half of 1940 and first half of 1941, especially with respect to aircraft production. The first 11 EPF contracts entered into by the Air Corps had a value of more than \$133 million. Due to the large size of many EPF loans, statutory limits on the amount a bank could lend any one borrower frequently precluded the bank from making further loans to the contractor for purposes of adequate working capital, causing some supply contractors to prefer other means of financing emergency plant facilities. Klagsbrunn, Some Aspects of War Plant Financing, 33 Amer. Econ. Rev. at 121, available at http://www.jstor.org/stable/1818994; Smith, The Army & Economic Mobilization at 483, available at www.history.army.mil/ catalog/pubs/1/1-7.html; Expansion of Indus. Facilities at 75-77, available at http://www. afhra.af.mil/studies/numberedusafhistoricalstudies.asp; see generally 5 Fed. Reg. 5200-03 (Nov. 1940 War Dept. EPF contract for plant addition to make gages); 6 Fed. Reg. 182-85 (Oct. 1940 War Dept. EPF contract with Bell Aircraft for new plant), 186 (Dec. 1940 Navy Dept. EPF contract with Fairchild Engine & Airplane for plant addition and equipment), 218-21 (Oct. 1940 War Dept. EPF contract with Boeing Aircraft Co. for two plant additions), 347-50 (Oct. 1940 War Dept. EPF contract with Vultee Aircraft, Inc. for two plant additions), 528 (Nov. 1940 War Dept. EPF contract with Niles-Bement-Pond Co. for plant addition), 785 (Dec. 1940 War Dept. EPF contract with Republic Aviation Corp. for over \$5 million addition to existing plant), 822 (Dec. 1940) War Dept. EPF contract with Ford Motor Co. for four additions to existing plants costing over \$21 million), 2396-97 (Apr. 1941 War Dept. EPF contract with Glenn L. Martin Co. for a new plant and six additions to existing plant costing over \$23 million), 23698-99 (Mar. 1941 Navy Dept. EPF contracts with General Electric for additions to three plants producing gun mounts, ordnance equipment, and gun directors).

If a contractor did not wish to obtain financing from a private sector bank due to lending limits or for other reasons, it could use the third financing method and enter into a contract with the Defense Plant Corporation (DPC), a subsidiary of the Reconstruction Finance Corporation (RFC), which was essentially a "cost" only reimbursement contract with no profit or fee, whereby the DPC reimbursed it for the full "cost" of the facility, held title to the facility, and "leased" the facility to the contractor. Congress created the RFC as an "independent" agency in 1932 primarily to provide liquidity to, and restore confidence in, the nation's banking system. Congress provided \$500 million in capital to the RFC and authorized it to borrow from the U.S. Treasury, which would sell bonds to fund the RFC, obviating any need for RFC to seek appropriations from Congress or have its expenditures reflected as part of the federal budget. During the New Deal, Congress expanded the RFC's authority to include making of working capital loans to businesses where credit was not available from private sources and a loan was "of such sound value, or so secured, as reasonably to assure retirement or repayment." In summer 1940,

recognizing the potential economic unsoundness of some emergency plant facility financing, Congress authorized RFC to create subsidiary corporations to "finance" the construction or acquisition of new defense plant and lease that plant to business without any requirement that such loans be reasonably assured of repayment. Pursuant to this authority, RFC created the DPC, which "put up" the cash to make necessary emergency plant expansion or construction and then leased new plant acquired or constructed to a manufacturer, with title residing in the DPC at all times. To prevent the "free" use of a government-owned facility and disadvantage to competing manufacturers using their own facilities, DPC desired to charge a manufacturer "rent" for new plant sufficient to recover its investment in the leased facility, but the Departments of War and Navy wished to keep the cost of necessary supplies to a minimum and eliminate charges for new facilities, e.g., rent, from the price of products supplied. DPC thus typically charged a nominal rent (\$1 per year) or a rent roughly equivalent to actual deterioration of the plant during the life of the contract calculated to place DPC lessees on a competitive basis with private suppliers using their own equipment who were obliged to recoup plant depreciation costs in their supply prices, unless facilities were used for commercial as well as defense production. When facilities were used for commercial production, DPC charged a "full rent" figure calculated to discharge plant costs over a five-year period. As in EPF contracts, the government desired a distinct separation between the cost of facilities acquired and enditem supply prices. Whenever public funds were granted to finance facility expansion, the government took steps to insure no part of facility cost was included in the unit price of products produced at the facilities to prevent excess reimbursement with respect to facility cost. The standard form DPC lease expressly provided:

WHEREAS, Lessee has entered into a contract or contracts with the Government or with suppliers of the Government in order to enable such suppliers to perform contracts with the Government for the manufacture and furnishing of ______; and the establishment of the additional plant above referred to and the acquisition of the Machinery to be provided hereunder are essential to enable Lessee to manufacture and furnish and to expedite the delivery of such products in accordance with said contract or contracts; and

WHEREAS, Lessee represents that, in the price charged the Government or any supplier for the Government for the manufacture and furnishing of such products, there have been eliminated all charges (including amortization and depreciation), exclusive of the rental, maintenance, taxes and insurance provided for herein, for the additional facilities to be provided hereunder....

Accordingly, in most cases, to recover its investment in new facilities, DPC obtained from existing military appropriations 40 to 60% of its costs and recovered remaining costs from entry into a "takeout agreement" with the military providing for payment of the balance if and when additional funds were appropriated by Congress to the military for that purpose. 47 Stat. 5-12; 52 Stat. 212-13; 54 Stat. 572, 573; White, Financing Industrial Expansion for War, 9 J. Econ. History at 157, 160-62, 169, 175, available at http://www.jstor.org /stable/2113638; McGrane, The Facilities & Constr. Program of the War Production Board at 13; Klagsbrunn, Some Aspects of War Plant Financing, 33 Amer. Econ. Review at 123, available at http://www.jstor.org/stable/1818994; U.S. Navy Dep't Office of Gen. Counsel, Navy Contract Law at 233-34 (1949); Glover, Defense "Lending", 19 Harv. Bus. Rev. 197, 205; Durr, The Early History of Defense Plant Corp., vol. 32; Holley, Buying Aircraft at 99, available at www.history.army.mil/catalog/pubs/11/11-2.html; 6 The Army Air Forces in World War II: Men and Planes at 308-12, available at www. ibiblio.org/hyperwar/AAF/VI/index.html; Smith, The Army & Economic Mobilization at 484-90, available at www.history.army.mil/catalog/pubs/1/1-7.html; Expansion of Indus. Facilities at 31, 39-41, 64, 244, 255 available at http://www.afhra.af.mil/studies/ numberedusafhistoricalstudies.asp; Jules M. Lipton, Contractual Arrangements Covering the Use of Gov't Property by Defense Contractors, 32 Fordham L. Rev. 217, 218 (1963); see RFC v. Beaver County, PA, 328 U.S. 204, 206-07 (1946).

A DPC contract for emergency plant resembled a device often used to finance railroad rolling stock whereby the financing institution owned the facilities and leased those facilities to the operator. It allowed the government to maximize the number of businesses making defense supplies by eliminating the problem of manufacturers who could get no financial backing for new plant without orders, no orders without facilities, and no facilities without financial backing. It also allowed the government to keep the cost of supplies separate from the cost of facilities since only the rent charged by DPC could be included in the cost of supplies, eliminating the possibility of any contractor windfall. Under a DPC contract, a manufacturer could obtain title to a new facility only if it exercised an option to purchase that facility. Because title resided in the DPC until exercise of a purchase option, there was no danger after the war the manufacturer would be burdened with debt as a result of unwise plant investment. Although freed from risk of fixed capital investment, a manufacturer with a DPC contract retained an incentive to build and maintain an efficient plant – its option to purchase the facility in the future. White, Financing Indus. Expansion for War, 9 J. Econ. History at 157, 175-76, 181-82, available at http://www.jstor.org/stable/2113638; McGrane, The Facilities & Constr. Program of the War Production Bd. at 14; Klagsbrunn, Some Aspects of War Plant Financing, 33 Amer. Econ. Rev. at 122, 125, available at http://www.jstor. org/stable/1818994; U.S. Navy Dep't Office of Gen. Counsel, Navy Contract Law at 233-34 (1949); Holley, Buying Aircraft at 300, available at www.history.army.mil /catalog/pubs/11/11-2.html.

Many aircraft manufacturers elected to enter into DPC contracts to finance new plant facilities. Of 935 War Department DPC contracts involving some \$3 billion, over 80% were for air arm projects. The Navy's Bureau of Aeronautics accounted for more than another \$548 million in DPC contracts. Among those entering into DPC contracts were Wright, which had a DPC lease for \$57 million in plant to build aircraft engines, and Bendix Corp., which had a DPC lease for additional plant to make struts. Where a manufacturer also wished to use new plant to produce for other than the U.S. military, such as Packard Motor Car Company's desire to produce Rolls Royce licensed aircraft engines for Britain, DPC charged the manufacturer greater than a nominal rent based upon the amount of production occurring for others and that production typically bore its pro rata share of expense of the new facilities. White, Financing Indus. Expansion for War, 9 J. Econ. Hist. at 166, 170-71, 175-76, available at http://www.jstor.org/stable/2113638; McGrane, The Facilities & Constr. Program of the War Production Bd. at 4, 14; Holley, Buying Aircrafts at 301, available at www.history.army.mil/catalog/pubs/11/11-2.html; Durr, The Early History of Defense Plant Corp. at 29, 32-34, 43.

While the Assignment of Claims Act promoted private financing of facilities and the creation of the DPC promoted government financing without the necessity of "full" appropriations by Congress, the necessity for using all industry in the war effort required financial aid be given even where such aid was deemed a poor credit risk under the most liberal investment criteria. The costly conversion from peacetime to wartime production and the tremendous expansion needed for industry to meet war requirements necessitated the War and Navy Departments "directly" assist with expansion by paying for extension of existing privately-owned plant and construction of new plant with appropriated funds. The departments therefore developed a contract often referred to as a "facilities contract" under which industrial installations and machine tools were constructed or acquired by a contractor on a straight "cost reimbursement" basis. Typically, the contractor constructed or purchased the facilities and was reimbursed "allowable costs" as the work progressed. While title vested in the Department as facilities were acquired, the contractor could use those facilities for both government and private work, but was required to give priority to the former. The contractor was obliged to maintain the facilities as long as it had a right to utilize them, but the cost for such maintenance constituted an indirect expense under CPFF supply contracts entered into by the contractor. U.S. Navy Dep't Office of the Gen. Counsel, Navy Contract Law at 239-40 (1949); accord Jenks, Tax Problems of Wartime Plant Expansion, 10 L. & Contemp. Probs. at 149, 162. A typical "facilities contract" entered into by the Department of the Navy provided, in relevant part, as follows:

WHEREAS, Section 8(b) of the Act of June 28, 1940 (Public No. 671, 76th Cong., 3d Sess.), entitled "An Act to Expedite National Defense, and for Other Purposes", provides that whenever the Secretary of the Navy finds it impossible to make contracts or obtain facilities to effectuate

the purposes of this Act in the procurement or construction of items authorized in connection with national defense he is authorized to provide, out of appropriations available to the Department for such purposes, the necessary building, facilities, utilities, and appurtenances thereto, on Government-owned land or elsewhere, and to operate them, either by means of Government personnel, or otherwise, and

WHEREAS, the public exigency, in the national emergency declared by the President on September 8, 1939, to exist, makes it necessary in the judgment of the Secretary of the Navy that the production . . . for purposes of national defense be expedited and that additional machine tools, equipment, facilities and appurtenances be provided at the plant of the Contractor; and

WHEREAS, the Department and the Contractor have entered into or are entering into further contract or contracts, hereinafter sometimes referred to as "the supply contract", for the sale by the Contractor to the Department of _____ or other ____ materials on the understanding that the facilities required for the production of the same will be provided by the Department; and

WHEREAS, the Contractor represents to the Department that the price to be paid to the Contractor under the supply contract or under any other contract will not include any amount or allowance for the cost of acquisition, construction, or installation or for the amortization or depreciation of the said facilities, other than rental....

ARTICLE 1. Scope of Contract. – The Contractor shall with due expedition, by contract with others or otherwise, acquire and install or construct the machinery, equipment, facilities, services, and appurtenances identified in Appendix A attached to and forming a part of this contract (and hereinafter sometimes collectively referred to as "the facilities" or "the Department-owned facilities"), furnishing or causing to be furnished the labor, materials, tools,

machinery, equipment, facilities, supplies and services, and doing or causing to be done all other things necessary for the acquisition, installation and construction thereof. All of the said facilities shall be in accordance with the drawings, specifications, descriptions and instructions set forth in Appendix A.

ARTICLE 6. Determination of Costs: (a) The true cost to be paid by the Department shall be determined by the Compensation Board, and the decision of such Board or a majority thereof shall be binding on the parties thereto. In determining such true cost the Compensation Board shall, subject to the provisions of this Article, employ the accounting methods for determining costs as set forth in the Regulations promulgated by the Treasury Department and approved by the Secretary of the Navy August 6, 1940 (T.D. 5000, as amended). (b) The true cost of the facilities provided for hereunder to be paid by the Department shall not include any profit to the Contractor.

ARTICLE 8. Payments. – (a) The Contractor shall be paid without profit as full compensation under this contract the true cost of the performance thereof, said true cost being determined in the manner provided in Article 6 hereof.

Shaffer, 128 Ct. Cl. at 337-41 (findings, emphasis added); see, e.g., California v. United States, 132 Ct. Cl. 154, 132 F. Supp. 208 (1955) (Navy facilities contract with Bethlehem Steel Co. providing for expansion of shipyard); Cramp Shipbuilding Co. v. United States, 122 Ct. Cl. 72, 74-75, 92 (1952) (Navy facilities contracts to acquire, rehabilitate, and enlarge shipyard not operated since 1927, which provided for "reimbursement of costs" but no fee); 6 Fed. Reg. 356 (Navy contract for additional equipment with Camden Forge Co. to be "done at actual cost without profit to the Contractor."); 6 Fed. Reg. 826 (Navy contract for additional equipment and plant rehabilitation with General Machinery Ordnance Corp. to be "done at actual cost without profit to the Contractor."); 6 Fed. Reg. 2398 (Navy contract with General Electric Corp. (Erie) for the acquisition and installation of additional equipment to be "done at actual cost without profit to the Contractor."); 6 Fed. Reg. 2398 (Navy contract with General Electric Corp. (Schenectady) for the acquisition and installation of additional equipment to be "done at actual cost without profit to the Contractor."); 6 Fed. Reg. 2398 (Navy contract with

General Electric Corp. (Pittsfield) for the acquisition and installation of additional equipment to be "done at actual cost without profit to the Contractor.").

Besides providing a contractor with facilities under "facilities contracts," the government sometimes furnished facilities to contractors under "supply" contracts. *E.g.*, 7 Fed. Reg. 6139 (1942) ("*Plan V: Government Ownership Supply Contract*").

The furnishing of equipment, plant, and other government property to contractors created situations that did not exist in conventional procurements. For example, did small hand tools bought for use on production lines become accountable government property? Property officers had no way of knowing if a manufacturer was charging the government for a new tool when he was merely refurbishing an old one because there was no established system for marking such property. Property officers began using procedures for tracking military property but discovered they rested on assumptions different than those existing with respect to industrial production and required elaborate record systems to keep track of the property. As a result, property officers decided to assign the task of accounting for property to manufacturers, leaving government property officers the task of auditing manufacturers' records to ensure compliance. Holley, Buying Aircraft at 398-400; Expansion of Indus. Facilities at 143, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp.

By 1 October 1940, the military had entered into about 300 contracts with 100 manufacturers of airframes, engines and accessories for more than 9,000 aircraft. This appeared to be a tremendous volume of business at the time, but paled in comparison to developments two years later in 1942, when the War Department was purchasing aircraft from 4,000 different concerns. Holley, *Buying Aircraft* at 337, *available at* www.history. army.mil/catalog/pubs/11/11-2.html.

Utilization of defense order priority for materials in short supply limited the ability of manufacturers needing those materials for civilian production to engage in production and caused such manufacturers to seek and demand defense orders. Criticism of the military for placing orders with big business, rather than with small business scattered across the country, appeared in the press and congressional reports. The War Department stated it entered into contracts with large, reliable businesses because they had facilities and the experience and engineering skill to produce needed armament in the shortest possible time. During March 1941, Congress passed the Lend Lease Act, supplying unprecedented quantities of munitions, equipment, ships and planes to our Allies in exchange for rights to use certain bases based upon the presumption our Allies would repay the equipment cost at a later time, again necessitating enlargement of our nation's industrial base. The next month, in April 1941, a Special Senate Committee, which was commonly referred to as the "Truman Committee," began an investigation of military procurement, examining contract costs, profits, geographical distribution, and charges of discrimination against small business. By July 1941, the aircraft industry had acquired

over 24 million square feet of floor space, double the area available in January 1940. Due to success in expanding industry, the government believed throughout summer and fall 1941 that the addition of industrial plant would soon end. It was thought any future increase in capacity could be achieved by converting plant for production of peacetime goods. Only where specialized facilities required new construction was it thought that additional plant would be approved. The Big "L" at 105, available at http://www.ibiblio.org/ hyperwar/USA/BigL; Holley, Buying Aircraft at 310, 320-21, available at www.history.army.mil/catalog/pubs/11/11-2.html; Expansion of Indus. Facilities at 99, 104-05, 110, available at http://www.afhra.af.mil/studies/numberedusaf historicalstudies. asp; Smith, The Army & Economic Mobilization at 499, available at www.history. army.mil/catalog/pubs/1/1-7.html; Thomson & Mayo, The Ordnance Dep't: Procurement & Supply at 40-41, available at www.history.army.mil/catalog/pubs/10/10-10.html.

On 7 December 1941, Japan attacked our Naval Base at Pearl Harbor, Hawaii, killing 2,402 Americans, wounding 1,282 Americans, sinking four Navy battleships, sinking or damaging eight other Navy vessels, and destroying 188 American aircraft. President Roosevelt declared 7 December 1941, "a date which will live in infamy" and the next day, the United Stated entered the war. The shocking prospect of a two-ocean war made the military's existing computation of war requirements utterly inadequate. The War Department had less than 3,000 tactical aircraft then at its disposal, a large percentage of which were not fit for combat, because the new plants authorized and initiated during summer 1940 had not yet produced a single plane. The military, therefore, reacted swiftly, immediately commencing a new, extensive program of industrial expansion. *Expansion of Indus. Facilities* at 107, 110, *available at* http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp; 2 *Amer. Mil. Hist.* at 77-81, *available at* www.history.army.mil/books/amh-v2/amh%20v2/index.htm; Holley, *Buying Aircraft* at 321, *available at* www.history.army.mil/catalog/pubs/11/11-2.html.

Eleven days after the attack, Congress enacted the first War Powers Act, Pub. L. No. 77-354, 55 Stat. 838, bestowing on the President power to authorize an agency to enter into contracts and make advance, progress and other payments thereon, without regard to provisions of law relating to making, performance, amendment, or modification of contracts whenever he deemed such action would facilitate prosecution of the war, provided the Act not be construed as authorizing use of cost-plus-a-percentage-of-cost contracting or entry into a contract violating existing profit limitations. 55 Stat. 839. On 27 December, by Executive Order 9001, President Roosevelt delegated to the Secretaries of War and Navy, and Maritime Commission, the sweeping powers vested in him by the Act. Culver, Fed. Gov't Procurement – An Uncharted Course through Turbulent Waters, Contract Mgmt. at 11, available at resources nemahq.org/.../Publications%20by%20 NCMA%20Member; Holley, Buying Aircraft at 367, available at www.history. army.mil/catalog/pubs/11/11-2.html; Exec. Order No. 9001, 6 Fed. Reg. 6787; William L. Marbury and Robert R. Bowie, Renegotiation and Procurement, 10 L. & Contemp. Probs. 218, 219 n.6 (1943), available at http://jstor.org/stable/1190064; vom Baur, Fifty

Years of Gov't Contract Law, 29 Fed. B. J. at 305, 320-321; The Big "L" at 105, available at http://www.ibiblio.org/hyperwar/USA/BigL; see Op. Atty. Gen. No. 53 (Aug. 29, 1942).

Within four weeks of the attack, six airframe contractors had begun new facility construction projects ranging from \$20 to \$50 million in cost to increase production of fighters, bombers, and heavy transports. Aircraft engine manufacturers similarly began new facility projects estimated to cost in excess of \$50 million each. The largest was a 6.75 million square foot expansion for Chrysler Corp. at a cost of \$173 million. To obtain needed aircraft, the War Department authorized all large aircraft companies to add significantly to their existing facilities. While smaller airplane companies previously had received only small expansions of plant and been expected to operate principally as subcontractors for larger concerns, the Department began giving them their own orders and new plants or additions to their existing plants. New construction authorized during the first four months after Pearl Harbor exceeded facilities provided industry during the prior year. Holley, *Buying Aircraft* at 320-21, *available at* www.history.army.mil/catalog/pubs/11/11-2.html; *Expansion of Indus. Facilities* at 107, 112-13, *available at* http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp.

When our nation entered the war in 1941, neither the Navy nor War Departments had detailed procurement "regulations." While both Departments had promulgated a small number of regulations regarding their contracts generally, see, e.g., 10 C.F.R. Part 81 (1940) and 34 C.F.R. Part 8 (1940), differing significantly from today's procurement regulations, the Departments typically set forth their procurement policies in documents not published in the Federal Register, but compiled "looseleaf." The Department of War issued "Procurement Circulars" setting forth policies for its personnel. The Navy issued "Procurement Directives" setting forth its policies. In January 1942, the Navy issued a procurement directive providing in part that:

Every negotiating and contracting officer in negotiating or in making a supply contract shall make sure that any payments for the purchase of, or to aid in the acquisition of, facilities which are not of the type commonly classified as expendable, are separately and clearly set forth and not buried or otherwise hidden in a lump price;

All Navy procurement officers must be sure in making a contract, the fulfillment of which may require the use of a facility covered by an agreement to the effect that no depreciation or amortization of such facility shall be included in the price that such agreement is unmistakably adhered to and that depreciation and amortization of such facility are definitely excluded from the price; and

In most instances where the cost of major facilities of a non-expendable character is to be absorbed by the Navy, it will be more appropriate to do so by a separate facilities contract, rather than by the inclusion of the costs under a supply contract.

Navy Procurement Directives § 6011 (1943); accord Navy Procurement Directives ¶ 13-102 (Apr. 1961); U.S. Navy Dep't Office of Gen. Counsel, Navy Contract Law (1949); see Penn Dairies, Inc. v. Milk Control Comm'n, 318 U.S. 261, 276 & n.3 (1943).

During early 1942, mounting demand for munitions strained existing Ordnance plants and brought into war production industry previously devoted simply to civilian production. The military converted various industries producing consumer goods, such as automobiles, refrigerators, and typewriters, to war production. Engineers worked 24 hours a day to create new production lines for war material. *Expansion of Indus. Facilities* at 114-123, *available at* http://www.afhra.af.mil/studies/ numberedusafhistoricalstudies.asp; Thomson & Mayo, *The Ordnance Dep't: Procurement & Supply* at 33, *available at* www.history.army.mil/catalog/pubs/10/10-10.html.

The military asked many firms to undertake projects far beyond their normal capacity. For example, the firm making struts for the Boeing Flying Fortress, which was no industrial giant, suddenly had billings as high as \$7 million a month, a large sum in 1942. Holley, *Buying Aircraft* at 373, *available at* www.history.army.mil/catalog/pubs/11/11-2.html; *Expansion of Indus. Facilities under Army Air Forces Auspices* at 112-13, *available at* http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp.

In many cases, manufacturers were making unfamiliar articles or familiar articles in quantities far beyond experience, and often employing significant new labor. Thus, it often was difficult, if not impossible, for a manufacturer to estimate accurately what its production rates and costs would be. Expansion of Indus. Facilities under Army Air Forces Auspices at 128, 131, available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp; Marbury & Bowie, Renegotiation & Procurement, 10 L. & Contemp. Probs. at 219, available at http://jstor.org/stable/1190064.

Because of difficulties being experienced by both manufacturers and the military in properly estimating costs for war contracts, the military developed two contract clauses to address incorrectly estimated costs. The first, called the "Redetermination Clause," permitted automatic downward adjustment in price on the basis of actual cost experience during a "test run" early in performance of the contract. The second, initially referred to as the "Renegotiation Clause," permitted adjustment of the contract price (either upward or downward) based on actual cost experience after part performance, when reasonably reliable cost data was available. The latter was later called the "Revision of Price by

Negotiation Clause" (to distinguish it from a new clause for statutory renegotiation discussed below) and authorized where costs could not be reliably estimated at the time the contract was made. Marbury & Bowie, *Renegotiation & Procurement*, 10 L. & Contemp. Probs. at 220, *available at* http://jstor.org/stable/1190064.

During March of 1942, the War Department required that all procurement be negotiated, unless explicitly exempted by the Under Secretary. Department personnel however found they frequently lacked information desired to "negotiate" a contract. Available pricing data often was inaccurate due to inflationary pressures sending prices spiraling upward and generally applied to a production volume dwarfed by the size of current war orders. Production costs for orders of tens or hundreds usually did not hold true for orders in the thousands. Holley, *Buying Aircraft* at 343-44, *available at* www.history.army.mil/catalog/pubs/11/11-2.html; Nagle, *A History of Gov't Contracting* at 432; *The Big "L"*, available at http://www.ibiblio.org/hyperwar/USA/BigL.

At approximately the same time the War Department directed war contracts be negotiated, the Supreme Court of the United States issued its decision in *United States v*. Bethlehem Steel Corp., 315 U.S. 289 (1942), involving World War I negotiated CPFF shipbuilding contracts containing a savings or "incentive" feature. As discussed above, the U.S. Shipping Board Emergency Fleet Corp. (like the Navy did in contracting for standard-design destroyers) agreed to a "half-savings" clause in various ship construction contracts giving the contractor, Bethlehem, half the amount by which the actual cost fell short of estimated cost. The Supreme Court held that courts may not refuse to enforce as "unconscionable" a provision to construct vessels for the government for cost-plus-a-fixed-fee based upon an estimated base cost plus one half the saving should actual cost prove less than estimated cost, the effect of which was to give the contractor a profit of 22%, where (a) profit is not shown to be grossly in excess of the standard established by common practice in the field in which Congress authorized the making of such contracts even though under other contracts on a cost-plus basis the contractor's profit was limited to 10%, (b) the ships cost the government less than comparable ships built by others under cost plus 10% contracts, and (c) even larger profits were made at the time under other government contracts and, when compared with contemporaneous industrial profits not limited to profits on government contracts alone, a 22% profit was not exceptional. In concluding, the Court stated:

The problem of war profits is not new. In this country, every war we have engaged in has provided opportunities for profiteering and they have been too often scandalously seized. To meet this recurrent evil, Congress has at times taken various measures. It has authorized price fixing. It has placed a fixed limit on profits, or has recaptured high profits through taxation. It has expressly reserved for the Government the right to cancel contracts after they have been

made. Pursuant to Congressional authority, the government has requisitioned existing production facilities or itself built and operated new ones to provide needed war materials. It may be that one or some or all of these measures should be utilized more comprehensively, or that still other measures must be devised. But if the Executive is in need of additional laws by which to protect the nation against war profiteering, the Constitution has given to Congress, not to this Court, the power to make them. [Citations omitted]

315 U.S. at 309; Withrow, The Control of War Profits in the U.S. & Canada, 91 U. Pa. L. Rev. 194, 209; vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B. J. 305, 322.

The decision in *Bethlehem*, plus publication of reports of tremendous profits on World War II contracts during 1942, generated public pressure to devise an effective method of profit control. Both industry and the military opposed a revival of the Vinson-Trammel Act, viewing both the rigidity of the Act's application and its requirement for cost accounting as serious threats to war production. Several proposals were advanced, notably in the Smith-Vinson Bill and a measure advocated by Senator Case, for recovery of war profits in excess of six percent. The military strongly opposed the measures, and suggested a system for price re-determination by bilateral contract amendment similar to practices it had employed under the two contract clauses discussed above. After much discussion, Congress adopted a compromise in the Sixth Supplemental National Defense Appropriation Act, 55 Stat. 245-46, for the "renegotiation" of war contracts to recover "excessive profits." It provided that the Secretaries of War and Navy and Chairman of Maritime Commission were:

Authorized and directed to insert in any contract for an amount in excess of \$100,000 hereafter made...a provision for the renegotiation of the contract price at a period or periods when, in the judgment of the Secretary [or Chairman], the profits can be determined with reasonable certainty.

Congress defined "Renegotiation" as "refixing" of the contract price by the respective department heads. The procedure envisioned therefore included not only determinations which were reached by mutual agreement between government and contractor, but also determinations made unilaterally by the contracting department, if no mutual agreement could be reached. Any amount found as a result of renegotiation to represent "excessive profits," a term not defined by the Act, was to be returned to or retained by government. Further, the department heads were authorized to renegotiate any contract, regardless of amount involved and the absence of a renegotiation clause in the contract, whenever excessive profits were deemed to have been realized. All war contracts, whether entered into before or after passage of the Act, were made subject to "renegotiation," unless final

payment had been made prior to the Act's passage. (A provision in the Revenue Act of 1942, 56 Stat. 982, allowing renegotiation on the basis of "all" contracts entered into by a contractor during the taxable year, softened the impact of Renegotiation, by permitting losses incurred in performance of one contract to be used by a contractor to offset profits realized on another during the same taxable year.) 56 Stat. 245, 246; Marbury & Bowie, Renegotiation & Procurement, 10 L. & Contemp. Probs. at 221, available at http://jstor.org/stable/1190064; vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B. J. 322 n. 95; The Big "L" at 106, available at http://www.ibiblio.org/ hyperwar/USA/BigL; U.S. Navy Dep't Office of the Gen. Counsel, Navy Contract Law § 6.9 (2d ed. 1959); Culver, Fed. Gov't Procurement – An Uncharted Course through Turbulent Waters, Contract Mgmt at 11, available at resources.ncmahq.org/.../Publications%20by% 20NCMA% 20Member.

In addition, during spring 1942, Congress enacted the Second War Powers Act. This Act, among other things, authorized the military to inspect contractors' plants and audit contractors' books to allow closer administrative supervision of CPFF contracts. 56 Stat. 185 (1942); Exec. Order No. 9127, 7 Fed. Reg. 2753 (1942).

Effective 1 July 1942, pursuant to the First War Powers Act, 55 Stat. 839, and Executive Order 9001, the War Department promulgated detailed "Procurement Regulations" (PRs), and rescinded Army Regulations and Procurement Circulars. The PRs set forth in one location general policies and standard forms for War Department procurement personnel, as well as rules established over the years by the Congress, Comptroller General and Attorney General. 7 Fed. Reg. 8082; Penn Dairies, 318 U.S. at 276 & n.3; Holley, Buying Aircraft at 339-40, available at www.history.army.mil/catalog/pubs/11/11-2.html.

PR 10 § 1001 set forth a "general policy in regard to new facilities" providing as follows:

The conservation of critical material and the fullest possible utilization of existing facilities, whether structures, machinery or equipment, requires that preference in placing contracts should be given first to contractors who have existing buildings or machinery available and, second, to contractors who need to acquire the least amount of additional facilities for performance of the contract. Where it has been determined that new facilities are essential, preference should be given to contractors who will themselves finance such facilities....

7 Fed. Reg. 6138. PR 3 § 332 set forth a standard clause to be included in contracts where a contractor is to procure necessary facilities for the account of the government for

use in connection with the work under the contract, and in those cases where the government furnishes the contractor new facilities which the government directly has acquired or will acquire. The clause stated:

Government-owned facilities. (a) In connection with its work under this contract, the Contractor shall acquire or manufacture for the Government's account the facilities listed in Schedule A, attached hereto....[T]he Government shall reimburse the Contractor for the cost of such facilities, which are presently estimated at the amounts stated...in...Schedule A....

- (b) As each item of the facilities listed in Schedule A is delivered to, or manufactured by, the Contractor, for the Government's account, it shall become and remain the property of the Government, and title thereto shall vest in the Government. (All of the facilities listed in Schedule B are the property of the Government, and title to them is, and shall remain, in the Government.) The Government hereby grants to the Contractor the right to use, without the payment of rental therefor, such facilities in connection with the work herein contracted for and, subject to written approval of the [CO], for any additional work for which the Government may contract. The Contractor agrees at its own expense to keep such facilities in good operating condition and repair and to make all necessary repairs and replacements thereof.
- (c) Each item of such facilities shall be suitably marked with an identifying mark or symbol, indicating that such item is the property of the Government. Upon the completion of the installation of all such facilities, the Contractor shall submit to the [CO] a detailed inventory list of such facilities, including a description of the identifying marks or symbol on item therefor. [Footnotes omitted]

7 Fed. Reg. 8093 (emphasis added).

While use of CPFF contracts was supported by military leaders, who believed such contracts provided for expeditious procurement, the House Committee on Military Affairs issued a report highly critical of such contracts stating the time had come when the military contractors' "honeymoon at the expense of the taxpayers" must end. Other negative publicity regarding CPFF contracts caused many Americans to associate such contracts with extravagance and waste. As a result, repeated attempts were made to

eliminate or restrict use of CPFF contracts and convert existing CPFF to firm fixed-price contracts. While a directive issued ordering such conversion if possible and prohibiting future use of CPFF (except under certain circumstances), CPFF contracts continued to be utilized, especially for construction and production of aircraft, ships and ordnance. *The Big "L"* at 230, *available at* http://www.ibiblio.org/ hyperwar/USA/BigL; Holley, *Buying Aircraft* at 411-12, 419, *available at* www.history.army.mil/catalog/pubs/11/11-2.html; Lenore Fine & Jesse A. Remington, *The Corps of Engineers: Construction in the United States* 563 (U.S. Army Ctr. of Mil. Hist. 1972), *available at* http://www.history.army.mil/html/books/010/10-5/index.html; Braucher & Hardee, *Cost-Reimbursement Contracts with the U.S.*, 5 Stanford L. Rev. 4, 9; Smith, *The Army & Econ. Mobilization* at 284 & n.9, 285-86, *available at* www.history.army.mil/catalog /pubs/1/1-7.html; S. REP. No. 480, pt. 5, 77th Cong., 2d Sess., 15 Jan 42 (Truman Comm. First Annual Rep. 232-74; *Expansion of Indus. Facilities* at 99, *available at* http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp.

During 1943, the War Department amended PR 3 § 332 to provide as follows:

Government-Owned Facilities. (A) In connection with its work under this contract, the contractor shall, within the shortest practicable time, acquire or manufacture for the Government's account the facilities listed in Schedule "A" attached hereto, the estimated costs of which are therein stated....Such facilities shall be installed by the contractor in its plant or plants, or, if approved in writing by the contacting officer, in the plants of subcontractors....

- (B) Upon inspection and acceptance of the facilities by the contracting officer, and upon the contractor's furnishing satisfactory evidence that it has made payment or incurred the costs as the case may be, the Government shall reimburse the contractor for the actual costs of Schedule "A" facilities, approved by the contracting officer. The term "actual costs", as used in this Article, means the following:
- (1) For facilities procured by the contractor from sources other than its own manufacture:
 - (a) The net invoice price to it of the facilities;
- (b) The costs of transportation, *Provided*, That no costs of transportation shall be separately reimbursed when the invoice price reimbursed under (1) (a) hereof includes the costs of transportation;
 - (2) For facilities manufactured by the contractor:
- (a) The net invoice price to it of all direct materials required in manufacture;

- (b) The costs of transportation, *Provided*, That no costs of transportation shall be separately reimbursed when the invoice price reimbursed under (2) (a) hereof includes the costs of transportation;
- (c) The costs to it of all direct labor required in manufacture:
- (d) An amount equal to ___ per cent of item (2) (c) hereof as an allowance for all overhead and administrative expenses. The contractor represents, based on experience, that this amount does not include any element of profit, and represents no more than actual costs allocable to manufacture.

The Contractor shall install all Schedule "A" facilities at its own expense. [Footnotes omitted]

8 Fed. Reg. 14153-54 (emphasis added).

By mid-1944 and the invasion of Europe, estimated productive aircraft capacity was 2,000% of the level available in September 1940. Four long-established airframe companies (Boeing, Lockheed, Bell and Republic) had so increased their output that the value of their unfilled orders was now 100 times their net worth. Fees set at a mere 5% of estimated contract cost tended to yield a return on capital so spectacular that criticism was unavoidable. One Inspector General noted that fees earned by some contractors in a year exceeded the entire investment in those contractors. Holley, *Buying Aircraft* at 324, 376, available at www.history.army.mil/catalog/pubs/11/11-2.html.

When Japan surrendered in September 1945, costs for facilities supplied war contractors were \$2.9 billion under DPC contracts, \$108 million under EPF contracts, and in excess of \$4.3 billion under facilities, supply, GOCO and other contracts where the government directly owned the property. Moreover, according to data for federal tax amortization, American industry had expended \$4.6 billion of its own funds on needed war plant facilities. Smith, *The Army & Econ. Mobilization* at 499, *available at* www.history.army.mil/catalog/pubs/1/1-7.html.

After Japan surrendered, production ceased immediately in almost every category of armament. The nation demobilized its military forces and terminated its war contracts. Plants producing war materials closed and the defense plant workforce was assimilated back into a peacetime economy. The government considered the rapid disposal of war plants important to the health of the nation's economy. The military, however, did not simply abandon its industrial base. Memories of the years following World War I – when our government believed the nation had fought "the war to end all wars" and abandoned defense related industries – were all too fresh. Industries abandoned during 1918 had to

be recreated from scratch 20 years later at tremendous cost. Some damage, however, simply was irreversible. Workers with the special skills and experience needed for war materials were no longer available. For example, the military deemed the art of making black gun powder to have been lost permanently. While new plants were built to revive the industry during World War II, the powder produced never achieved the quality previously utilized. The military, therefore, desired to and did retain title to a number of plants financed by the government at tremendous expense during the war. For example, it retained the Detroit Tank Arsenal, which after the War principally was used to produce spare parts and as a site for storage. Shiman, Forging the Sword at 39, 41, 43, available at www.denix.osd.mil/cr/.../95-10092-FORGING_THE_SWORD; Smith, The Army & Econ. Mobilization at 708, available at www.history.army.mil/catalog/pubs/1/1-7.html; see Lipton, Contractual Arrangements Covering the Use of Gov't Property by Defense Contractors, 32 Fordham L. Rev. at 219; 61 Stat. 774 (1947).

Various problems arose regarding sale of the facilities. For example, the aircraft industry already burdened with tremendous excess production capacity and anticipating a major contraction had no interest in exercising contractual purchase options or otherwise buying the unusually sized plant structures, which it deemed to be of little value. The most troublesome problems occurred with respect to the so-called "scrambled" or "cats and dogs" facilities where government and private property were intermixed. During war mobilization, the military often paid for expansion of contractor-owned plant by adding new equipment, constructing new buildings, and/or buying adjacent land. If a contractor declined to exercise a contractual purchase option or otherwise buy those government-owned facilities, the government often was contractually obliged to remove its property from the contractor's premises and restore the premises to their prior condition. While machinery could be moved, the government also had to deal with government-owned "buildings" on private land and privately-owned buildings on government-owned "land." Ultimately, the government had no choice but to "write-off" many of the facilities as part of the cost of war, selling them at a fraction of their cost or simply retaining them in its inventory. The Navy's Bureau of Ships, for example, recouped only 30% of investment in its facilities. Many aircraft plants were never sold. A number of scrambled facilities remained "scrambled," in some cases until the end of the "Cold War." Shiman, Forging the Sword at 39-41, available at www.denix.osd.mil /cr/.../95-10092-FORGING THE SWORD; Smith, The Army & Econ. Mobilization at 477, available at www.history.army.mil/catalog/pubs/1/1-7.html.

In 1947, recognizing that the military had retained title to a number of government financed war facilities, Congress enacted legislation authorizing the military to lease real or personal property not required for public use and not surplus to needs of the military within the meaning of 58 Stat. 765 if doing so would promote the national defense or be in the public interest. 61 Stat. 774; Lipton, Contractual Arrangements Covering the Use of Gov't Property by Defense Contractors, 32 Fordham L. Rev. at 219. Congress also enacted the National Security Act of 1947, which renamed the "Department of War" the

"Department of the Army," transferred Army air operations to a separate, newly-created "Department of the Air Force," and (based upon World War II experiences) "unified" the nation's military services without "merger," i.e., retained each service as an "individual Executive department" comprising a "National Military Establishment" (NME) while authorizing the appointment of a "Secretary of Defense" to establish general policies for the NME. 61 Stat. 495, 499-503.

After World War II, agencies did not wish to return to the "archaic forms of pre-war procurement." They had seen successful private sector performance of "negotiated" contracts, recognized modern complex weapon systems required special skills, and the limitations of procurement by formal advertising. Congress was suspicious, however, of any form of procurement other than traditional advertised competitive bidding. Thus, to obtain authority to continue to negotiate contracts after expiration of the war emergency, proponents of war procurement methods drafted legislation phrased to require that, unless "specific circumstances existed," all military procurement was to be made by competitive advertised bidding. Ernest F. Leathem, Defense Procurement – A Complex of Conflicts and Tensions, 5 Boston College L. Rev. 1, 2-3 (1963), available at http://lawdigitalcommons.bc.edu/bclr/vol5/iss1/1; Arnold S. Levine, Managing NASA in the Apollo Era, ch. 4 at 4 (NASA 1982), available at http://nasa.gov/SP-4102/ch4.htmandntrs.nasa.gov/archive/nasa/casi...nasa.../ 19830010280 1983010280.

During February 1948, Congress enacted the Armed Services Procurement Act of 1947 (ASPA), Pub. L. No. 80-413, 62 Stat. 21 (1948) (codified in 10 U.S.C. § 2301, et seq.). The Act constituted Congress' first effort to provide a comprehensive framework for procurement by the military. It applied to "all purchases and contracts for supplies or services made" by the Departments of the Army, Navy, and Air Force, United States Coast Guard, and National Advisory Committee for Aeronautics, where payment was to be made with appropriated funds. 62 Stat. 21. To no one's surprise, ASPA required use of competitive advertising in most procurements. Section 2(c) of the Act stated "[a]ll purchases and contracts for supplies and services shall be made by advertising,...except that such purchases and contracts may be negotiated" if one of 17 circumstances existed. 62 Stat. 21-22; see, e.g., Kern Limmerick v. United States, 347 U.S. 110, 114-16 (1954). With respect to negotiated contracts, ASPA essentially followed the practices used during the War. Section 4 of the Act stated that negotiated contracts may be of "any type" but that "the cost-plus-a-percentage-of-cost system of contracting shall not be used, and in the case of a cost-plus-a-fixed-fee contract the fee shall not exceed 10 per centum of the estimated cost of the contract, exclusive of the fee." 62 Stat. 23.

Soon after ASPA, regulations started appearing which interpreted, explained and enlarged upon the Act. While ASPA did not contain a specific provision regarding the issuance of such regulations, the Court of Claims held that the comprehensive terms of

the Act, buttressed by general statutory sections authorizing the Defense and Service Secretaries to adopt directives and regulations in their fields of competence, including procurement, authorized their promulgation. *G.L. Christian & Assocs. v. United States*, 160 Ct. Cl. 58, 64, 320 F.2d 345, 349 (Ct. Cl. 1963) (reh'g motion), *cert. denied*, 375 U.S. 954 (1963); Leathem, *Defense Procurement – A Complex of Conflicts & Tensions*, 5 Boston College L. Rev. 1, 5, *available at* http://lawdigitalcommons.bc.edu/bclr/vol5/iss1/1.

Effective May of 1948, the Secretaries of the Army, Navy and Air Force formally issued the first three parts of the Armed Services Procurement Regulation (ASPR) in Title 10, Code of Federal Regulations. 13 Fed. Reg. 3074 -3088. In doing so, the Secretaries stated "[a]ll procurement personnel are enjoined to follow strictly the standards and requirements set forth in this regulation as well as in such implementing procedures as will be issued under it from time to time." 13 Fed. Reg. 3075. About three months later, the Secretaries promulgated three additional ASPR parts. 13 Fed. Reg. 4914-19. During the following six months, the Secretaries issued two more ASPR parts and renumbered the first six parts of ASPR as parts "400 – 405" of title 34, Code of Federal Regulations. 14 Fed. Reg. 522 (1949); 13 Fed. Reg. 7345 (1948). The next year, the Secretaries promulgated three other parts of ASPR, including part 414 entitled "Contract Cost Principles," relocated to Title 32, Code of Federal Regulations. 15 Fed. Reg. 8025-52 (1950).

With respect to types of contracts authorized for procurement, ASPR stated "contracts negotiated...may be of any type which will promote the best interests of the Government, except that under no circumstances shall the cost-plus-a-percentage-of-cost system of contracting be used or allowed to be used" and added "the fixed-price type of contract shall be used for negotiated contracts unless conditions necessitate the use of some other type of contract." ASPR 402.401. The ASPR expressly defined a "Cost contract" as one providing for "payment to the contractor of allowable costs, to the extent prescribed in the contract, incurred in the performance of th[at] contract." ASPR 402.405. While the ASPA limited fees on standard CPFF contracts to 10% of estimated cost (62 Stat. 23; Kern Limmerick, 347 U.S. at 110), the ASPR further limited such fees. It stated that fees for CPFF contracts (other than contracts for experimental, developmental or research work or for architectural or engineering services) may not exceed 7%. ASPR 402.406-2.

In 1949, Congress created the "Department of Defense" (DoD). It converted the NME into a full-scale Executive department (DoD), designated the Secretary of Defense as principal assistant to the President in all defense matters, and downgraded the Services to the status of "military Departments." 63 Stat. 578.

During 1950, the North Korean Army crossed the 38th Parallel into South Korea starting the Korean War. United States forces in Japan rushed into action with World

War II weapons and equipment. The nation's military industrial base, which largely had been dormant, began expanding to produce tanks, guns and other needed items. Few contractors for the military however were able or willing to invest in new plant. Unlike World War II, the government did not elect to build new plants for contractors. Rather, it permitted them to utilize ones built and improved during the World War, and financed new construction through loans and tax incentives. Between 1950 and 1956, the military supplied contractors with \$3 billion worth of facilities. Shiman, Forging the Sword at 45, 54, available at www.denix.osd.mil/cr/.../95-10092-FORGING_THE_SWORD; Culver, Fed. Gov't Procurement – An Uncharted Course through Turbulent Waters, Contract Mgmt. at 15, 18, available at resources.ncmahq.org/.../Publications%20by%20 NCMA%20Member; see 57 Stat. 177; Penn-Ohio Steel Corp. v. United States, 173 Ct. Cl. 1064, 1067, 354 F.2d 254, 256 (1965).

In May 1951, three years after issuance of the first three parts of ASPR, the Secretaries promulgated parts 412 ("Government Property") and 413 ("Inspection and Acceptance"). 16 Fed. Reg. 4311-26 (1951). ASPR Part 412 set forth policies for property under three separate categories "material," "special tooling," and "industrial facilities." ASPR 412.101-1 (1951). It defined "material" as property which may be "incorporated into or attached to the end products to be delivered to the Government or as may be consumed or expended in the performance of a contract." ASPR 412.101-4 (1951). (An example of such property would be the walnut gun stocks supplied by the government to Eli Whitney.) It defined "Special Tooling" as property of "such specialized nature that its use, without substantial modification or alteration is limited to the production of the particular supplies or the performance of the particular services for which acquired or furnished. ASPR 412.101-5 (1951). (Examples of special tooling are "jigs, dies, fixtures, molds, patterns, special gauges, special test equipment, and other special equipment and manufacturing aids." Lipton, Contractual Arrangements Covering the Use of Gov't Property by Defense Contractors, 32 Fordham L. Rev. at 234 n.96. It defined "Industrial Facilities" as property, "other than material and special tooling, of use for the performance of a contract or subcontract for supplies or services." ASPR 412.101-6 (1951). (An example of such property would be the shipways provided to Bethlehem and other shipbuilders during World War I).

Part 412 stated:

It is the general policy of the Armed Services that contractors will furnish all facilities required for the performance of Government contracts. However, subject to and within the limitations of existing authority, facilities may be provided by the Government for use by Contractors when such providing is considered necessary to meet essential production or program schedules or when otherwise considered...to be in the best interest of the Government.

ASPR 412.102-3 (1951). According to Part 412, "[i]ndustrial facilities shall be provided only under a facilities contract separate from any related contract for supplies or services, except that industrial facilities may be provided under suitable clauses in a supply or service contract" when (a) "the cumulative total acquisition cost (actual or estimated) of the industrial facilities provided to a contractor at one plant or general location does not exceed \$50,000," (b) "the contract is for the performance of construction work," or (c) "the contract is for the performance of work within establishments or installations operated by the Government" (emphasis added). ASPR 412.402. Part 412 also stated "[e]xcept as provided under [ASPR] 412.402 [quoted immediately above], or unless in accordance with Departmental procedures the [CO] determines it to be impracticable, all industrial facilities provided by a procuring activity for use by a contractor at any one plant or general location shall be governed by a single facilities contract, amended from time to time as necessary, covering only the facilities at that plant or general location..." ASPR 412.403 (1951). Part 412 defined "Facilities Contract" as simply "a contract under which industrial facilities are provided by the Government for use in connection with the performance of a separate contract or contracts for supplies or services" (emphasis added). ASPR 412.101-8 (1951).

ASPR Part 412 incorporated by reference a "Manual for Control of Government Property in Possession of Contractors," which was Appendix B to the ASPR. ASPR 412.103 (1951); 16 Fed. Reg. 4322-25 (Appendix B). Appendix B set forth basic requirements to be observed by the Departments for establishing and maintaining control over government property. ASPR Appx. B 101.

When fighting ended during summer 1953, our soldiers in Korea were still mostly using World War II issue. While the industrial base had swung into action and expanded, most new weapons and products were not ready, even after three years. Our nation began its first long-term, peacetime program of military and industrial preparedness, promoting the concept of military "readiness," at the end of the Korean War. Shiman, Forging the Sword at 45, 53 available at www.denix.osd.mil/cr/.../95-10092-FORGING_THE_SWORD.

While the Service Secretaries promulgated some modifications to ASPR Part 412 during the Korean War, they did not significantly alter the regulatory provisions set forth and discussed above. See 17 Fed. Reg. 11315-19 (1952); 18 Fed. Reg. 1228 (1953). Part 412 and the other parts of ASPR received new numbers in the 1955 revision of Title 32 of the Code of Federal Regulations. "Part 412 – Government Property" became "Part 13 – Government Property." Compare 32 C.F.R. § 412.000 (1954 rev.) with 32 C.F.R. § 13.000. While the numbers of each provision in ASPR Part 412 changed, there was no substantive alteration of regulatory provisions set forth and discussed above. Compare ASPR 412.101-6, 412.101-8, 412.102-3, 412.402, 412.403 with ASPR 13.101-6, 13.101-8, 13.102-3, 13.402, 13.403 (1955 rev.).

On 4 April 1955, DoD amended the definition of "Cost contract" set forth in ASPR to include two "illustrative situations" in which the use of this type of contract might be appropriate. The second such situation was "Facilities contracts." ASPR 3.404-1 (Rev. No. 4, 1955 ed.). DoD, however, made no change to ASPR 3.404-3(c) (1955), which continued to limit fees on cost reimbursement contracts (other than those for research/development and architect/ engineering) to 7% of estimated cost, i.e., less than the ASPA statutory limit of 10%.

From 1955 through 1959, DoD promulgated modifications to ASPR Part 13, but did not significantly alter the regulatory provisions discussed above. Compare ASPR 13.101-6, 13.101-8, 13.102-3, 13.402, 13.403 (1955 rev.) with ASPR 13.101-6, 13.101-16, 13.102-3, 13.402, 13.403 (1961 rev.); see 25 Fed. Reg. 14076, 14279 (29 Nov. 1960). ASPR 13.101-8 was "renumbered" as 13.101-16. 23 Fed. Reg. 9214 (29 Nov. 1958). In addition, a fourth exception was added to ASPR 13.402 stating expressly that facilities may be provided under suitable clauses in a supply or service contract if "the contract is for the performance of services, involving the operation of a Government-owned plant or installation for a specified period of time and the facilities provided are to be used only in connection with such contract." 23 Fed. Reg. 3633 (27 May 1958).

Due to the terrific need for aircraft in World War II, the provision of facilities to aircraft manufacturers during the War, and inability of the government subsequently to dispose of those facilities, the Air Force possessed many industrial facilities related to aircraft during the 1950s. The Air Force therefore had its own regulations specifically addressing "facilities." As of 1 October 1957, the Air Force Procurement Instruction provided that "[w]here industrial facilities are to be provided a contractor under the circumstances set forth in ASPR 13-402(a), the supply, service, or research and development contract (procurement) will provide"—

- (a) Facilities in Cost-Type Procurement Contracts.
- (1) Where existing facilities are to be furnished under the terms of a cost-type procurement contract, no separate clauses covering such facilities are required other than the Government furnished property clause.... The items of facilities will be listed and specified in the schedule as Government-furnished property.
- (2) Where the acquisition or fabrication of facilities is authorized in a cost-type contract, the following clause will be set forth in the schedule. The facilities authorized will be listed following the clause, and the maximum cost of each set forth.

FACILITIES ACQUIRED OR FABRICATED

Subject to the approval of the [CO], the Contractor may acquire or fabricate the facilities hereafter listed at costs not to exceed those specified. Costs incurred therefor, if not in excess of those specified in the following list, will be allowable costs, but no fee will be paid thereon. The facilities so acquired or fabricated shall be considered Government property and subject to the provisions of the Government property clause of this contract.

- (b) Facilities in Fixed-Price Procurement Contracts.
- (1) Where existing facilities are to be furnished under the terms of a fixed-price contract, no separate clauses covering such facilities are required other than the Government-furnished property clause.... The items of facilities will be listed in the schedule as Government-furnished property.
- (2) Where the acquisition or fabrication of facilities is authorized in a fixed-price contract:
 - (A) The general provisions of the contract will be designated "Section I," and the following clause will be set forth in the schedule. The facilities authorized will be listed following the clause and the maximum cost of each set forth.

FACILITIES ACQUIRED OR FABRICATED

Subject to the approval of the [CO], the Contractor may acquire or fabricate the facilities hereafter listed at costs not to exceed the costs specified in that list. The Contractor shall be reimbursed for costs incurred therefor in accordance with the General Provision hereof entitled "Reimbursement." Such facilities and the acquisition or fabrication thereof shall be subject to the provisions of both Section I and Section II of General Provisions of this contract....

(B) In addition to the clause set forth in subparagraph (A) above, the following will be included in the contract as General Provisions, Section II:

II-1 REIMBURSEMENT

(a) Upon inspection and acceptance by the [CO] of the facilities specified in the Schedule, the Government will pay to the Contractor the costs thereof as determined in accordance with...Section XV [Cost Principles] of the [ASPR]....

(d)The Contractor represents that the costs to be incurred and for which it will be reimbursed under this clause are not and will not be included as an element of cost under any other provision of this contract or any other contract with the Government or suppliers of the Government, and do not include any allowance for profit or fee. [Emphasis added]

Air Force Procurement Instruction ¶ 13-402 at 1320, 1321 (1957).

The successful orbiting of Sputnik I in October and Sputnik II in November of 1957, caused grave concern in the United States. Within eight months, Congress created from the National Advisory Committee for Aeronautics a new "civilian agency," NASA, to direct and exercise control over the nation's aeronautical and space activities. While development of weapons systems remained the job of the military, Congress declared that other activities should be conducted to contribute to preservation of the role of the United States as a leader in aeronautical and space science, and in the application thereof to the conduct of peaceful activities within and outside the atmosphere. 72 Stat. 426–38. On 30 October 1958, NASA announced that its contracting would be handled in accordance with ASPA. It stated procurement and contracting regulations:

[N]ow being developed will conform in every practicable way to the Armed Services Procurement Regulations.... This decision should be welcomed by potential NASA contractors since industry has become quite familiar with the ASPR in the past 10 years. They will not be required to learn how to operate under widely divergent NASA regulations, nor will this change procedures for those contractors now engaged in projects which have recently been transferred from the...[military] to NASA.

Robert L. Rosholt, *An Administrative History of NASA*, 1958-1963, NASA SP-4101 at 62 (NASA Historical Society 1966). In creating NASA, Congress brought the new civilian agency under the purview of ASPA by amending that statute to substitute NASA for the National Advisory Committee for Aeronautics. 72 Stat. 432. Because the legislation

creating NASA, however, provided generally for agency contracting, e.g., 72 Stat. 430, 435, similar to ASPA, NASA did not believe it was bound to adhere to the ASPR and promulgated its own NASA Procurement Regulations similar to the ASPR. See Rosholt, An Admin. History of NASA, 1958-1963, NASA SP-4101 at 61-62; Managing NASA in the Apollo Era, A Summary of NASA Contracting Philosophy, ch. 4 at 6-7, available at http://history.nasa.gov/SP-4102/ch.4htm (citing Clarence Danhof, Gov't Contracting and Technological Change 95 (Wash., DC: The Brookings Institution, 1968); Albert N. Schrieber, Small Business and Gov't Procurement, 29 L. & Contemp. Probs. 390 n.3 (1964); John J. Grossbaum, Procedural Fairness in Public Contracts: The Procurement Regulations, 57 Va. L. Rev. 171, 180 n.54 (1971), available at http://www. jstor.org/stable/107210; John R. Donnelly, The Milkman Rings Twice: Has Paul v. United States Given Federal Procurement Regulations The Force of Statutory Law?, 29 L. & Contemp. Probs. 347, 355 (1964); Managing NASA in the Apollo Era at 24 (ch.2) at 3, 5; John W. Whelan, Understanding Federal Government Contracts ¶ 1-3.3 (CCH 1993); Steven J. Dick, NASA Chief Historian, The Birth of NASA (29th essay), available at www.nasa.gov/exploration/whyweexplore/Why_We_29.html. NASA's regulations followed the numbering system of the Federal Procurement Regulation (FPR) issued by the General Services Administration (GSA) for civilian agencies pursuant to the Federal Property and Administrative Services Act of 1949, 63 Stat. 377, but corresponded "very closely to ASPR in general plan." E.g., 18 C.F.R. § 18-1.103-1 (1963).

While the Air Force promulgated a revised Instruction ¶ 13-402 in both February of 1958 and 1959, the instruction continued to provide that (1) the Clause "FACILITIES ACQUIRED OF FABRICATED" required to be included in the schedule of cost-type contracts states "no fee" will be paid or payable on costs incurred in either acquiring or fabricating facilities and (2) paragraph (d) of Clause II-1 "REIMBURSEMENT" required to be included in fixed-price type contracts states the contractor represents that costs to be incurred "do not include any allowance for profit or fee." Air Force Procurement Instruction ¶ 13-402 at 1320.1 (1958); Air Force Procurement Instruction ¶ 13-402 at 1322.1, 1322.2 (1959).

During August 1959, the Air Force deleted existing Procurement Instruction ¶ 13-402, and added a new ASPR Instruction ¶ 13-402 (Separate facilities contract) providing:

Where industrial facilities are to be provided to a contractor under the circumstances set forth in [ASPR] 13.402 of this title (and paragraphs (a), (b), (c), and (d) of this section); the procurement (supply, service, research and development) contract will include the applicable provisions of § 1013.402-50.

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- (c) Provision of facilities for procurement contract work at Government owned-Government operated Installations:
- (1) Obtaining coordinations for provisioning. The base or installation commander will normally arrange for the providing of facilities for work within establishments or installations operated by the Government and will prescribe the terms and conditions under which such facilities are to be used....
- (2) Alternate use of procurement or facilities contracts. If required facilities are not to be provided from the base commander's inventories or budgeted funds, the facilities may be provided under a supply, service or research and development contract issued by the cognizant procurement office or under a facilities contract issued by the facilities contracting office whichever method of contracting is advantageous for purposes of property accountability and administration.

(d) Facilities provided under service contract involving operation of a Government-owned plant or installation. If additional facilities are to be acquired or fabricated under a service contract under which a Government-owned plant or installation is operated, the requirements of § 1013.402-50 will be complied with. Such facilities and any additional Government furnished facilities will be contractually covered in the same manner as the plant....

24 Fed. Reg. 7006 (29 Aug. 1959). Newly added § 1013.402-50 (Provisions applicable to procurement contracts) stated:

(a) Facilities provided under cost-type procurement contracts. (1) Where existing facilities are to be furnished under the terms of a cost-type procurement contract, no separate clauses covering such facilities are required other than the Government furnished property clause set forth in § 13.503 or § 13.506 of this title, whichever is applicable. The items of facilities will be listed or specified in the Schedule as Government-furnished property.

2) Where the acquisition or fabrication of facilities is authorized in a cost-type contract, in addition to inserting the Government Property clause of § 13.503 or § 13.506 of this title, the following clause will be set forth in the Schedule. The facilities authorized will be listed following the clause, together with the estimated cost of each set forth and the total estimated cost of all such facilities:

FACILITIES ACQUIRED OR FABRICATED

Subject to the approval of the [CO], the Contractor may acquire or fabricate, the facilities hereafter listed. Costs incurred therefor will be allowable costs, provided that the contractor shall have no obligation to acquire or fabricate facilities and the Government will have no obligation to reimburse any amount for such facilities in excess of the total estimated facilities cost set forth herein, unless this contract is amended to increase such amount. No fee will be payable based on the cost of facilities acquired or fabricated hereunder. The facilities so acquired or fabricated shall be considered Government property and subject to the provisions of the Government Property clause of this contract.

Facilities provided under fixed-price procurement contracts. (1) Where existing facilities are to be furnished under the terms of a fixed-price contract, no separate clauses covering such facilities are required other than the Government-furnished property clause as set forth in § 13.502 or § 13.505 of this title, whichever is applicable. The items of facilities will be listed or specified in the Schedule as Government-furnished property.

- (2) Where the acquisition or fabrication of facilities is authorized in a fixed-price contract:
- (i) ...[T]he following clause will be set forth in the Schedule. The facilities authorized will be listed following the clause together with the estimated cost of each set forth and the maximum (total) cost of all such facilities:

FACILITIES ACQUIRED OR FABRICATED

Subject to the approval of the [CO], the Contractor may acquire or fabricate the facilities hereafter listed....

(ii) In addition to the clause set forth in subdivision (i) of this subparagraph, the following will be included in the contract as General Provisions, Section II:

II-1 Reimbursement.

- a. Upon inspection and acceptance by the [CO] of the facilities specified in the Schedule, the Government will pay to the contractor the costs thereof as determined in accordance with Parts 2 and 6, Section XV [Cost Principles] of the [ASPR] for items other than construction and in accordance with Parts 4 and 6 of said Section XV for items of construction, if any.
- d. The Contractor represents that the cost[s] to be incurred and for which it will be reimbursed under this clause are not and will not be included as an element of cost under any provision of this contract or any other contract with the Government or suppliers of the Government, and do not include any allowance for profit or fee. [Emphasis added]

24 Fed. Reg. 7006 (29 Aug. 1959). While the Army also had supplemental ASPR applicable only to its Department, its supplemental ASPR did not contain any regulations addressing reimbursement for contractor acquired or fabricated industrial facilities. See, e.g., 19 Fed. Reg. 5765 (1954); 32 C.F.R. §§ 602 000 – 602 406-50 (1962).

In January 1960, GSA's Office of Procurement Supply, which was responsible "for developing and executing a...Government-wide program for the establishment of uniform procurement policies and procedures" and which issued standard forms required to be used by all government agencies, including DoD, promulgated a standard contract clause which could be inserted in construction contracts if it was "desired to provide for suspension of the work for the convenience of the Government and/or to provide for administrative relief for unreasonable periods of delay caused by the [CO] in the administration of the contract." The clause, entitled "Price Adjustment for Suspension, Delay, or Interruption of the Work," provided:

- (a) The [CO] may order the Contractor in writing to suspend all or any part of the work for such period of time as he may determine to be appropriate for the convenience of the Government.
- (b) If, without the fault or negligence of the Contractor, the performance of all or any part of the work is for an

unreasonable period of time, suspended, delayed, or interrupted by an act of the [CO] in the administration of the contract, or by his failure to act within...a reasonable time), an adjustment shall be made by the [CO] for any increase in the cost of performance of the contract (excluding profit) necessarily caused by the unreasonable period of such suspension, delay, or interruption, and the contract shall be modified in writing accordingly....

25 Fed. Reg. 648 (1960) (emphasis added.) DoD issued this clause as ASPR 7-604.3 and prescribed its use, on an optional basis, for fixed-price construction contracts. Army Engineers had been using a similar clause in construction contracts (GC-11) since World War II, but prior efforts to draft a government-wide clause or have such a clause included in ASPR all had failed. The Army clause had arisen from efforts by Associated General Contractors and others to overcome *United States v. Rice*, 317 U.S. 61 (1942), holding a contractor's exclusive remedy for delays caused by change orders, changed conditions, and acts of the government were time extension provisions set forth in the construction contract clauses. In construing the Army suspension clause, this Board explained:

Except for repelling any idea that a time extension is the contractor's exclusive remedy for a Government-caused delay, we are not aware of any right of recovery created by the "Suspension of Work" clause that would not otherwise exist in an action at law for damages. In an article by E. Manning Seltzer and Albert M. Gross [of the Corps of Engineers], it is stated:

"It (the Suspension of Work clause) is not intended to increase the contractor's substantive rights...."

We are of the opinion that the "Suspension of Work" clause provides a contract administrative remedy without creating any new or additional substantive rights....

Since the "Suspension of Work" clause is regarded as remedial, rather than as creating substantive rights, it will be helpful in determining the scope of this clause to examine court decisions concerning a contractor's right to recover damages for delay in performance caused by the Government.

T.C. Bateson Constr. Co., ASBCA No. 5492, 60-1 BCA \P 2552 at 12,346-49. While the 1960 uniform suspension clause differed from the earlier Army clause in explicitly excluding recovery of "profit," the Court of Claims had held for nearly four decades, e.g.,

Wyant v. United States, 46 Ct. Cl. 205, 210 (1911); Torres v. United States, 126 Ct. Cl. 76, 79, 112 F. Supp. 363, 365 (1953), Oliver-Finnie Co. v. United States, 150 Ct. Cl. 189, 204, 279 F.2d 498, 508 (1960), that profit was not recoverable on the amount of damages in a breach of contract action. 25 Fed. Reg. 648 (1960); Federal Procurement Regulation (F.P.R.) §§ 1-1.004 (17 Mar. 1959), 1-7.602 (26 Jan. 1960), 1-7.602-1 (26 Jan. 1960); ASPR 7-604.3, Rev. No. 12, 1960 ed. (26 Nov. 1962); Merritt-Chapman & Scott Corp. v. United States, 208 Ct. Cl. 639, 647-48, 528 F.2d 1392, 1396 (1976); T.C. Bateson Constr. 60-1 BCA ¶ 2552 at 12,346-49 (quoting E. Manning Seltzer & Albert M. Gross, Fed. Gov't Constr. Contracts: Liability For Delays Caused by the Gov't, 25 Fordham L. Rev. 423, 446 (1956)); Robert B. Clark, Gov't-Caused Delays in the Performance of Federal Contracts: The Impact of the Contract Clauses, 22 Mil. L. Rev. 4, 27-28 & App. B (1963); John Lane, Jr., Admin. Resolution of Gov't Breaches - The Case for an All-Breach Clause, 28 Fed. B.J. 199, 206-07 (1963); see B-127764, 36 Comp. Gen. 302 (1956) (purpose of clause to permit payment through contract modification of those extra costs which could otherwise be recovered by contractor as damages in litigation); Bennett v. United States, 178 Ct. Cl. 61, 69, 371 F.2d 859, 864 (1967); Laburnum Constr. Corp. v. United States, 163 Ct. Cl. 339, 352, 325 F.2d 451, 459 (1963).

During 1960, the Comptroller General advised the Army that GAO had examined the procurement of industrial facilities and special tooling by Chrysler Corporation, Missile Division, Highland Park, Michigan under Department of the Army "Cost-plus-a-fixed-fee contracts...which were awarded in June and November [of] 1956, [and] provided for the furnishing of engineering services and production of Jupiter and Redstone missiles." He stated:

We found that the government incurred unnecessary costs for fixed fees because the Army Ordnance Corps accepted Chrysler's cost proposals, which included estimated costs for industrial facilities improperly classified as special tooling, in negotiating CPFF contracts for engineering services and production of Jupiter and Redstone Missiles. Chrysler was allowed fees under these contracts based on the estimated costs of industrial facilities although the facilities could have been procured under cost-reimbursable, no-fee contract DA-20-018-ORD-13336 which had been awarded to Chrysler in January 1954. The use of a separate no-fee contract is in accordance with the [ASPR] which provides that industrial facilities shall be procured under a facilities contract separate from any related contract for supplies or services and that it may be appropriate to use a cost-type, no fee contract for this purpose.

On July 18, 1960, the Detroit Ordnance District approved revisions to the contracts transferring \$879,093 of industrial facilities acquired under the supply contracts to the facilities contract and reducing the fixed fee allowed Chrysler under the CPFF supply contracts by \$30,000.... The actions taken represent a reasonable adjustment of the excess cost to the government.

1960 U.S. Comp. Gen. LEXIS 2443, B-133304 (Oct. 31, 1960).

In 1961, newly elected President John F. Kennedy appointed Robert McNamara, a Ford Motor Company executive and graduate of Harvard University's Business School, as Secretary of Defense. McNamara thought CPFF contracts, which were commonly used to purchase major weapon systems, encouraged waste because they did not link profit/fee to performance. He reasoned:

A contractor's motivation for good management and tight cost control usually varies in direct proportion to the degree of risk he bears. CPFF contracts, being virtually risk-free, provide no such motivation. In contrast, fixed price or incentive contracts offer strong inducements for managerial efficiency because they impose serious financial penalties on the contractor who exceeds his cost estimates, defaults on his delivery schedule, or who fails to meet the performance specifications.

The President's Budget Director, David Bell, who chaired a task force on contracting for research and development, essentially agreed with McNamara. The "Bell Report" issued by the task force in April 1962 cited the "profit motive" as generally the most effective means to obtain successful contract performance, dismissed any notion the government supply hardware or services available generally, and recommended greater use of firm-fixed-price (FFP) contracts and contracts including incentive provisions. About one month before issuance of the Bell Report, DoD (which participated in the taskforce) amended ASPR to encourage the use of incentive contracts, limit the use of CPFF contracts to situations involving considerable uncertainty where incentive type contracts would be impractical, and establish the use of FFP or fixed-price incentive (FPI) type contracts as preferable for production and use of cost-plus-incentive-fee (CPIF) type contracts as preferable for research and development. DoD's intent was to encourage more efficient contractor performance and improved cost control through increased profit. ASPR 3.401, 3.402(b), 3.404-2(b), 3.404-4(b), 3.405-1(b), 3.405-4(b), 3.405-5(b) (27 Fed. Reg. 4015-4020 (27 Apr. 1962)); Bureau of the Budget, Report to the President on Government Contracting for Research and Development (Bell Report) (30 Apr. 1962), available at www.dtic.mil/dtic/tr/fulltext/u2/417110.pdf; Managing NASA in the Apollo Era, ch. 4 at 9-10; I.N. Fisher, Improving the Effectiveness of Incentive Contracting 1 (Rand Corp., Santa Monica, CA, July 1968); I.N. Fisher, A Reappraisal of Incentive Contracting Experience 2 (Rand Corp. 1968); Nagle, A History of Gov't Contracting at 494.

DoD amended ASPR Part III during March 1962 to expressly provide:

- (a) General. (1) Profit, generally, is the basic motive of business enterprise. Both the Government and its defense contractors should be concerned with harnessing this motive to work for the truly effective and economical contract performance required in the interest of national defense. To this end, the parties should seek to negotiate and use the contract type best calculated to stimulate outstanding performance. The objective should be to insure that outstandingly effective and economical performance is met by high profits, mediocre performance by mediocre profits, and poor performance by low profits or losses....
- with the negotiation of sound performance goals and standards. This objective is met if the contractor either benefits or loses in relation to achieving or failing to achieve realistic targets. Where award is based on effective price competition, there is reasonable assurance that the contract price represents a realistic pricing standard, including a profit factor which reflects an appropriate return to the contractor for the financial risk assumed in undertaking performance at the competitive price. In the absence of competitive forces, however, the contract type selected should provide for a profit factor that will tie profits to the contractor's efficiency in controlling costs and meeting desired standards of performance, reliability, quality and delivery....
- (b) Preferred contract types. (1) The firm fixed-price contract is the most preferred type because the contractor accepts full cost responsibility, and the relationship between cost control and profit dollars is established at the outset of the contract....

ASPR 3.402, 27 Fed. Reg. 4015–4016 (1962) (emphasis added). DoD also amended ASPR 13.102-3 to provide:

- (a)(1) It is the policy of the Department of Defense that contractors will furnish all industrial facilities required for the performance of Government contracts, except in the limited situations described in subparagraph (2) of this paragraph. Accordingly, the Government shall not include in competitive solicitations an offer to purchase and furnish industrial facilities or to have them acquired for its account. This does not preclude the Government from offering to furnish existing Government-owned industrial facilities.
- (2) Industrial facilities may be provided by the Government only when it its determined that:
- (i) It is not possible to obtain contract performance without Government-owned industrial facilities; or
- (ii) Contractor-furnished industrial facilities would likely result in allocation of costs to the contract in excess of reasonable depreciation costs; or
- (iii) Furnishing of existing Government-owned industrial facilities will most likely result in substantially lower cost to the Government of the items produced, after taking into account transportation costs, maintenance costs, reactivation costs, and any other costs for the furnishing of such facilities and that it is otherwise in the best interest of the Government.

27 Fed. Reg. 8878-8879 (1962).

In September of 1962, a NASA circular announced the agency would favor "procurements that lend themselves to the use of contract incentive provisions." The next year, NASA issued a directive in November ordering use of CPFF contracts be reduced substantially and that incentives be considered for all contracts. *Managing NASA in the Apollo Era*, ch. 4 at 9-10 (citing Circular 242, 1 Sept. 1962, Subject: Use of Incentive Contracts, *reprinted* in House Comm. on Science and Aeronautics, 1964 NASA Authorization at 3009-11, *and* Nov. 1963 Directive at House Comm. on Science and Aeronautics, 1966 NASA Authorization, 89th Cong. 1st sess. 387 (1965).

During 1962, NASA and the Navy both began experimenting with use of a new type of "incentive" contract, a cost-reimbursement type contract having a variable fee based on criteria where purely objective calculations were not possible so subjective judgments were made by high-level, government personnel on the basis of after-the-fact evaluations of the contractor's performance. This type of contract became known as a cost-plus-award-fee or CPAF contract. NASA, which did not consider itself bound by the types of contracts set forth in the ASPR, negotiated such a contract for operation,

maintenance, and engineering services for the Mercury Manned Space Flight Network. The Navy, which had to abide by the ASPR, obtained a "deviation" under ASPR 3-407.2 permitting use of this type of contract on a "test basis" not to exceed five contracts. The limitation on number of test contracts later was removed by the ASPR Committee and authorization to test this type of contract extended to both the Army and Air Force. NASA, Cost Plus Award Fee Contracting Guide at 1-2, 5-6 (GPO 1967), available at ntrs.nasa.gov/archive/nasa/casi...nasa.../19720064039_1972064039; see B-160221 (Comp. Gen. Feb. 28, 1967), available at www.gao.gov/products/431423.

In August 1963, because restriction of contractor profit administratively to sums less than allowed by statute was deemed inconsistent with offering incentives to industry, DoD revised ASPR 3-405.5 to eliminate the regulation's limits establishing a ceiling on fee for cost-reimbursement contracts less than statutorily allowed. The revised ASPR simply set forth the statutory limits of 10 U.S.C. 2306(d). ASPR 3-405.5(c)(2) (Rev. 2, 1963 ed.).

During February of 1965, DoD significantly revised ASPR Part 13. Compare 30 Fed. Reg. 1744–1749 with 32 C.F.R. §§ 13.000 – 13.506 (1955). The revision provided it was DoD policy that contractors furnish all facilities, except the Government may provide facilities when necessary to obtain contract performance or the furnishing of existing Government-owned facilities was likely to result in a substantially lower cost to the Government of items produced. ASPR 13.301(a), (b), 30 Fed. Reg. 1746 (9 Feb. 1965). With respect to use of facilities contracts, ASPR 13.303 stated:

- (a) Except as provided in paragraph (b) of this section, facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract.
- (b) Facilities may be provided to a contractor under a contract other than a facilities contract when:
- (1) The cumulative total acquisition cost (actual or estimated) of the facilities provided to the contractor at one plant or general location does not exceed \$50,000;
 - (2) The contract is for construction;
- (3) The contract is for the performance of work within an establishment or installation operated by the Government; or
- (4) The contract is for the performance of services involving the operation of a Government-owned plant or installation and the facilities provided are to be used only in connection with such contract, which shall to the extent practicable, contain the clauses in Subpart G, Part 7 of this chapter.

When facilities are provided under a contract other than a facilities contract, the contract shall contain the appropriate Government Property clause, except where, pursuant to subparagraph (4) of this paragraph, adequate contractual coverage is obtained through the use of clauses set forth in Subpart G, Part 7 of this chapter.

- (c) Unless the [CO] determines it to be impracticable, all facilities provided by a procuring agency for use by a contractor at any one plant or general location shall be governed by a single facilities contract.
- (d) Special tooling and special test equipment will normally be provided to a contractor under a supply contract, but may be provided under a facilities contract when to do so is administratively desirable. [Emphasis added]

30 Fed. Reg. 1746 (1965). Most importantly for purposes of these appeals, a new ASPR 13.104 entitled "Profits and fees" expressly stated:

No fee is to be provided or allowed a facilities contractor under a facilities contract. Where Government production and research property is provided under facilities contracts, profit or fee (plus or minus) shall be considered in the negotiation of the related separate contract or contracts for supplies or services, consistent with the profit guidelines established in § 3.808 of this chapter. [Emphasis added]

ASPR 13.104, 30 Fed. Reg. 1746. Since 1960, ASPR 3.808 (Profit or fee) provided in relevant part:

§ 3.808-1 **General**.

A fair and reasonable provision for profit or fee cannot be made by simply applying a certain predetermined percentage to the cost estimate or selling price of a product. Rather, the profit or fee should be first established as a dollar amount, after considering the factors set forth in this section. Therefore, where a fee is involved and it is necessary to determine the percentage relationship between the fee and the estimated cost of the contract in order to comply with administrative and statutory limitations on fees for cost-reimbursement type contracts, the percentage shall be determined only after the dollar amount of the fee has been established for negotiation purposes.

§ 3.808-2 Factors for determining fee or profit.

The factors set forth in subparagraphs (a) through (i) below should be considered in determining profit or fee in all contracts, whether for supplies or services; for construction work; or for experimental, developmental, or research work; and whether of the fixed-price type or of the cost-reimbursement type unless otherwise specified in the particular factor....

- (a) Effect of competition. Where competition is adequate and effective and proposals are on a firm fixed-price basis, the [CO] normally need not consider in detail the amount of estimated profit included in a price. . . .
- (b) Degree of risk. (1) The degree of risk assumed by the contractor should influence the amount of profit or fee a contractor is entitled to anticipate....
- (c) Nature of work to be performed. A major consideration in the determination of the amount of profit or fee, particularly in connection with experimental, developmental, or research work, is the difficulty or complexity of the work to be performed and any unusual demands of the contract, such as whether the project involves a new approach....
- (d) Extent of government assistance. The [DoD] encourages its contractors to perform their contracts with the minimum of financial, facilities, or other assistance from the Government. Where extraordinary financial, facilities, or other assistance must be furnished to a contractor by the Government, such extraordinary assistance should have a modifying effect in determining what constitutes a fair and reasonable profit or fee....
- (e) Extent of the contractor's investment. The extent of a contractor's total investment (i.e., both equity and borrowed capital) in the performance of the contract will be taken into consideration in determining the amount of the fee or profit. [Emphasis added]

25 Fed. Reg. 14146 (31 Dec. 1960).

During the mid-1960s, NASA delegated many of its functions with respect to administering contracts, such as property administration, to DoD. At the start of Fiscal

Year 1967, DoD was administering about 1700 NASA contracts totaling \$11.7 billion. *Managing NASA in the Apollo Era*, ch. 4 at 13.

In May of 1968, the ASPR Committee promulgated a "Delay of Work" clause for "supply contracts." Like the clause for fixed-price construction contracts, which had been renumbered as ASPR 7-602.46 (Rev. No. 9, 1963 ed., 29 Jan. 1965), renamed the "Suspension of Work" clause and made mandatory effective 1 February 1968 (32 Fed. Reg. 16268 (1967); *Merritt-Chapman & Scott Corp.*, 528 F.2d at 1397, 208 Ct. Cl. at 649), the clause for supply contracts expressly excluded recovery of "profit." The clause provided:

(a) If the performance of all or any part of the work is delayed or interrupted by an act of the [CO] in the administration of this contract, which act is not expressly or impliedly authorized by this contract, or by his failure to act within the time specified in this contract (or within a reasonable time if no time is specified), an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by such delay or interruption and the contract modified in writing accordingly.... [Emphasis added]

ASPR 7-104.77 (Rev. No. 30, 1963 ed., 1 Sept. 1968); Lane, Admin. Resolution of Gov't Breaches, 28 Fed. B.J. 199.

In 1969, DoD and NASA jointly issued an Incentive Contracting Guide, which stated:

The Guide recognizes that profit is the basic motivating force behind incentives, but realizes that contractors in maximizing profit do not necessarily seek "maximum" profit on every contract even if they could. Those "extracontractual motivators" (e.g., follow-on business, growth, image, etc.) should be considered in structuring the contract. However, DoD and NASA accept the concept that these factors are often beyond the control of the Government and willingly subscribe to the philosophy that to the degree that a contractor can be motivated by profit to produce more efficiently, he is achieving the government's objective. [Emphasis added]

Incentive Contracting Guide at ix (DoD & NASA, Oct. 1969), available at https://acc.dau.mil/CommunityBrowser.aspx?id=189615. The same year, DoD amended ASPR 3.405-5 to include among the "types of contracts" authorized the cost-plus-award-

fee (CPAF) contract. Compare 27 Fed. Reg. 4020 (1962) with 33 Fed. Reg. 19905 (1969). The newly revised ASPR described a CPAF contract as follows:

The CPAF contract is a cost reimbursement type of contract with special fee provisions. It provides a means of applying incentives in contracts which are not susceptible to finite measurements of performance necessary for structuring incentive contracts. The fee established in a CPAF contract consists of two parts: (1) A fixed amount which does not vary with performance, and (2) an award amount, in addition to the fixed amount, sufficient to provide motivation for excellence in contract performance in areas such as quality, timeliness, ingenuity, and cost effectiveness. Award fee may be earned by the contractor in whole or in part. The amount of award fee to be paid is based upon a subjective evaluation by the Government of the quality of the contractor's performance judged in the light of criteria set forth in the contract....

ASPR 3.405-5, 33 Fed. Reg. 19905 (1969). Unchanged, however, was ASPR Part III's listing of a "Facilities Contract" as an example where a no-fee "Cost Contract" might be appropriate. ASPR 3.405-2 (1970).

While DoD amended ASPR Part 13 between 1965 and 1970, the 1965 facilities provisions discussed above were not significantly changed. *E.g.*, 30 Fed. Reg. 12009 (1965), 33 Fed. Reg. 274 and 33 Fed. Reg. 10198 (1968); *compare* 30 Fed. Reg. 1744 with, e.g., 32 C.F.R. Part 13 (1967-1970). In sum, the ASPR continued to provide "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except as specified in the ASPR and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104, 13.303(a) (1971). Similarly, during the same period, the Air Force modified various Procurement Instructions, but Instruction 1013.402-50 continued to require inclusion of clauses in facilities contracts stating "[n]o fee will be payable based on the cost of facilities acquired or fabricated hereunder" and "the costs to be incurred and for which it will be reimbursed under this clause...do not include any allowance for profit or fee." *Compare* 24 Fed. Reg. 7006 (29 Aug. 1959) with ASPR 1013.402-50(a), (b) (1968).

In November of 1969, to promote "economy, efficiency, and effectiveness in the procurement of goods, services and facilities by and for the executive branch," Congress created a Commission on Government Procurement. Three years later, in 1972, the Commission released a report containing 149 recommendations to improve the federal procurement process, including the development of government-wide regulations and profit guidelines. 83 Stat. 269; Recommendations of the Comm'n on Gov't Procurement:

A Final Assessment Appx. I at 77, 79 (GAO 1979); Whelan, Understanding Federal Gov't Contracts ¶ 3-8; Culver, Federal Gov't Procurement at 27-28.

In the mid-1970s, when the nation was subject to double digit inflation and interest rates, the Cost Accounting Standards Board (CASB), which had exclusive authority to make, promulgate, amend, and rescind cost accounting standards (and interpretations thereof) to achieve uniformity and consistency in standards governing cost measurement, assignment, and allocation to government defense contracts, 84 Stat. 796, explored promulgation of a Standard on adjustment of historical depreciation costs for inflation and accounting for investment cost of tangible capital assets. During October 1975, it issued a proposed Standard (CAS 413) to establish criteria for the adjustment of recorded depreciation expense based on historical acquisition cost of an asset in determining contract costs. 45 Fed. Reg. 47517-18. Five months later, the CASB withdrew its proposed standard on adjustment of historical depreciation and issued another proposed Standard (CAS 414) to provide reasonable recognition for the cost of a contractor's investment in facilities. 41 Fed. Reg. 9562. In reviewing comments received in response to proposed Standard 414, the CASB stated:

Performance under negotiated contracts usually requires the use of facilities which represent significant contractor investments. Accounting principles applicable to financial reporting do not provide for any explicit recognition of the cost of capital committed to facilities. The Board has long been interested in identifying, as a contract cost, a part of the contractor's total cost of capital. The Board distributed three research papers dealing with the cost of capital in connection with negotiated contracts.... The responses received to all three of those...were useful in the development of the [Standard] proposal published by the Board....

A. GENERAL COMMENTS

(1) Impact on Contract Prices. Commentators who represented contractors and the accounting profession tended to favor the proposal, while those who represented some Government agencies were opposed. Government representatives were joined by some other commentators who expressed the belief that the cost of money as an element of the cost of capital committed to facilities should remain, explicit or otherwise, a consideration in determining contract profit compensation, rather than be treated as an element of cost. The Board's early research into the broad

question of measurement of the costs related to capital commitment included a number of inquiries about the propriety of a change in the basic concepts of contract cost to include this element.

The cost to be measured, even though imputed, is real and is relevant for contract costing. The Board is persuaded that there has not been adequate agreement on techniques for measuring it. A Cost Accounting Standard is, therefore, appropriate.

(2) Exclusion of Working Capital. As the Board pointed out in its publication on March 5, 1976, its staff has investigated the problems related to measurement of the costs related to investments in operating, or working, capital. Most commentators, while generally favoring the Board's proposal as to the cost of facilities capital, urged that the final promulgation include explicit cost recognition, based on the contractor's investment in working capital. The Board is not prepared at this time to make determinations on all the issues related to working capital. The economic impact of contractor investment in facilities is, by itself, important enough to warrant recognition as a contract cost without delay.... [Bold emphasis added]

41 Fed. Reg. 22241 – 22243. The CASB added that Standard 414 will reflect specific identifiable cost of money as an element of the cost of facilities capital in individual negotiated contracts but "need have no impact in the aggregate prices paid by the Government" because previously those costs "presumably were reflected in non-identifiable amounts in the profits or fees included in the total contract prices." 41 Fed. Reg. 22243. The CASB explained that: it understands "procurement agencies expect to take this Standard into account" in reconsidering their pricing policies; the "Nation's mobilization base depends on its facilities"; those facilities "may be more effectively modernized because of the explicit cost recognition provided by this Standard, which will help to eliminate the existing disincentives" hampering contractor investment; and, to the extent "the Standard results in investment in cost-reducing equipment, [agencies]...will be able to procure goods and services at lower prices." 41 Fed. Reg. 22244; see, generally, Karen L. Manos, 2 Government Contract Costs & Pricing 1-6 (CAS 414, Cost of Money As an Element of The Cost of Facilities Capital).

From 1970 through 1977, ASPR continued to state "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except

as specified in the ASPR and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104, 13.303(a) (1976).

During the 1970s, discontent grew with the voluminous, multi-volume ASPR and the existence of a second, different set of rules for agencies other than DoD. In 1978, DoD "redesignated" the ASPR as the Defense Acquisition Regulation (DAR) and stated that, where feasible, the DAR system will "achieve uniform policies with the Federal Procurement Regulation" applicable to other agencies. While some believed this was an attempt by DOD to maintain separate and independent regulatory authority, the next year, Congress directed the Administrator of the Office of Federal Procurement Policy to "develop...a uniform procurement system which shall, to the extent he considers appropriate and with due regard to the program activities of the...agencies, include uniform policies, regulations, procedures and forms." Beryl A. Harman, From the Constitution to FAStA – Origins of Acquisition Reform, Program Manager at 14 (1995), available at http://www.dau.mil/pubscats/PubsCats/PM/articles95/harman.pdf; DoD Directive No. 5000.35 (8 Mar. 1978); Lincoln Servs., Ltd. v. United States, 230 Ct. Cl. 416, 425 n.11, 678 F.2d 157, 162 n.11 (1982); Office of Federal Procurement Policy Act Amendments of 1979, 98 Stat. 649; Culver, Federal Gov't Procurement at 30.

From 1978 through 1983, the DAR provided "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except as specified in the DAR and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." DAR 13.104, 13.303(a) (1983).

During 1983, DoD, NASA, and the General Services Administration created a new Federal Acquisition Regulation (FAR), effective 1 April 1984, in Title 48 of the Code of Federal Regulations to replace the DAR and FPR, satisfying the 1972 goal of the Commission on Government Procurement of one regulation governing the procurement practices of all federal agencies. 48 Fed. Reg. 42102 (1983); Hercules, Inc. v. United States, 292 F.3d 1378, 1383 n.1 (Fed. Cir. 2002); FMC Corp. v. United States, 853 F.2d 882, 884 n.2 (Fed. Cir. 1988); Culver, Federal Gov't Procurement at 32.

Part 15, "Contracting by Negotiation," of the new FAR essentially reiterated prior ASPR and DAR policy regarding "profit." FAR 15.901 (1984) stated:

(b) It is in the Government's interest to offer contractors opportunities for financial rewards sufficient to (1) stimulate efficient contract performance, (2) attract the best capabilities of qualified large and small business concerns to Government contracts, and (3) maintain a viable industrial base.

(c) Both the Government and contractors should be concerned with profit as a motivator of efficient and effective contract performance. Negotiations aimed merely at reducing prices by reducing profit, without proper recognition of the function of profit, are not in the Government's interest. Negotiation of extremely low profits, use of historical averages, or automatic application of predetermined percentages to total estimated costs do not provide proper motivation for optimum contract performance. With the exception of [the] statutory ceilings in 15.903(d) on profit and fee, agencies shall not (1) establish administrative ceilings or (2) create administrative procedures that could be represented to contractors as de facto ceilings.

Compare FAR 15.901 (1984), 48 Fed. Reg. 42102 (emphasis added), with, e.g., ASPR 3.402, 27 Fed. Reg. 4015–4016 (1962). FAR 15.903 (similar to ASPR and DAR 3-210.3) specified that a CO shall not negotiate a price or fee that exceeds the statutory limitation of 10% of estimated cost (excluding fee) on CPFF, CPIF, and CPAF contracts. FAR 15.903(d) (1984), 48 Fed. Reg. 42102. FAR 15.903 further provided:

Contracting officers shall use the Government prenegotiation cost objective amounts as the basis for calculating the profit or fee prenegotiation objective. Before the allowability of facilities capital cost of money, this cost was included in profits or fees. Therefore, before applying profit or fee factors, the contracting officer shall exclude any facilities capital cost of money included in the cost objective amounts. If the prospective contractor fails to identify or propose facilities capital cost of money in a proposal for a contract that will be subject to the cost principles for contracts with commercial organizations...,facilities capital cost of money will not be an allowable cost in any resulting contract.... [Emphasis added]

FAR 15.903(c) (1984), 48 Fed. Reg. 42102.

With respect to "cost contracts," the newly promulgated FAR, similar to ASPR 3.404-1 (Rev. No. 4, 1955 ed.), ASPR 3.405-2 (1970), and DAR 13.303(a) (1983) stated:

(a) Description. A cost contract is a costreimbursement contract in which the contractor receives no fee. (b) Application. A cost contract may be appropriate for research and development work, particularly with nonprofit educational institutions or other nonprofit organizations, and for facilities contracts. [Emphasis added]

FAR 16.302 (1984), 48 Fed. Reg. 42102. In addition, similar to ASPR 3.405-5, 33 Fed. Reg. 19905 (1969), the FAR specified a CPAF contract was:

[A] cost-reimbursement contract that provides for a fee consisting of (1) a base amount fixed at inception of the contract and (2) an award amount, that the contractor may earn in whole or in part during performance and that is sufficient to provide motivation for excellence in such areas as quality, timeliness, technical ingenuity, and cost-effective management. The amount of the award fee to be paid is determined by the Government's judgmental evaluation of the contractor's performance in terms of the criteria stated in the contract. This determination is made unilaterally by the Government and is not subject to the Disputes clause.

FAR 16.404-2 (1984), 48 Fed. Reg. 42102.

With respect to the provision of facilities to contractors, Part 45 of the FAR (Government Property) expressly stated that facilities could be furnished for use in a government-owned, contractor operated plant, such as the Kennedy Space Center. FAR 45.302-1 (1984), 48 Fed. Reg. 42102, specified:

- (a) Contractors shall furnish all facilities required for performing Government contracts except as provided in this subsection.... Agencies shall not furnish facilities to contractors for any purpose, including restoration, replacement, or modernization, except as follows:
- (1) For use in a Government-owned, contractor-operated plant operated on a cost-plus-fee basis.
 - (2) For support of industrial preparedness programs.
- (3) As components of special tooling or special test equipment acquired or fabricated at Government expense.

- (4) When, as a result of the prospective contractor's written statement asserting inability or unwillingness to obtain facilities, the agency...determines that the contract cannot be fulfilled by any other practical means or that it is in the public interest to provide the facilities....
- (5) As otherwise authorized by law or regulation. [Emphasis added]

Similar to ASPR and DAR 13.104 and 13.303, the FAR specified facilities be furnished by the government to a contractor only under a facilities contract, except as otherwise provided in the FAR, and that "no fee" shall be allowed under a facilities contract. FAR 45.302-2 (1984), 48 Fed. Reg. 42102, expressly stated:

- (a) Facilities shall be provided to a contractor or subcontractor only under a facilities contract using the appropriate clauses required by 45.302-6, except as provided in 45.302-3.
- (b) All facilities provided by a contracting activity for use by a contractor at any one plant or general location shall be governed by a single facilities contract, unless the contracting officer determines this to be impractical. Each agency should consolidate, to the maximum practical extent, its facility contracts covering specific contractor locations.
- (c) No fee shall be allowed under a facilities contract. Profit or fee (plus or minus) shall be considered in awarding any related supply or service contract, consistent with the profit guidelines of Subpart 15.9. [Emphasis added]

FAR 45.302-3 (1984) (similar to ASPR and DAR 13.303) stated further that:

- (a) Facilities may be provided to a contractor under a contract other than a facilities contract when —
- (1) The actual or estimated cumulative acquisition cost of the facilities provided by the contracting activity to the contractor at one plant or general location does not exceed \$100,000;
 - (2) The contract is for construction;

- (3) The contract is for services and the facilities are to be used in connection with the operation of a Government-owned plant or installation; or
- (4) The contract is for work within an establishment or installation operated by the Government.
- (b) When a facilities contract is not used, the Government's interest shall normally be protected by using the appropriate Government property clause or, in the case of (a)(3) above, by appropriate portions of the facilities clauses. [Emphasis added]

48 Fed. Reg. 42102.

Unlike the ASPR and DAR, the FAR contained a definition of "Facilities contract" providing:

"Facilities contract," as used in this subpart, means a contract under which Government facilities are provided to a contractor or subcontractor by the Government for use in connection with performing one or more related contracts for supplies or services. It is used occasionally to provide special tooling or special test equipment. Facilities contracts may take any of the following forms:

- (a) A facilities acquisition contract providing for the acquisition, construction, and installation of facilities.
- (b) A facilities use contract providing for the use, maintenance, accountability, and disposition of facilities.
- (c) A consolidated facilities contract, which is a combination of a facilities acquisition and a facilities use contract. [Emphasis added]

FAR 45.301 (1984), 48 Fed. Reg. 42102. The definition set forth conformed to prior DoD practice with respect to facilities contracts.

While the FAR replaced the DAR, FPR, and procurement regulations of other agencies having statutory authority to issue such regulations, it allowed agencies to issue their own "FAR supplements" for unique or special circumstances peculiar to a particular

agency. DoD promptly established a Defense FAR Supplement (DFARS) and other agencies (including NASA) followed suit, setting up their own supplemental regulations. See, e.g., Culver, Federal Gov't Procurement, Contract Mgmt. at 32-33, available at http://www.gsacncma.com/files/US-FP-Hist.pdf at 32-33; Harman, From the Constitution to FAStA, Program Manager at 14, available at http://www.dau.mil/pubscats/PubsCats/PM/articles95/harman.pdf. General policy regarding profit and fees was set forth in DFARS 215.404-4, which required a structured approach for developing a "pre-negotiation profit or fee objective" for negotiated contracts requiring cost analysis. DFARS 215.404-4(b)(1). DoD adopted a "weighted guidelines method" as its principal approach to evaluating profit under the structured approach, but provided an exception for cost-plus-award-fee contracts, whose guidelines were set forth in DFARS 215.404-74. NASA's policy in determining profit objectives was to use a structured approach similar to DoD's. Worthington & Goldstein, Contracting with the Federal Gov't at 88-89.

In January 1979, DoD's Cost Accounting Standards (CAS) Steering Group, which was established in 1976 to develop and disseminate policy and guidance for integration of the CAS Board rules into DoD procurement practices (and for contracts with CAS requirements entered into by NASA) issued Working Group (W.G.) Paper No. 79-24 concerning the allocation of Business Unit G&A expense to facilities contracts. W.G. Paper No. 79-24, which appears in 1 Cost Accounting Standards Guide ¶ 5900.24 (CCH 2001) and remains in effect, provided in pertinent part:

Contractors' normal operations consist of the production of goods and services, such as aircraft or weapons systems. Contractors may, however, also receive Government facilities contracts which require the acquisition of significant amounts of facilities. These purchases are made at the direction of the Government, and no profit is granted to the contractor for making the acquisitions.

Facilities acquisition contracts normally do not require the same level of contractor risk and associated management attention as contracts which provide for the delivery of regular goods and services. As a result, a full allocation of a contactor's management or G&A expense to such contracts would generally not be equitable. An exception to this would be the rare circumstance when the preponderance of the contractor's activity is acquiring facilities as a service for the Government.

Government-funded facilities, when needed by a contractor to meet production contract requirements, are usually provided under a single facilities contract. However, in some instances contractors are awarded two or more concurrent contracts for the acquisition of facilities. The

dollar magnitude of facilities acquisition under these contracts may be substantial when compared with contractors' normal business activities. However, because these acquisitions are generally not part of the normal business activity, this dollar magnitude is probably not a valid indicator of the proportion of G&A expense related to the facilities contracts.

In the case of consolidated facilities contracts (i.e., those contracts which provide for both facilities acquisition and facilities maintenance), a special allocation of G&A expense would be applied to the acquisition portion of the contracts.... [Emphasis added]

1 Cost Accounting Standards Guide ¶ 5900 (CCH 2001); Trueger, Accounting Guide at 626-27 (1960).

During March of 1986, GAO testified before Congress regarding its review of DoD's implementation of policies relating to the manner in which contractors acquire, use, retain, dispose, and account for government-furnished equipment (GFE). GAO stated that, as of 30 September 1984, the government owned more than \$8.4 billion worth of equipment in the possession of contractors, DoD initiated a program in 1981 to give contractors incentives to improve their productivity through increased capital investments (including multiyear procurement and program stability), implementation provisions for the program, however, did not provide procurement officials "with sufficient guidance to assist them in making a decision on when equipment should be government or contractor financed," and the inadequate FAR instructions were among "factors impeding DoD's policy implementation" regarding GFE, "especially for service contractors." GAO explained:

The Air Force and Navy have made provisions to require the acquisition of new plant equipment at GOCO plants under facilities contracts, which allow the government to reimburse the contractor for only the actual cost of the equipment, with no add-ons for profit or fees. However, we found that some local Air Force officials ignored the requirement and permitted contractors to acquire new plant equipment under supply and production contracts, which allow contractors to add profits or fees to the purchase price. For example, one Air Force contractor recently acquired from commercial services 24 general purpose vehicles – like pickup trucks, vans, jeeps, and lift trucks – valued at \$630,000 under the B-1B production contract and added a 14-percent profit, or about \$88,000, to that total. Air Force

contract management division officials provided us with documentation showing that such practice is widespread.

There is no guidance for the several hundred contractors performing service work either at military installations or at contractor-owned facilities. While FAR provisions can be applied to service contractors, DOD and service directives implementing FAR are silent on this topic. As a result, equipment-purchase decisions are left to the judgment of program managers and local procurement officials.

Normal procurement practices include making certain that purchases of general purpose [industrial plant equipment] and [other plant equipment] under facilities rather than production contracts, screening existing government stocks, using GSA supply schedules where possible, and making lease-versus-purchase determinations. However, we found that contractors were not always following these practices, and the purchases did not receive adequate government review. As a result, extra costs were incurred.... For example,

-- One Air Force contractor who builds the F-16 fighter aircraft acquired, with the concurrence of the program manager, over \$7 million worth of automated data processing equipment (ADPE) between 1981 and 1985 under production contracts, which allow such addons as profits and general and administrative expenses, rather than facilities contracts, which do not permit add-ons. According to existing acquisition regulations, such equipment is to be purchased under facilities contracts....

We also found one contractor who, at the Air Force's direction, purchased \$61 million worth of equipment during a

3-year period, including pens, television sets, and major computer systems needed to equip and maintain Air Force laboratory and testing facilities. The purchases were made through service contracts which permitted the contractor to add such charges as profit and material-handling to the acquisition costs. For three service contracts, where equipment purchases totaled over \$16 million, we estimate an additional \$1.3 million was added for materials-handling and profit.

GAO, The DoD has Not Minimized the Amount of Equipment it Provides to Contractors at 1, 5, 11, 17, 23, 24, 28, 30-31 (20 Mar. 1986), available at http://gao. justia.com/department-of-defense/1986/3/. GAO concluded:

In summary, DOD and the services have made little progress since 1971 in implementing overall government policies which call for minimizing the amount of equipment the government furnishes to contractors. Major factors impeding progress, in our opinion, include:

-- vagueness of FAR provisions, which have allowed government officials to permit contractors to acquire new, general purpose equipment....

We believe that greater progress to implement government GFE policies could be made if:

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- -- Defense established firm equipment-acquisition guidelines for service contractors;
- -- Defense better enforced the existing FAR on equipment acquisitions, use and retention, and timely disposition....

Id. at 39-40.

Eight months later, in November 1986, Under Secretary of Defense for Acquisition Richard Godwin issued to the Secretaries of the Military Departments and directors of Defense Agencies a memorandum addressing problems that "would not exist if current DoD policies relating to the acquisition, management, control and disposal of government property were being followed." With respect to the provision of property to service contractors, the Under Secretary stated:

Service contracts have accounted for a high percentage in the growth of government-owned property in the possession of contractors. A portion of this growth appears to be due to the growth of A-76 programs. Service-type contracts range from commercial type activities (A-76) at military installations to service contractors operating GOCO plants to produce defense products.

The basic policy that government property will normally not be provided applies in this case as well as others. However, certain exceptions such as commercial activities use of existing property...need further clarification....

He added with respect to "unallowable profit/fee" that:

The GAO and DoDIG have found examples where contractors have received a profit when acquiring equipment for the government's account. Industrial facilities are normally to be provided on a cost reimbursable no-fee facilities contract. The FAR policy of providing facilities on a no-fee facilities contract must be followed by DoD components.

The Under Secretary directed that "[a]ctions that need to be taken range from...placing more discipline into the implementation of existing policies, to revising the [FAR]." Office of the Inspector General, DoD Audit Report No. 87-140, Appx. D at 1, 3, 5, 7 of 7 (6 May 1987).

Six months after the Under Secretary's memorandum, in May of 1987, DoD's Office of the Inspector General (OIG) issued a final report, No. 87-140, on "The Audit of Fees Charged for the Acquisition of Government-Owned Contractor-Operated Facilities." The OIG performed its audit from September 1985 to April 1986 to ascertain whether contractors operating government-owned facilities were receiving unauthorized fees when acquiring facilities under DoD contracts. While the OIG found no instances where fees were awarded when a facilities contract was used, it determined that "contracting officials inappropriately awarded fees totaling \$2.8 million to [DoD] contractors at 18 of 33 government-owned contractor-operated plants for facilities acquired on other than facilities contracts" and projected that at all 33 Government-owned contractor-operated plants contractors received fees amounting to \$7.2 million for

facilities acquired under other than facilities-type contracts during fiscal years 1983 through 1985. OIG stated, "when facilities are acquired under supply, service or production type contracts," no fee or profit should "be awarded on the facilities portion of the contract." OIG explained:

Under certain exceptions, the regulation[, FAR Part 45,] allows for facilities to be provided to a contractor under other than a facilities contract.... However, the regulation does not discuss the issue of awarding fees when other than facilities contracts are used to acquire facilities. Officials from the Office of the Under Secretary of Defense for Acquisition believe the intent of the regulation is to award fees based on supplies produced or services rendered, and not on the acquisition of facilities used in providing those supplies or services. The rationale for this position is that although the Government reimburses the contractor for all costs associated with acquiring facilities items, the Government will not provide the contractor profit on facilities costs since the contractor assumes no risk in acquiring these items. In a memorandum dated November 25, 1986,...the Under Secretary...affirmed that the intent of DOD policy is to have facilities provided on a no-fee basis. [Emphasis added

The OIG recommended that the Under Secretary request the Defense Acquisition Regulations Council (DARC) modify the FAR or the DFARS to expressly prohibit the payment of fee or profit on that portion of any contract, regardless of type, under which facilities are acquired. Office of the Inspector General, DoD Audit Report No. 87-140 at 1, 3, 7, and Audit Report Transmittal Memorandum at 1 (6 May 1987) (emphasis added).

In December 1990, DoD, NASA, and GSA amended the FAR (via Federal Acquisition Circular (FAC) 90-3) by adding the following paragraph to FAR 45.302-3:

(c) No profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract.

FAC 90-3, Item 35 stated:

The [GAO] and the [DoD] Inspector General studies have found that contractors are being paid fee or profit for facilities acquired for the Government when other than facilities contracts are used. The regulations clearly prohibit

payment of this kind on facilities contracts but do not address this prohibition when other than facilities contracts are used to purchase facilities. The policy is that regardless of the type of contract used, fee or profit will not be paid for facilities purchased for the account of the Government. FAR 45.302-3(c) is added to clarify this policy. [Emphasis added]

55 Fed. Reg. 52782 (1990).

Four years later, on 16 September 1994, the Director of Defense Procurement (Eleanor Spector) published in the Federal Register a notice of public hearings announcing an initiative to rewrite FAR part 45 (Government Property). The stated objectives of the initiative were to streamline and improve policies and procedures, eliminate unnecessary burdens on contractors and COs, and make the guidance easier to read and understand. 59 Fed. Reg. 47583 (1994); Douglas N. Goetz, *The Rewrite of FAR Part 45*, at 31, Contract Mgmt. (July 2006), *available at* http://www.ncmahq.org/files/Articles/5B0D0_CM_July06_FEA5.pdf. In response, DoD received about 500 comments covering a broad range of topics, causing the Director to (1) convene a team from DoD, NASA and four other agencies to assess the comments received, identify overly burdensome government requirements, and simplify the Government property rules, and (2) hold a series of meetings between November 1994 and October 1996 to obtain public participation in the rewrite. 62 Fed. Reg. 30186; *see* 84 Fed. Cont. Rep. (BNA) 263 (Sept. 20, 2005).

Between 1988 and 1997, the use of service contracts as a percentage of DoD prime contracts increased by 16%. GAO, Defense Spending: Trends and Geographical Distribution of Prime Contract Awards and Compensation at 6 (1998), available at http://www.gao.gov/products/NSIAD-98-195.

During June 1997, the Civilian Agency Acquisition Council (CAAC) and DARC published a proposed rewrite of FAR Part 45 and requested comments. The proposed rewrite removed contractor requirements from FAR Part 45 and consolidated them in appropriate contract clauses at FAR 52.245. It also eliminated most "facilities" clauses because "[f]acilities contracts are contracts for services" and "unique FAR coverage is, generally, unnecessary." Proposed FAR Subpart 45.4 addressed the limited circumstances under which "property management contracts might be appropriate" and noted the corresponding contract clause for such contracts would be newly drafted FAR 52.245-6. 62 Fed. Reg. 30186 (1997). After receiving public comments on the proposed revision and holding public meetings in February 1998 and May 1999 regarding the revision, the CAAC and DARC decided to "completely revise and restructure the proposed rule and request additional comments." 65 Fed. Reg. 1438 (2000).

In January of 2000, the CAAC and DARC issued another proposed revised FAR Part 45 which allowed contractors the option of managing government property under a "standard process based system" or the same business practices they use to manage their own property. 65 Fed. Reg. 1438 (2000); see 84 Fed. Cont. Rep. (BNA) 263 (2005); 73 Fed. Cont. Rep. (BNA) 48 (2000). This proposed revision reflected "the general consensus that adoption of more typically commercial business practices" would not only attract more commercial firms to the marketplace but also result in a "significant savings of acquisition dollars." Among the most significant changes proposed were that the terms "facilities contract" (and "facilities") would be replaced with "government-furnished real property" (and "real property" and "property") throughout the FAR. Further, since facilities contracts would be considered "government-furnished real property," various FAR sections and clauses were to be removed, including FAR 31.106 (Facilities Contracts); FAR 52.216-13 (Allowable Cost and Payment – Facilities); FAR 52.216-14 (Allowable Cost and Payment – Facilities Use); FAR 52.232-21 (Limitation of Cost (Facilities)), FAR 52.249-11 (Termination of Work (Consolidated Facilities or Facilities Acquisition)); and FAR 52.249-13 (Failure to Perform). Significant differences between industry and government concerning legalities and complexities of government property management, however, resulted in suspension of the FAR revision project. 65 Fed. Reg. 1438 (2000); 72 Fed. Reg. 27365 (2007).

During September 2005, the CAAC and DARC issued a third proposed revision of FAR Part 45 reflecting a life-cycle, performance-based approach to property management permitting adoption of more typically commercial business practices. The third proposed revision (among other things) deleted 5 subparts of FAR Part 45 (subparts 45.1 through 45.5), replaced them with revised language and titles, eliminated 15 FAR clauses set forth at 52.245, and combined 4 other FAR clauses into one new clause. This proposed rule deleted the provisions on facilities contracts and associated clauses because the "Councils" believe[d] they [we]re outmoded and no longer necessary." The Councils explained they found that "facilities contracts, contracts established solely to account for property with subsequent contracts authorized to use that property, [we]re rarely used," "facilities clauses [we]re being used in service contracts for the operation of GOCO Facilities," and "agencies' property management needs can better, and more appropriately, be met through tailoring the statement of work in these service contracts to the agency's specific needs and incorporating the new property clause at FAR 52.245-1." The Councils added that "much of the FAR language related to property management is well over fifty years old, and contains inconsistent, often conflicting guidance that is at odds with modern materials management technology such as Enterprise Resource Planning, relational databases, unique item identification, radio frequency tags, bar-coding, and the general trend toward commercialization of components and equipment." 70 Fed. Reg. 54878-79 (2005); 84 Fed. Cont. Rep. (BNA) 263 (Sept. 20, 2005).

The Councils received 287 comments regarding the 2005 proposed revision, including the following:

d. One respondent stated that they currently have a facilities type contract and having that type contract in place saves the Government both time and money. Property on this contract supports over 150 Government tasks across multiple agencies. The elimination of the facilities use type of contracts will have a negative effect on how we currently manage Government property.

Response: The Councils do not agree. A "facilities contract" is merely a form of service contract for property management. Agencies are not prohibited from issuing service contracts for this purpose.

e. One respondent proposed that service contracts have a standard template of terms and conditions for the management of Government property for consistency through the various agencies.

Response: The Councils do not agree. Terms and conditions are negotiated on a contract by contract basis to provide flexibility to both Government and contractor communities rather than prescriptive or proscriptive processes and requirements.

After reviewing the comments received, the Councils made changes to the proposed revision based on some comments and, on 15 May 2007, issued revised FAR Part 45, effective 14 June 2007. 72 Fed. Reg. 27364-65 (2007).

A principal change was the reduction of 19 FAR clauses to 3. Moreover, while FAR Part 45 contained a mix of both government and contractor requirements before the rewrite, revised Part 45 set forth only government requirements. Requirements for contractors were moved to new revised FAR clauses set forth at FAR 52.245 (in accord with the FAR protocol). Where the former version of FAR Part 45 defined the term "facilities," which was subdivided into real property and plant equipment (which was further subdivided by DoD into Industrial Plant Equipment and Other Plant Equipment), the revised Part 45 defined the term "equipment" to include property previously classified as "facilities." Neither the revised FAR Part 45 nor the revised FAR contract clauses contained any language similar to the previously existing FAR 45.302-2 and 45.302-3 precluding contractor recovery of fee or profit on facilities (i.e., equipment) acquired for the government. 72 Fed. Reg., 27364 – 27397; Douglas N. Goetz, *The Final Rule*, 18 Property Professional 15, issue 6 (2007), *available at* http://www.npma.org/Archives/18-6%20Goetz.pdf; Goetz, *The Rewrite of FAR Part 45*, Contract Mgmt. at 31-32 (July

2006); Steven W. Feldman, Government Contract Guidebook, 14.2 & 14.3 (West 4th ed.); 42 No. 8 Gov't Contractor at 69 (23 Feb. 2000).

After publication of the final rule, DoD received feedback on the revision, causing it to form an "Ad Hoc" team from DoD, GSA, and the Defense Contract Management Agency (DCMA) to review comments that had been received from industry, academia and government sources. The team recommendations resulted in establishment of FAR case 2008-011 to address the issues raised. During August 2009, DoD, GSA and NASA proposed various amendments to the FAR regarding government property and its related clauses to "add clarity and correction to the previous FAR rule for Part 45, Government Property." Among the revisions proposed was the addition of the following language to FAR 15.404-4(a)(3): "Unless the contractor acquired property is a deliverable under the contract, no profit or fee shall be permitted on the cost of the property." 74 Fed. Reg. 39262-63 (2009) (emphasis added).

In response to the amendments proposed, 106 comments were received, some necessitating further changes. With respect to the comments, the Councils stated, in part, as follows:

20. Profit and Fee

There is a revision to the proposed rule based on this comment category. The proposed language in FAR 15.404-4(a)(3) is relocated to FAR 15.404-4(c)(3). Nine comments were received from eight respondents regarding profit and fee.

One respondent suggests removal of the proposed language in 15.404-4(a)(3) and inclusion of new language in 15.404-4(c)(3) that "instructs [COs] to exclude the costs of contractor-acquired property from pre-negotiation cost objectives when calculating the Government's pre-negotiation profit or fee objective, unless the contractor acquired property is a deliverable under the contract." The Councils partially agree with this recommendation and the language is revised accordingly.

One respondent requests clarification of the language added in 15.404-4. The Councils agree with this recommendation.

One respondent suggests that requirement of the language added to 15.404-4(a)(3) will be burdensome and require auditing to ensure zero profit; instead of this method the respondent suggest that the contracting officer take the value of the contractor acquired property in consideration

when negotiating profits. The Councils partially agree with this suggestion. The Councils disagree with the assertion that the requirement is burdensome. The language has been modified to clarify its use and limit its applicability to equipment as defined in FAR 45.101.

One respondent suggests changing the weighted guidelines to address the value of contractor acquired property. The Councils disagree with this suggestion; however, the revised language provides direction to the [CO] as to how equipment should be treated within the current guidelines.

Four respondents suggest removal of the language added in 15.404-4(a)(3). The Councils disagree with these suggestions.

One respondent believes there is no basis to eliminate profit on any allowable element of the contract cost, especially property that is required in the performance of a Government contract but not incorporated into the end item deliverable or listed as a deliverable. The Councils disagree with this suggestion. The language is revised to assure that it applies only to equipment as defined in FAR 45.101.

The language has been revised and moved to 15.404-4(c)(3). The revision does not change, expand or constrict existing contracting policy. Rather the purpose of the revised language is to clarify policy, and ensure its awareness within the acquisition community.

Prior to the publication of FAR Case 2004-025, June 2007, FAR 45.302-2(c) and FAR 45.302-3(c) contained language intended to prevent contractors from acquiring facilities and treating the facilities in the same manner as a contract line item deliverable with associated profit or fee. FAR Case 2004-025 deleted this language. The requirements of this language were added to the proposed rule in FAR 15.404-4 because the policy still applies.

While the application of this policy tended to be obfuscated by the term "facilities," the underlying principle was clear — that when the contractor buys equipment or acquires real property on a "pass through" basis, i.e., when not part of a deliverable, it is the Government — not the contractor — who assumes the risk. Moreover, it is generally held that upon contract award, contractors are required to furnish all property necessary

to perform Government contracts (FAR Part 45.102) as well as all the necessary resources needed for contract performance (FAR 9.104-1(f), General Standards).

Accordingly, it is not appropriate for the Government to include the cost of contractor acquired property (equipment) when calculating the Government's pre-negotiation profit or fee objective. Including such costs would unduly compensate the contractor for obtaining equipment it should already have; and for risks it did not incur. This is a long held view; however, up until the publication of the proposed rule FAR Case 2008-011, it had not been adequately addressed in the FAR. [Emphasis added]

75 Fed. Reg. 38678. DoD, GSA and NASA therefore amended FAR 15.404-4 (effective 2 August 2010) to add the following sentence to (c)(3):

Before applying profit or fee factors, the [CO] shall exclude from the pre-negotiation cost objective amounts the purchase cost of contractor-acquired property that is categorized as equipment, as defined in FAR 45.101, and where such equipment is to be charged directly to the contract.

75 Fed. Reg. 38679 (2010).

Between 1990 and 2011, there were over 300 million DoD service contract actions. Spending on services across various DoD components grew at a rapid pace after 9/11, driven primarily by operations in Afghanistan and Iraq. In 2011, DoD spending on service contract actions totaled \$198 billion, accounting for slightly under 30 percent of total DoD outlays and 56 percent of total DoD contract spending for the year (up from 50% the year before and 48% in 2000). David Berteau, et al., U.S. Dep't of Defense Services Contract Spending and the Supporting Indus. Base, 2000-2011, 4-6, Center for Strategic International Studies (2012).

DECISION

The issue presented in these appeals is whether FAR 45.302-3(c) prohibits SGS's receipt of "profit" or "award fee" on equipment SGS acquired for NASA's account and utilized to perform production, maintenance, research, development and/or testing work under its CPAF services contract with NASA to supply, among other things, support for launch operations at Kennedy Spaceport. NASA contends that it does. SGS contends it does not.

I. Jurisdiction

In accordance with FAR 16-405(e)(3), SGS's CPAF services contract with NASA contained an award fee clause (NASA FAR 1852.216-76) which "expressly excludes from the operation of the Disputes clause any disagreement by the contractor concerning the amount of the award fee." While these appeals constitute a "disagreement" relating to "award fee," neither party contends that we lack jurisdiction to entertain the appeals. Because the parties, however, cannot confer subject matter jurisdiction on the Board by consent, we must independently satisfy ourselves of our jurisdiction to entertain these appeals. *Ins. Corp. of Ireland, Ltd. v. Compagnie des Bauxites de Guinee*, 456 U.S. 694, 701 (1982); *Diggs v. HUD*, 670 F.3d 1353, 1355 (Fed. Cir. 2011).

In Burnside-Ott Aviation Training Ctr. v. Dalton, 107 F.3d 854 (Fed. Cir. 1997), in construing an award fee clause similar to that set forth in NASA's contract with SGS, the court of appeals held that the Contract Disputes Act of 1978 (CDA), 41 U.S.C. §§ 7101-7109, grant of subject matter jurisdiction to this Board "trumps a contract provision" purporting to divest the Board of jurisdiction "unless the contract provision...is itself a matter of statute primacy" and the award fee clause is not such a provision. Burnside-Ott Aviation, 107 F.3d at 859; accord Colonna's Shipyard, Inc., ASBCA No. 56940, 10-2 BCA ¶ 34,494 at 170,139; compare Emerald Maintenance, Inc. v. United States, 925 F.2d 1425 (Fed. Cir. 1991). Accordingly, the contract's award fee clause here clearly does not divest us of jurisdiction under the CDA and we may entertain these appeals.

II. Applicability of FAR 45.302-3

SGS asserts NASA's reliance on FAR 45.302-3(c) as a bar to payment of fee (profit) on the cost of equipment SGS purchased for NASA under the J-BOSC is misplaced. According to SGS, FAR 45.302-3 applies only to "facilities." While SGS does not dispute that NASA furnished it "property used for production, maintenance, research, development, or testing," the regulatory definition of "facilities," FAR 45.301, it contends that "facilities" cannot be at issue here because NASA did not: (A) comply with the requirements for providing "facilities" to contractors; (B) specifically identify "facilities" furnished anywhere in the parties' contract; and (C) include in the parties' contract "facilities" clauses required by the FAR.

A. Requirements for Furnishing Facilities

SGS contends that the items at issue here cannot be "facilities" because NASA did not comply with FAR requirements for furnishing "facilities" to contractors. SGS asserts that FAR 45.302-1 expressly prohibits agencies from furnishing "facilities" to contractors except in four circumstances: (1) for use in a GOCO plant operated on a cost-plus-fee basis; (2) for the support of industrial preparedness programs; (3) for use as components

of special tooling or test equipment acquired or fabricated at government expense; or (4) in response to a prospective contractor's written statement of inability to obtain the facilities (app. br. at 12).

FAR 45.302 (Providing Facilities) states in FAR 45.302-1(a) that government policy is "Contractors shall furnish all facilities required for performing Government contracts except as provided in this subsection." It further states agencies shall not furnish facilities to contractors for any purpose, except under specified circumstances. FAR 45.302-1(a). While SGS is correct that the four circumstances set forth above are among the circumstances expressly set forth in FAR 45.302-1(a), SGS fails to note that there is a fifth circumstance expressly set forth whereby agencies may furnish facilities to contractors – when "otherwise authorized by law or regulation." FAR 45.302-1(a)(5). Another regulation, FAR 45.302-3, expressly provides:

- (a) Facilities may be provided to a contractor under a contract other than a facilities contract when -
- (5) The contract is for services and the facilities are to be used in connection with the operation of a Government-owned plant or installation; or
- (6) The contract is for work within an establishment or installation operated by the Government.

SGS's contract was for "services" (operation support services, such as logistics support for launches) and the "facilities were to be used in connection with the operation of a Government-owned installation," the Kennedy Space Center. In addition, SGS's contract was "for work within an establishment or installation operated by the Government," the Kennedy Spaceport. NASA's furnishing of facilities to SGS therefore was "otherwise authorized by law or regulation," i.e., FAR 45.302-3(a)(3), (4). Accordingly, SGS's contention – that FAR 45.302-3(c) does not apply here because NASA did not "comply" with FAR provisions under which "facilities" can be furnished contractors – is without merit. FAR 45.302-1(a)(5).

B. Requirements For Identification of Facilities

SGS also contends the items at issue here cannot be "facilities" because NASA did not comply with FAR requirements for identifying "facilities" in contracts. SGS asserts that FAR 45.301 defines "facilities" as "property used for production, maintenance, research, development, or testing" when that term is "used in th[at] subpart and when used in other than a facilities contract" and the definition cannot apply here "unless the

contract specifies that particular Government property is 'facilities.'" (App. supp. br. at 1-2)

SGS is correct that, for purposes of the FAR subpart and contracts other than "facilities contracts," FAR 45.301 expressly defines "facilities" as "property used for production, maintenance, research, development, or testing," which "includes plant equipment and real property." FAR 45.301, however, contains no requirement that contracts (other than facilities contracts) specifically identify particular government property constituting "facilities." The term "facilities" has been used in government contracting to refer to government owned plant equipment and structures furnished contractors for work under supply or service contracts for over 90 years. E.g., Shaffer v. United States, 128 Ct. Cl. at 338-339, available at 1954 U.S. Ct. Cl. LEXIS 74-75; ASPR § 412.102-3 (1951); Dep't of the Navy, Navy Contract Law at 10 (1949); Dep't of the Navy, Navy Procurement Directives § 6011 (1943); War Dep't Procurement Regulation 10 § 1001 (1942); Nicholson & Rohrbach, Cost Accounting at 497-98 (1919), available at http://books.google.com/books; Reginald C. McGrane, The Facilities and Constr. Program of the War Production Board and Predecessor Agencies May 1940 to May 1945 at 11 (1945) (Historical Reps. on War Administration: War Production Board, Special Study No. 19); Expansion of Indus. Facilities under Army Air Forces Auspices 1940-1945 at 143 (Army Air Forces Historical Studies: No. 40, 1946), available at http://www.afhra.af.mil/studies/numberedusafhistoricalstudies.asp. The term "facilities," therefore, is a long used and understood term in the government contracting community. The principal Property clause in the J-BOSC here, FAR 52.245-5, states simply the "Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the Government-furnished property described in the Schedule." Article G-11 of the contract (List of Government-Furnished Property) similarly states "the government will make available government property" identified in the schedule (attachment J-3), a more than 600-page document. (R4, tab 1 at 40, 79) Neither requires that government-furnished property constituting "facilities" within the meaning of FAR 45.301 be specifically identified as "facilities." While FAR 45.302-1(a) states "facilities provided to contractors shall be individually identified" in the contract, the listing of property furnished by NASA individually identifies the facilities provided and other NASA property furnished the contractor. SGS cites no regulation, and we are not aware of any regulation, expressly requiring that the government identify in a contract (other than a facilities contract) all government-furnished property falling within the FAR 45.301 definition of "facilities" specifically as "facilities." Thus, SGS's contention that FAR 45.302-3(c) cannot apply here because NASA did not specifically identify in the contract the government furnished property constituting "facilities" is also without merit.

C. Requirements For Contract Clauses Concerning Facilities

SGS similarly contends the items at issue cannot be "facilities" because NASA did not include in the contract here clauses for contracts furnishing facilities. SGS asserts the

Dep't of Defense Manual for the Performance of Contract Property Admin. incorporated in NASA FAR Supplement (NFS) 1845.104(a) explains why language in contracts that furnish facilities is significantly different from other contracts and such language does not appear in its contract. (App. br. at 11-13)

FAR 45.302-3(b) provides that, "[w]hen a facilities contract is not used" in furnishing facilities, "the Government's interest shall normally be protected by using the appropriate Government property clause" or, in the case of a contract for services with facilities to be used in connection with operation of a Government-owned plant or installation, "by appropriate portions of the facilities clauses." FAR 45.106(f)(1) states a CO "shall insert the clause at 52.245-5, Government Property (Cost-Reimbursement, Time-and-Material, or Labor-Hour Contracts), in solicitations and contracts when a cost-reimbursement contract" is contemplated. FAR 45.305(c) further states a CO "shall insert the clause at 52.245-19, Government Property Furnished 'As Is,' in solicitations and contracts when a contract other than a consolidated facilities or facilities use contract is contemplated and Government production and research property is to be furnished 'as is." NASA's contract with SGS furnishes "facilities" under a cost reimbursement (CPAF) contract for work within an establishment or installation operated by NASA and incorporated by reference both FAR 52.245-5 and 52.245-19, as required by the FAR. (R4, tab 1 at 46, 55, 59) Under FAR Part 45, no other standard contract clauses relating to facilities are specifically required to be included in a CPAF contract furnishing facilities for work performed in an establishment operated by the government, such as SGS's. In accordance with FAR 45.302-3(b), the government's "interest" is deemed to be protected by use of the appropriate government property clause. While SGS indicates that the Dep't of Defense Manual for the Performance of Contract Property Admin. incorporated in NFS 1845.104(a) explains why language in contracts that furnish facilities is significantly different from other contracts, we have reviewed the Manual and find nothing therein indicating NASA was required to include additional clauses or provisions concerning facilities in SGS's contract. E.g., Dep't of Defense Manual for the Performance of Contract Property Admin. §§ C.3.3, C3.4, C3.5.5, C3.14.2, C3.15.2.4.4, (DoD 4161.2-M Dec. 1991) available at http://biotech.law.lsu.edu/blaw/dodd/corres/html/41612m.htm. Accordingly, SGS's contention FAR 45.302-3(c) cannot apply here because NASA did not include in its contract facilities clauses or provisions is additionally without merit. SGS, therefore, has not cited any regulation precluding the items at issue here from being "facilities" within the definition of FAR 45.301 and governed by FAR 45.302-3(c).

III. <u>Inclusion or Incorporation in Contract of FAR 45.302-3(c)</u>

A. Perceived Conflict With Changes and Property Clauses

SGS asserts that NASA cannot rely on FAR 45.302-3(c) as a bar to payment of fee or profit on the cost of equipment SGS purchased for NASA under the J-BOSC change orders because the regulation would improperly "read in" a limitation in contravention of

express terms of its contract. According to SGS, FAR 45.302-3 can't apply here because the regulation is contrary to the plain language of two clauses included in or incorporated into its contract. SGS asserts that the Property clause for cost-reimbursement contracts, FAR 52.245-5, provides that, if the CO makes a change in the property to be furnished to SGS by substituting other government-furnished property provided by NASA or acquired by SGS pursuant to the contract, SGS is entitled to an equitable adjustment under paragraph (h) of the clause, which states "[w]hen this clause specifies an equitable adjustment, it shall be made to any affected contract provision in accordance with the procedures of the Changes clause." SGS further asserts it is well established that the standard Changes clause set forth in its contract provides for an "equitable adjustment" in contract price that includes recovery of the cost of additional work it performed and "a reasonable profit on th[os]e increased costs." (App. br. at 9-11)

NASA contends there is no conflict between the language of the Changes and Property clauses set forth in the parties' contract and FAR 45.302-3(c). It agrees that, under the Property clause in the contract (FAR 52.245-5), the CO is authorized to make changes in the property to be furnished SGS by substituting other government-furnished property provided by it or acquired by SGS pursuant to the contract and that, if such a change occurs, SGS may request an "equitable adjustment to the contract in accordance with paragraph (h) of th[e] clause." It also agrees that paragraph (h) provides that an adjustment shall "be made to any affected contract provision in accordance with the procedures of the [contract's] Changes clause." According to NASA, however, the standard Changes clause at issue, FAR 52.243-2, which is referenced in the Government Property clause, FAR 52.245-5, allows only for an adjustment to any "applicable fixed fee," if appropriate, and the parties' contact here does not contain any provision for the payment of a "fixed fee." NASA states SGS's contract "is a cost-plus-award-fee contract," which provides simply that SGS "can earn award fee from a minimum of zero dollars to the maximum stated in Article B-3." (Gov't br. at 1, 18-20) (Emphasis in original)

We concur with the parties' interpretation of the Government Property clause, FAR 52.245-5, as requiring that any equitable adjustment for substitution of government-furnished property "be made...in accordance with the procedures of the [contract's] Changes clause." The Changes clause in SGS's contract, FAR 52.243-2, CHANGES – COST-REIMBURSEMENT (AUG 1987) – ALT. II (APR 1984), states:

- (a) The [CO] may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:
 - (1) Description of services to be performed.

- (b) If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, or otherwise affects any other terms and conditions of this contract, the [CO] shall make an equitable adjustment in the (1) estimated cost, delivery or completion schedule, or both; (2) amount of any fixed fee; and (3) other affected terms and shall modify the contract accordingly.
- (d) Failure to agree to any adjustment shall be a dispute under the Disputes clause.... [Emphasis added]

NASA, therefore, is correct that the clause expressly provides for an adjustment in "fixed fee," if appropriate. NASA also is correct that the J-BOSC at issue here does not provide for the payment of any "fixed fee." While CPAF contracts often specify a "fixed" base fee in addition to a variable award fee, the FAR authorizes CPAF contracts with "zero" base "fixed fee." FAR 16.305 (CPAF contract provides for a fee consisting of (a) a base amount (which may be zero) fixed at inception and (b) an award amount); NASA, Cost Plus Award Fee Contracting Guide 1 (1967) (base fee may be zero). The fee clause in the parties' contract, NASA FAR Supplement 1852.216-76 (AWARD FEE FOR SERVICE CONTRACTS), states simply that the "contractor can earn award fee from a minimum of zero dollars to the maximum stated in Article B-3." NASA's construction of the Changes clause – as precluding recovery of profit or fee as part of an equitable adjustment here because there is no fixed fee payable under the contract – however is incorrect. In addition to a possible adjustment in amount of "fixed fee," the Changes clause expressly states the CO shall make an equitable adjustment in "other affected terms." FAR 52.243-2(b)(3). The clause, therefore, expressly directs the CO make adjustments, if appropriate, in "affected" contract terms other than "fixed fee," such as J-BOSC Article B-3 which sets forth by contract periods estimated contract costs and available "award fee" (R4, tab 1 at 10-12). See NASA, Cost Plus Award Fee Contracting Guide 35 (1967) (if change causes increase or decrease in estimated cost of performance, CPAF contract should provide for appropriate equitable adjustment in the target cost and award fee); DoD & NASA, Incentive Contracting Guide 193 (1969) (if work is changed under incentive contract, adjustments may be made in target cost, target fee, minimum fee, maximum fee, or any or all of them as appropriate) available at https:// acc.dau.mil/CommunityBrowser.aspx?id=189615; Ralph C. Nash, Jr., Gov't Contract Changes 18-21 (Fed. Pubs. 1989); Aerojet-General Corp., ASBCA No. 17171, 74-2 BCA ¶ 10,863. Thus, the Changes clause's specific reference to adjustment of "fixed

fee" does not bar a possible increase or decrease in the amount of the "award fee" pool as part of an equitable adjustment and we must address SGS's contention the Changes clause conflicts with FAR 45.302-3(c).

The gist of SGS's contention is that the Changes clause in the J-BOSC specifies it receive "profit" or fee as part of an equitable adjustment for a change and thus expressly conflicts with the prohibition against payment of profit or fee on "the cost of facilities" purchased for the account of the government under other than a facilities contract set forth in FAR 45.302-3(c). There is no "express" language, however, in the Changes clause here stating "profit" or award "fee" is to be part of equitable adjustments made under the clause. FAR 52.243-2. Indeed, throughout the long history of the Changes clause, there rarely has been any language expressly stating that "profit" was to be a component of an adjustment under the clause. As Professor Nash details in Gov't Contract Changes, the first trace of the clause in an 1818 ordnance contract stated simply that "[s]hould any alterations or pattern other than above mentioned be decreed by the Ordnance Department, the said [contractor] will be entitled to compensation for any extra expense occasioned by such alterations." Nash, Gov't Contract Changes 2-2 (2d ed., Fed. Pubs. 1989). By the Civil War, the changes article language was more sophisticated, but still lacked any express mention of "profit." For example, the 1863 contract for construction of the monitor Etlah contained a clause stating "if said alterations and additions shall cause extra expense to the [contractor], [the government] will pay for the same at fair and reasonable rates" with the "cost of the alterations to be determined when the changes are directed to be made." Id. at 2-3. While the language of the Changes article was quite well developed at the time of the Civil War, provisions for "Changes" in contracts between the Civil War and end of World War I, "took a variety of forms." Id. Departing from prior precedent, a clause used by the Navy Department's Bureau of Yards & Docks expressly stated:

The cost of the changes as ascertained above, when approved by the Chief of the Bureau of Yards and Docks, shall be added to or deducted from the contract price, and the contractor agrees and consents that the contract price thus increased or decreased shall be accepted in full satisfaction for all work done under the contract: *Provided*, That the increased cost shall be the estimated actual cost to the contractor at the time of such estimate and that the decreased cost shall be the actual or market value at the time the contract was made, both plus a profit of 10 per cent.

Eaton, Brown & Simpson, Inc. v. United States, 62 Ct. Cl. 668, 681 (1926) (bold added); Nash, Gov't Contract Changes at 2-3, 2-4. Similarly, a Changes clause used by the U.S. Geological Survey of the Department of the Interior in the early 1900s expressly stated "[e]xtra work or work not provided for in the specifications, if ordered in writing by the

engineer, will be paid for at actual necessary cost, as determined by the engineer, plus 15 per cent." Lovell v. United States, 46 Ct. Cl. 318, 336-37 (1911) (emphasis added); Nash, Gov't Contract Changes at 2-4. The Army Corps of Engineers, in contrast, utilized a clause at the turn of the century stating:

If at any time during the prosecution of the work it be found advantageous or necessary to make any change or modification in the project, and this change or modification should involve such change in the specifications, as to character and quality, whether of labor or material, as would either increase or diminish the cost of the work, then such change or modification must be agreed upon in writing by the contracting parties, the agreement setting forth fully the reasons for such change and giving clearly the quantities and prices of both material and labor thus substituted for those named in the original contract.

The Corps clause made no express reference to "profit" as part of the adjustment. Burton & Co. v. United States, 51 Ct. Cl. 362, 390 (1916); Nash, Gov't Contract Changes at 2-5. When the government issued "standard form" provisions after World War I for supply and construction contracts, both provided if contract "changes cause an increase or decrease in the amount due under this contract, or in the time required for its performance, an equitable adjustment shall be made and the contract shall be modified in writing accordingly." Nash, Gov't Contract Changes at 2-6, 2-7 (emphasis added). The standard provisions did not include a definition of the term "equitable adjustment" or expressly reference "profit." See id. The language used in the 1926 standard forms is similar to that used by the government today. See, e.g., FAR 52.243-2; Nash, Gov't Contract Changes at 2-7.

The Supreme Court construed the language set forth in the 1926 general provision for construction contracts in *United States v. Callahan Walker Constr. Co.*, 317 U.S. 56 (1942). It held:

An "equitable adjustment" ...for extra work involved merely the ascertainment of the cost of digging, moving, and placing earth, and the addition to that cost of a reasonable and customary allowance for profit. [Emphasis added]

Id. at 61.

While standard Changes clauses have been issued similar to the 1926 standard provisions, agencies sometimes use different language in their clauses. For example,

during the 1960s, NASA entered into a contract valued at about \$450 million expressly providing:

[N]o adjustment in the fixed fee will be made as a result of one or more of the above conditions unless such modification causes an increase or decrease of more than \$100,000.00 in the estimated cost of the contract. The monetary amount limiting conditions for an adjustment of fee shall be applied on an individual modification basis provided that each modification is self-sustaining functionally and not one of a series of interrelated changes.

Nash, Gov't Contract Changes at 8-8, 8-9, 8-10. Moreover, most agencies that enter into construction contracts incorporate language limiting contractors' recovery of profit under their Changes clause. For example, the Naval Facilities Command specified profit be at the rate of six percent. Koppers-Clough, ASBCA No. 12364, 70-1 BCA ¶ 8150 at 37,870-71. The GSA Public Buildings Service and Postal Service specified profit not exceed 10%. The Federal Highway Administration specified a flat rate of 15% of labor and material for both overhead and profit. Nash, Gov't Contract Changes at 16-21, 16-22. Similarly, the National Park Service specified an amount not to exceed 15% of "actual necessary costs" for both overhead and profit. Perry & Wallis, Inc. v. United States, 192 Ct. Cl. 310, 312, 427 F.2d 722, 723 (Ct. Cl. 1970). Such limitations generally have been upheld and followed. See, e.g., Santa Fe Eng'rs, Inc. v. United States, 801 F.2d 379 (Fed. Cir. 1986); Jack Picoult Constr. Co. v. United States, 207 Ct. Cl. 1052 (1975); Perry & Wallis, 192 Ct. Cl. at 313-14, 427 F.2d at 724-25.

Moreover, some FAR clauses providing for an equitable adjustment specifically exclude "profit" from being part of the adjustment. E.g., FAR 52.242-14(b) (GOVERNMENT SUSPENSION OF WORK) ("an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly"); 52.242-17(a) (GOVERNMENT DELAY OF WORK) ("an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by the delay or interruption"). Similarly, FAR clauses providing for "adjustment" in the contract's price or fixed hourly wage rates to comply with a new Department of Labor Wage Determination or change in the statutory minimum wage specifically exclude "profit" from being part of that adjustment. FAR 52.222-43(e) (FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT - PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS)) ("[a]ny adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (d) of this clause, and the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance, but shall not otherwise include any amount for general

and administrative costs, overhead, or profit"); 52.222-44(d) (FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT – PRICE ADJUSTMENT) (same).

Thus, there is no per se rule that a contractor receive "profit" on an equitable adjustment equivalent to the rate of profit it received on other contract work. Rather, the established rule is that stated by the Supreme Court in Callahan Walker - simply the addition to cost incurred of a "reasonable and customary allowance for profit." 317 U.S. at 61. As discussed more fully below, the "customary allowance" for profit on facilities purchased for the account of the government under a government contract and to be used by the contractor in performing that or another government contract is "zero." For more than 90 years, i.e., since the government began furnishing plant equipment to contractors for the performance of government contracts during World War I, the government's policy and practice has been not to pay "profit" to a contractor on plant equipment that the contractor acquired for the government's account and for use by it to perform one or more supply or service contracts with the government. We, therefore, find no conflict between the procedures for an equitable adjustment under the Changes Clause (which were adopted by the J-BOSC Property clause) – addition of a reasonable and customary allowance for profit – and FAR 45.302-3(c) which states that "[n]o profit or fee shall be allowed on the cost of facilities when purchased for the account of the Government under other than a facilities contract."

Indeed, in order to find that the Changes clause mandated SGS's receipt of "profit" on the equitable adjustments here, we would have to ignore the commonly understood definition of an "equitable adjustment." As the Court of Claims explained, the words "equitable adjustment" have become a term of art in federal contracts with a commonly understood meaning. E.g., Gen. Builders Supply Co. v. United States, 187 Ct. Cl. 477, 482, 409 F.2d 246, 250 (1969). Equitable adjustments "are simply corrective measures utilized to keep a contractor whole when the Government modifies a contract." E.g., Bruce Constr. Corp. v. United States, 163 Ct. Cl. 97, 100, 324 F.2d-516, 518 (1963). Their purpose "is to safeguard the contractor against increased costs engendered by the modification." Id. The "measure of damages" is not the value which is received by the Government, but must be "closely related to and contingent upon the altered position in which the contractor finds [it]self by reason of the [contract] modification." Id.; McFerran v. United States, 39 Ct. Cl. 441 (1904).

We therefore must examine the status of the contractor before occurrence of the change necessitating equitable adjustment of the contract price. By statute, Congress limits the rate of "profit" or "fee" negotiable on a CPFF cost reimbursement contract for the acquisition of other than architectural or engineering services or the performance of developmental or research work to 10% of the estimated cost of that contract. 41 U.S.C. § 3905(b); 10 U.S.C. § 2306(d); Yosemite Park & Curry Co. v. United States, 217 Ct. Cl. 360, 582 F.2d 552 (1978). The FAR extends this 10% limit on profit or fee to CPIF and CPAF cost reimbursement contracts. FAR 15.404-4(c)(4)(i). Prior to award of a CPAF

contract, such as J-BOSC, once a NASA CO has received a proposal from a prospective contractor, the CO must develop pre-negotiation parameters (which are often detailed in a pre-negotiation position memorandum (PPM)) setting forth the government's cost and profit/fee pre-negotiation objectives in order to prepare a negotiating position permitting the CO to reach agreement on a fair and reasonable price. See FAR 15.404-4, 15.404-5, 15.406-1(a), (b), 15.406-3(a)(7), (10), 62 Fed. Reg. 51224, 51246 (effective 10 Oct. 1997); NFS 1815.406-1, 1815.406-3, 63 Fed. Reg. 9953, 9963, 9964 (effective 27 Feb. 1998); see generally, John Cibinic, Jr. & Ralph C. Nash, Jr., Cost-Reimbursement Contracting 571, 574-75 (Geo. Wash. U. 2d ed. 1993). The FAR requires a CO use the government's determined pre-negotiation cost objective amounts as the "basis for calculating" the government's profit or fee pre-negotiation objective. FAR 15.4044(c)(3), 62 Fed. Reg. 51244 (effective 10 Oct. 1997). While FAR 31.205-10(a)(2) provides that "facilities capital cost of money" (FCCM) is an allowable cost of the performance of contracts if it is "specifically identified or proposed in cost proposals," FAR 15.404-4(c)(3) mandates that, prior to applying profit or fee factors, the CO "shall exclude any facilities capital cost of money included in the cost objective amounts." 62 Fed. Reg. 51244 (effective 10 Oct. 1997). The rationale for excluding FCCM was set forth in OFPP Policy Letter 80-7:

Agencies shall ensure that contractors are not compensated for [FCCM] both as a direct or indirect cost and in profit or fee. Before the allowability of [FCCM] costs, this cost was included in profits and fee. Therefore, profit and fee pre[-]negotiation objectives shall be reduced if necessary to reflect this refinement in cost accounting practice.

Cibinic & Nash, Cost-Reimbursement Contracting at 604. The FAR does not specify how a CO is to ensure that contractors do NOT also receive "profit" or "fee" on the amount of FCCM allowed and reimbursed. Id. OFPP opined in its Policy Letter 80-7 that a CO was free to use a dollar-for-dollar offset in the government's pre-negotiation profit or fee objective to do so. *Id.* To comply with FAR 15.404-4(c)(3) and preclude a contractor from receiving "profit" or "fee" on FCCM reimbursed, NASA adopted the offset approach and, in NFS 1815.970-4, directed that "[w]hen facilities capital cost of money is included as an item of cost in the contractor's proposal, it shall not be included in the cost base for calculating profit/fee" and "a reduction in the profit/fee objective shall be made in the amount equal to the facilities capital cost of money allowed," thereby barring the receipt of profit or fee on FCCM reimbursed. 61 Fed. Reg. 52325, 52338 (7 Oct. 1996); 62 Fed. Reg. 3464, 3477 (23 Jan. 1997). FAR 45.302-3(c), similar to FAR 15.404-4(c)(3) barring receipt of profit on reimbursed FCCM, mandates "[n]o profit or fee" be allowed "on the cost of facilities" when purchased for account of the Government under other than a facilities contract. Accordingly, to comply with FAR 45.302-3, a CO can exclude the cost of the facilities to be acquired for account of the government from the pre-negotiation cost base "for calculating profit/fee" and reduce the pre-negotiation "profit/fee objective" in an amount equal to the cost of the facilities to be

acquired for account of the government in the same fashion that the CO eliminates all FCCM to be reimbursed from the pre-negotiation cost and profit/fee objectives. See FAR 15.404-4(c)(3) (effective 2 August 2010) (before applying profit or fee factors, CO shall exclude from pre-negotiation cost objective amounts the purchase costs of contractor-acquired property), 75 Fed. Reg. 38679 (2010). While the record in these appeals does not reflect the actions taken by the CO in developing pre-negotiation cost and profit objectives for SGS's contract, we are required to presume that the CO complied with FAR 45.302-3 and acted to preclude the receipt of profit on facilities acquired for account of the government when developing the government's pre-negotiation profit objective. E.g., Amer. Elec. Contracting Corp. v. United States, 217 Ct. Cl. 338, 353, 579 F.2d 602, 610 (1978); Gen. Elec. Co. v. United States, 188 Ct. Cl. 620, 629, 412 F.2d 1215, 1221 (1969) (unless evidence to contrary is produced, law presumes official actions properly taken); Baldwin v. United States, 175 Ct. Cl. 264, 271 (1966), cert. denied, 385 U.S. 1014 (1967); see United States v. Chem. Foundation, Inc., 272 U.S. 1 (1926) (in absence of clear evidence to contrary, courts presume public officers have properly discharged their official duties). Thus, when the J-BOSC CPAF contract was awarded to SGS, there was no "profit/fee" on facilities acquired for account of the government in the NASA profit objective, thereby barring receipt of profit on such costs. To provide SGS with profit on the costs of facilities it acquired for the account of NASA under contract change orders, therefore, would be to treat it better in the performance of "changed work" than in the performance of contractually specified work, i.e., increase the award fee pool under SGS's contract for profit/fee based on cost of facilities acquired for NASA's account under the two change orders when no profit/fee was included by the CO in the original award fee pool based on cost of facilities acquired for NASA's account in performing contractually specified work.

When a CO orders a change, the equitable adjustment in contract price granted should keep the contractor in the "same position financially" as before the change. E.g., KECO Indus., Inc. v. United States, 176 Ct. Cl. 983, 1002, 364 F.2d 838, 850 (1966), cert. denied, 386 U.S. 958 (1967); S.N. Nielsen Co. v. United States, 141 Ct. Cl. 793, 796 (1958). An equitable adjustment is not to be used to reduce or increase the contractor's profit or loss, or convert a loss to a profit or vice versa. Equitable adjustments are simply corrective measures to keep a contractor whole. Pacific Architects & Eng'rs, Inc. v. United States, 203 Ct. Cl. 499, 508, 491 F.2d 734. 739 (1974); Bruce Constr., 163 Ct. Cl. at 100, 324 F. 2d at 518. Were we to determine here that the Changes clause mandated SGS's receipt of "profit" on the costs of acquiring facilities for NASA's account equivalent to the rate of profit received on other contract work, we would not be making SGS "whole," but improving its financial position with regard to the performance of the contract in contravention of the commonly understood definition of an "equitable adjustment." See FAR 15.404-4(c)(3) (effective 2 August 2010) (before applying profit or fee factors, CO shall exclude from pre-negotiation cost objective amounts the purchase costs of contractor-acquired property), 75 Fed. Reg. 38679 (2010); Bennett, 178 Ct. Cl. at

70, 371 F.2d at 864 ("there may be situations where [a] claim" for an equitable adjustment does "not entitle a contractor to a profit allowance").

B. Lack of Express Incorporation or Inclusion

SGS alternatively asserts that NASA cannot rely upon FAR 45.302-3(c) as a bar to the payment of fee (profit) on the cost of facilities SGS purchased for NASA pursuant to the change orders because the regulation is not expressly incorporated into or included in the parties' contract. According to SGS, FAR 45.302-3(c) imposes a limitation upon its contract and any such limitation must appear in the four corners of the parties' contract or be expressly incorporated in the contract to be effective. (App. br. at 1-2, 10; app. reply br. at 4-5)

FAR 45.302-3 is not a standard contract clause prescribed for inclusion in or incorporation into a government contract. It also is not language that is "expressly" included in or incorporated into SGS's written contract. Rather, FAR 45.302-3 is a federal procurement regulation setting forth the authority of COs to provide "facilities" to a contractor under a contract other than a facilities contract. 55 Fed. Reg. 52782 (1990). It specifies four instances in which a CO is authorized to provide facilities under a contract other than a facilities contract and that "[n]o profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract." FAR 45.302-3.

1. FAR Prohibition on Profit Originated in 1917 and Has Existed in One Form or Another for Over 90 Years

The governmental rule set forth in the regulation – that no profit or fee shall be allowed on the cost of facilities when purchased for the account of the government - has existed for nearly a century. The policy originated during World War I when Executive agencies were required to confront how to administer "cost-plus" contracts. During the earliest days of our nation, our government discontinued its practice of contracting with "commissaries" to furnish rations and supplies to the Continental Army in exchange for reimbursement of the commissaries' cost of the items (plus a percentage of those costs as "profit") because it recognized such a contract caused many contractors to maximize the costs they incurred in order to enhance the sum of profit they received. Nagle, A History of Gov't Contracting at 49-52; Risch, Quartermaster Support of the Army at 242-45. 251-52, 254, 257-58; Nagle, Federal Procurement Regulations: Policy, Practices and Procedures at 13-16; 20 Journals of the Continental Congress (10 July 1781) 734 in Amer. State Papers, available at http://memory.loc.gov/cgi-bin/ampage. For the next 140 years, the government generally acquired needed supplies and goods by advertising for bids to supply those items at a fixed price and selecting the lowest responsible bidder. While Congress repeatedly expanded by statute requirements that items be procured by advertised, competitive bidding, e.g., 2 Stat. 536; 12 Stat. 103, 220, 18 Stat. 733, 28 Stat.

30, 50, 36 Stat. 487, the first World War caused it to waive the statutory requirements for advertising and competing fixed-price contracts and allow agencies to negotiate "costplus contracts" similar to those used by commissaries, i.e., contracts for reimbursement of cost incurred plus a percentage of those costs as profit or a fixed fee. E.g., 39 Stat. 617 ("[i]f, in the judgment of the Secretary of the Navy, the most rapid and economical construction of the battle cruisers herein appropriated for can be obtained thereby, he may contract for the construction of any or all of them upon the basis of actual cost, plus a reasonable profit to be determined by him," 1194 ("[i]f, in the judgment of the Secretary of the Navy, the most rapid and economical construction of the battle cruiser herein appropriated for can be obtained thereby, he may contract for the construction of said battle cruiser upon the basis of actual cost, plus a reasonable profit to be determined by him"). While the Secretary of the Navy, who was pursuing a long-standing dispute over contract profits with manufacturers of armor, and some other officials opposed returning to the use of such contracts for the same reasons they were discontinued initially, Nagle, A History of Gov't Contracting at 250-51, 273; Navy Sec'y Ann. Rep. 1915 at 57-60, all eventually realized such contracts were the only means contractors would agree to supply the urgently needed items to prosecute the first World War. Bethlehem Steel Corp., 315 U.S. at 302 (quoting Report of Chief of Construction Div., War Sec'y Ann. Rep. 1919 at 4147 ("no sane man would bid on a lump-sum contract under such conditions [as now exist], unless perchance he should treat the matter as a pure gamble and include an excessive margin in his proposal for unforeseen contingencies")); Staff of S. Temporary Nat. Econ. Comm., 76th Cong., Investigation of Concentration of Economic Power 43-44, 50, 52 (Monograph No. 19, Comm. Print 1940); H. Struve Hensel & Richard G. McClung, Profit Limitations Prior to the Present War, L. & Contemp. Probs. 187, 193-94 (1944); F. Trowbridge vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B.J. 305, 306, 312 (1970).

An interdepartmental conference consisting of delegates from the Departments of War, Navy, and Commerce, Federal Trade Commission, and Council of National Defense, issued recommendations concerning the treatment of costs for all government contracts. Because, with use of a cost-plus contract, "[t]he temptation is great to the contractor to inflate his own costs, as well as the costs of subcontractors, and the task of the United States is difficult and burdensome in checking and determining proper costs," the conference recommended "a fixed profit of a definite sum of money per article be agreed upon instead of a percentage of cost." To encourage contractors to reduce their costs, the conference stated the fixed-profit agreed upon could be adjusted "so that the contractors may share in the saving of, or be charged with part of the excesses of, actual cost over estimated cost." The conference emphasized that a cost-plus contractor should "receive no profit beyond that definitely specified in his contract." *Uniform Contracts and Cost Accounting Definitions and Methods* 3-7, 20 (GPO July 1917); Theodore Wesley Graske, *The Law of Gov't Defense Contracts* 18 (1941).

Concerned about possible war profiteering and administrative accounting nightmares, the Navy and War Departments both scrambled to establish rules and policies for such contracts. Both Departments attempted to limit profits on cost-plus contracts by using a contract ceiling of 10% on profit. Navy Sec'y Ann. Rep. 1917 at 33, Rep. 1918 at 685, Rep. 1919 at 570-76, Rep. 1920 at 147-48; 1 War Sec'y Ann. Rep. 1917 at 28, Rep. 1918 at 1319, Rep. 1919 at 4138-42; James R. Withrow, Jr., The Control of War Profits in the United States and Canada, 91 U. Pa. L. Rev. 194, 200 (1942); Crowell, Gov't War Contracts at 85, available at http://books.google.com/books. The Navy adhered to a "cost-plus-fair-profit" standard and appointed a "Compensation Board" to "insure [the] correct ascertainment of cost and guard against extravagance." Crowell, Gov't War Contracts at 156, available at http://books.google.com/books; Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program During World War I, 60 J. Mil. Hist. at 12-14 (1996), available at http://www.jstor.org/stable/2944447; see Kingsbury, 68 Ct. Cl. at 680. It also promulgated a "standard form" for cost-plus contracts involving manufacturing. The standard-form provided in part:

The department will pay the contractors a profit of (percentage of cost of product or stated amount per unit) completed and accepted hereunder and also actual cost of production, defined in subparagraphs (a) to (e) below. No profit will be allowed on costs under subparagraph (e). [Emphasis added]

Subparagraph (e) stated "Cost of machinery and equipment, patterns and drawings and temporary structures needed for the utilization and protection thereof acquired for and devoted exclusively to navy work; subject to approval in advance...." Navy Paymaster Gen. Ann. Rep. 1918 at 94-96 (emphasis added); Crowell, Gov't War Contracts at 146-47 available at http://books.google.com/books. The War Department's Chief of Ordnance issued a 26-page "booklet" entitled "Instructions to Accountants." The booklet, which was distributed to accountants in his office's finance division, cost-accounting section, stated with respect to "SPECIAL PURCHASES FOR INCREASING FACILITIES":

- 81. Special purchases of buildings, machinery, equipment, and the like may be made by the contractor on the authority of the contracting officer and such authority must be contained in writing in every instance.
- 82. The contractor will be reimbursed by the United States for such special purchases upon presentation of Public Voucher, Form No. 325, supported by the evidence required on Summary of Special Purchases, Form No. 1613.

85. The cost of such special purchases is not subject to any addition for profit to the contractor unless otherwise specified in contract. [Emphasis added]

Instructions to Accountants Attached to Cost Accounting Section Fin. Div. Office of the Chief of Ordnance War Dep't, 18-19 (GPO 11 July 1917).

The Chairman of the Interdepartmental Conference, who was Chief, Division of Cost Accounting, Department of Commerce, authored a treatise on cost accounting two years after the war specifically dealing with government cost-plus contracts. In addressing "equipment" as an item of cost under such contracts, the treatise stated:

BETTERMENTS AND EQUIPMENT

Treatment of Additions and Special Facilities

Expenditures for special facilities, which usually are in the nature of a betterment, may be charged as cost when they are exclusively employed on cost-plus work, providing that the contract authorizes the charge. In all other cases, they should be charged to a Betterment account and be subject to depreciation, of which the cost-plus contracts would bear their proportionate share.

Unless clearly stated in the contract itself, expenditures of the above character should not be treated as a part of the normal costs, but should be reimbursed and profit should be added only when the betterment is manufactured in the plant. All purchases of betterments, where provided for in the contract, should be reimbursed without profit. Some contracts do not allow profit on increased or special facilities whether purchased or manufactured in the plant. [Emphasis added]

Nicholson & Rohrbach, Cost Accounting 487, 497-98 (1919), available at http://books.google.com/books. In addressing replacement of equipment, the book stated:

REPAIRS, RENEWALS, AND REPLACEMENTS

Method of Treatment

Repairs, renewals, and replacements sometimes require special treatment. If the buyer has supplied the contractor with machinery or has reimbursed him for its purchase or for the erection of buildings, the ownership of such property is vested in the buyer. Wherever such expenditures are made directly and only for cost-plus work, they become a direct charge; when used for commercial work as well, the charge should be made to overhead. The cost-plus contract should bear no part whatever of the cost of the contractor's machinery if used by him for commercial work only.

Wherever replacements of machinery are made necessary by cost-plus work and a purchase is made, the contractor is entitled to reimbursement, but profit should not be added.... [Emphasis added]

Id. at 501-02.

Because contractors were deemed to have had unprecedented opportunities during the first World War to pad costs and make excessive profits, despite efforts by Executive agencies to deter war profiteering, the government returned to advertised, competitive bidding for contracts following the war. The "bonus for cost savings" or incentive feature recommended by the Interdepartmental Conference and used by the Navy, EFC, and others on cost-plus contracts, whereby the contractor received a percentage of the difference between its estimated and actual production costs, in addition to fee, was not viewed favorably in hindsight. It was said such contracts "lead to waste, foster abuses, and impose an almost intolerable burden of cost accounting," hindering rapid production. According to the report on the aircraft industry by the Attorney General's independent counsel, estimated costs for such contracts were "placed so high [that] the contractor had every reason to expect that the actual cost would be much less" and that it was guaranteed a profit fixed at 12.5% to 15% of the estimated cost. In fact, EFC (which was responsible for maintaining the bridge of ships to Europe to aid our allies) engaged unsuccessfully in litigation against one of the nation's largest contractors for over 20 years to "disgorge averred unconscionable profits" received on half-savings contracts for construction of various vessels. There was great public concern over the existence of profiteering on war contracts and Congress repeatedly examined possible means to eliminate it in the future. Bethlehem Steel, 315 U.S. at 306; United States v. Bethlehem Steel Corp., 23 F. Supp. 676 (1938), aff'd, 113 F.2d 301 (3rd Cir. 1941), aff'd, 315 U.S. 289 (1942); Rockwell Int'l Corp., ASBCA No. 46544, 96-1 BCA ¶ 28,057; 57 Cong. Rec. 883, 885, 906 (1918)

(Report to Att'y Gen. on Aircraft Production Investigation); Robert Braucher & Covington Hardee, Cost-Reimbursement Contracts With the United States, 5 Stan. L. Rev. 4, 13 (1952); vom Baur, Fifty Years of Gov't Contract Law, 29 Fed. B.J. 305-06; Hensel & McClung, Profit Limitations Prior to the Present War, L. & Contemp. Probs. at 194-95, 201; Rockwell, 96-1 BCA ¶ 28,057 at 140,100 n.10.

While Congress authorized monies to procure additional ships and planes during the decades that followed, it did so only after limiting profits to be realized by builders of new warships and aircraft. Following the example of the Departments of Navy and War during World War I, Congress imposed a ceiling on profits. Under the Vinson-Trammel Act, 48 Stat. 503, 505, and subsequent legislation, 49 Stat. 1985, 1998-99, 53 Stat. 560, all profits in excess of a specific percentage of the contract price realized by a contractor were recaptured by the government. *Rockwell Int'l*, 96-1 BCA ¶ 28,057 at 140,103; Hensel & McClung, *Profit Limitations Prior to the Present War*, L. & Contemp. Probs. 187, 202-04; Withrow, *The Control of War Profits in the U.S. & Canada*, 91 U. Pa. L. Rev. at 194, 206.

After Nazi Germany took control of Austria in 1938, our government embarked on a limited war preparedness program and Congress again exempted certain contracts from legal requirements for advertising and award to the lowest bidder. It authorized the War Secretary to enter into educational contracts for munitions of special or technical design, noncommercial in character, with commercial concerns to familiarize commercial and manufacturing establishments with manufacture of such munitions and accessories, and the inclusion in such contracts of a "complete set" of tools, fixtures, and other special appliances required for production of such munitions, specifying that "title to all such facilities shall remain in the Government." The War Department awarded various small-volume orders, including ones for manufacture of gas masks to Goodyear Tire and Rubber Co., Firestone Tire and Rubber Co., and Johnson & Johnson Co., none of which previously had made such masks. During construction of the new mask plants in Akron, Ohio, Fall River, Massachusetts, and Chicago, Illinois, *Time Magazine* described the latter orders as follows:

For the three companies the deal was designed as a labor of love. The contracts will meet expenses, leave **no profit**. The project is educational, designed to acquaint the manufacturers with war materials production. [Emphasis added]

52 Stat. 707-08; The Chem. Warfare Service: From Lab. to Field 241-44 (Ctr. Mil. Hist., Wash. D.C. 1959), available at www.history.army.mil/html/books/010/10-2/CMH_Pub_10-2.pdf; 6 The Army Air Forces in World War II: Men and Planes 300-01, available at www.ibiblio.org/hyperwar/AAF/VI/index. html; Expansion of Industrial Facilities at 17-18, 88-89; Harry C. Thomson & Lida Mayo, The Ordnance Dep't:

Procurement and Supply 19-20, 35 (Ctr. Mil. His., Wash. D.C. 1960), available at www. history.army.mil/catalog/pubs/10/10-10.html.

Similarly, Congress empowered the Navy to contract on a "cost-plus-a-fixed-fee" basis for construction of "off-shore" bases. 53 Stat. 590-91; vom Baur, Fifty Years of Government Contract Law, 29 Fed. B.J. at 319-20; 2 Amer. Mil. History 75-76 (Maurice Matloff ed. 1996), available at www.history.army.mil/books/amh-v2/amh% 20v2/index. htm; Withrow, The Control of War Profits in the U.S. & Canada, 91 U. Pa. L. Rev. at 206-07; Navy Dep't, Bureau of Yards and Docks, Some Commentaries on Cost-Plus-Fixed-Fee Contracts With Particular Reference To U.S. Navy Contracts under the Bureau of Yards and Docks in Gov't Constr. Contracts 9-10 (1940); Office of the Gen. Counsel, Dep't of the Navy, Navy Contract Law 3 (1949). The Navy promptly awarded such contracts which provided:

ARTICLE 7.... The rental compensation for items of plant and equipment owned or controlled by the Contractors shall be calculated on the basis of cost to the Contractors with no allowance for profit. [Emphasis added]

Attached to the contracts was a Cost and Rental Schedule for plant and equipment providing:

It is not unusual for a contractor to undertake work for less than an equitable fee, if he can arrange for the use of the plant owned by him at rentals that represent a profit to him. To avoid this situation, compensation for the use of contractor's equipment should be on the basis of cost to him, with **no** allowance for profit, if plant rentals are to be kept free from any influence on the general fee to be paid for his services. [Emphasis added]

During hearings before the Senate Committee on Naval Affairs, Admiral Morrell, Chief of the Bureau of Yards and Docks, testified with respect to equipment rentals:

The underlying principle is that a contractor who is doing a piece of work for us must make no profit from his equipment. His equipment must be rented to us at what we consider to be the cost to the contractor. [Emphasis added]

ADM Morrell added that "[w]e agree to pay the contractor a rental for his equipment without allowing any profit" (emphasis added.) Graske, The Law of Gov't Defense Contracts at 124-25; Navy Dep't, Bureau of Yards and Docks, Some Commentaries on

Cost-Plus-Fixed-Fee Contracts with Particular Reference To U.S. Navy Contracts under the Bureau of Yards and Docks at 13-15, 27, 36, 40; Navy Dep't, Bureau of Yards and Docks, Notes on the Use of the Cost-Plus-A-Fixed-Fee Form in Gov't Constr. Contracts 22, 27, 63, 74, 80 (1943).

After Germany invaded Denmark, Norway, Netherlands, Belgium, Luxembourg and France, Congress appropriated more than \$970 million for the purchase, replacement, and modernization of military equipment and speeding up of all existing and new military contracts awarded, including the furnishing of Government-owned facilities at privately owned plants. Nat. Defense Act of 13 June 1940, 54 Stat. 365, 368; Naval Expansion Act of 14 June 1940, 54 Stat. 394-95; First Supp. Nat. Defense Appropriation Act, 54 Stat. 599, 602-03, 610. On 28 June 1940, in a further act to expedite the national defense (which was commonly referred to as the "Speed-Up Act"), 54 Stat. 676, Congress created another exception to the requirement that government contracts be advertised and bid. It authorized the Navy to negotiate contracts for the acquisition, construction, repair, or alteration of complete naval vessels or aircraft or any portion thereof when the Navy determined "the price is fair and reasonable." 54 Stat. 677. Four days later, Congress enacted additional legislation granting the Secretary of War authority similar to that of the Navy Secretary. 54 Stat. 712.

In August 1940, the War Secretary requested the Comptroller General issue an opinion on whether the Department may legally enter into a contract for delivery of aircraft providing the cost of additional new plant facilities requisite to performance is included in the price the government pays for the aircraft and, for payment purposes, such part of the price shall be segregated. In response, the Comptroller General stated that the War Secretary is expressly authorized by the act of 2 July 1940, to provide "for the necessary construction, etc., of plants, buildings, facilities, etc., for the development, manufacture, maintenance and storage of military equipment, munitions and supplies, including Government-owned facilities at privately owned plants and the expansion of such plants" and enter into such contracts as he may deem necessary to carry out such purposes. He added the Act of 28 June 1940 recognizes the contract price may include cost of additional equipment and facilities required and, "in effect, authorizes and requires the segregation of such additional costs from the balance of the contract price for the purpose of determining excess profits under...the Vinson-Trammel Act." 20 Comp. Gen. 95. Within days of the Comptroller General issuing his decision, the Treasury Department jointly issued with the Navy and War Departments a revised regulation for the Vinson-Trammel Act, which was referred to as "Treasury Decision 5000," 1940-2 C.B. 397. Rockwell Int'l, 96-1 BCA ¶ 28,057 at 140,103-04; Paul M. Trueger, Accounting Guide for Defense Contracts 1 (3rd ed. 1960). With respect to calculating a contractor's cost and profit, Treasury Decision 5000 provided:

Sec. 26.8...In the case of a contract made on a cost-plus-a-fixed-fee basis the total contract price is the

actual, rather than the estimated, cost of performing the contract plus the stipulated fee and any other amounts received by the contracting party for performing such contract.

For the purposes of the act and these regulations, the contract price of a contract or subcontract shall be reduced by the part of the cost of special additional equipment and facilities acquired by the contracting party and chargeable against the contract or subcontract in pursuance of a certification made by the Secretary of the Department concerned in accordance with the provisions of section 4 of the act. See Executive Order No. 8465 and Joint Rules issued under such order (I.R.B. 1940-30, 15).

T.D. 5000, 76 Treas. Dec., Int. Rev., No. 7 at 21 (15 Aug. 1940). Both Congress and the Executive Branch, therefore, were attempting to ensure compliance with statutory limits on profits for supply and service cost-reimbursement contracts by providing for the segregation of additional equipment and facilities acquired and chargeable against the contract from the cost base used to determine the percentage of profit earned by the contractor. Such action was consistent with the policy set forth by the interdepartmental conference during World War I that all contract profit was to be figured as part of the contract fee (not hidden in the costs of equipment rental, equipment and plant acquisition cost for the account of the government, etc.) and thus be readily ascertainable by the government's auditors and other officials.

To finance complete plants, additional capacity or equipment for performance of defense supply contracts during World War II, the government relied on five methods. The first (GOCO) was to build plants itself with appropriations when items being made were deemed too risky financially by private enterprise and use a contractor to operate the plant, similar to the agency contracts of World War I. See, e.g., 5 Fed. Reg. 4391-93 (summary of Hercules smokeless powder plant GOCO contract), 4393 (summary of Gadsden, Alabama Ordnance Plant GOCO contract with Lansdowne Steel); Fed. Cartridge Corp. v. United States, 111 Ct. Cl. at 373-74, available at 1948 U.S. Ct. Cl. LEXIS 54, 3-4. The second method, the one the government most desired be used, was that employed traditionally, i.e., to have a contractor use its own funds to acquire new facilities, hold title to those facilities and privately operate the facilities with the contractor receiving no direct reimbursement for the cost of the facility other than through the normal expensing of depreciation. Under the third financing method developed to promote private bank participation, a business (in conjunction with the award of a government supply contract) (a) entered into a separate Emergency Plant Facility contract with the government listing on Schedule A all new facilities to be acquired and providing for reimbursement of the costs of the new facilities over 60 months on facility completion, and (b) then borrowed funds necessary to pay for its

acquisition of the new facilities from a private bank after legally assigning to that financing institution its claim to government reimbursement. Article 6 of the standard EPF contract ("Determination of Costs") expressly provided "[t]he true cost of the facilities provided for hereunder to be paid by the Department shall not include any profit to the contractor." (Emphasis added) E.g., 5 Fed. Reg. 4147 (1940); Lake Erie Eng'g Corp., 268 F.2d at 341 (EPF contract with Navy provided contractor was to finance and construct needed facilities at its own expense and be reimbursed in 60 installments, but make no profit); Shaffer, 128 Ct. Cl. at 306, 337, 340, 121 F. Supp. at 659; Irving Trust Company, Emergency Plant Facilities Contract to Expedite Nat. Defense at 1-2 (1940); see generally 5 Fed. Reg. 5200-03 (Nov. 1940 War Dept. EPF contract for plant addition to make gages); 6 Fed. Reg. 182-85 (Oct. 1940 War Dept. EPF contract with Bell Aircraft for new plant), 186 (Dec. 1940 Navy Dept. EPF contract with Fairchild Engine & Airplane for plant addition and equipment). The fourth method of financing was a business (in conjunction with the award of a government supply contract) entering into a separate contract with the Defense Plant Corporation, a subsidiary of the Reconstruction Finance Corporation whereby DPC reimbursed the business for the full "cost" of the facility, held title to the facility, and leased the facility to the business for a nominal rent if the facility was being used solely for government work (with the DPC being reimbursed over time for the facility costs from the procuring agency's appropriations). The business, therefore, received "no profit" on the cost of the facility acquired from DPC or any other part of the government. 47 Stat. 5-12; 52 Stat. 212-13; 54 Stat. 572, 573; U.S. Navy Dep't Office of the Gen. Counsel, Navy Contract Law at 233-34 (1949); John Desmond Glover, Defense "Lending": 1918 and 1941, 19 Harv. Bus. Rev. 197, 205; Jules M. Lipton, Contractual Arrangements Covering the Use of Gov't Property by Defense Contractors, 32 Fordham L. Rev. 217, 218 (1963); see RFC v. Beaver County, PA, 328 U.S. 204, 206-07 (1946). The fifth and last method of financing was a "facilities contract" under which industrial installations and machine tools were constructed or acquired by a contractor on a straight "cost reimbursement" basis with funds appropriated by Congress to the Executive. Typically, the contractor constructed or purchased the facilities and was reimbursed "allowable costs" as the work progressed. While title vested in the Department as facilities were acquired, the contractor could use those facilities for both government and private work, but was required to give priority to the former. U.S. Navy Dep't Office of the Gen. Counsel, Navy Contract Law at 239-40 (1949); accord Thomas E. Jenks, Tax Problems of Wartime Plant Expansion, 10 L. & Contemp. Probs. 149, 162 (1943). A typical "facilities contract" entered into by the Department of the Navy provided, in relevant part, as follows:

(c) The true cost of the facilities provided for hereunder to be paid by the Department shall not include any profit to the Contractor.

Shaffer, 128 Ct. Cl. at 337, available at 1954 U.S. Ct. Cl. LEXIS 135, 73-80 (findings); see, e.g., California v. United States, 132 Ct. Cl. 154, 132 F. Supp. 208 (1955) (Navy facilities contract with Bethlehem Steel Corp. providing for expansion of shipyard); 6 Fed. Reg. 2398 (Navy contract with General Electric Corp. (Erie) for acquisition and installation of additional equipment to be "done at actual cost without profit to the Contractor."). Thus, under all five methods of financing acquisition of facilities, the contractor did not receive "profit" on the cost of facilities acquired for account of the government.

In addition to providing a contractor with facilities under facilities contracts, the Executive sometimes furnished facilities to contractors under "supply" contracts. E.g., 7 Fed. Reg. 6139 (1942) ("Plan V: Government Ownership Supply Contract"). War Department PR 3 § 332 set forth a standard clause to be included in contracts where a contractor is to procure necessary facilities for the account of the government for use in connection with the work under the contract, and in those cases where the government furnishes the contractor new facilities which the government directly has acquired or will acquire. The clause stated in pertinent part:

Government-Owned Facilities. (A) In connection with its work under this contract, the contractor shall, within the shortest practicable time, acquire or manufacture for the Government's account the facilities listed in Schedule "A" attached hereto, the estimated costs of which are therein stated....Such facilities shall be installed by the contractor in its plant or plants, or, if approved in writing by the contacting officer, in the plants of subcontractors....

- (B) Upon inspection and acceptance of the facilities by the contracting officer, and upon the contractor's furnishing satisfactory evidence that it has made payment or incurred the costs as the case may be, the Government shall reimburse the contractor for the actual costs of Schedule "A" facilities, approved by the contracting officer. The term "actual costs", as used in this Article, means the following:
- (1) For facilities procured by the contractor from sources other than its own manufacture:
 - (a) The net invoice price to it of the facilities;
- (b) The costs of transportation, *Provided*, That no costs of transportation shall be separately reimbursed when the invoice price reimbursed under (1) (a) hereof includes the costs of transportation;
 - (2) For facilities manufactured by the contractor:
- (a) The net invoice price to it of all direct materials required in manufacture;

- (b) The costs of transportation, *Provided*, That no costs of transportation shall be separately reimbursed when the invoice price reimbursed under (2) (a) hereof includes the costs of transportation;
- (c) The costs to it of all direct labor required in manufacture;
- (d) An amount equal to ___ per cent of item (2) (c) hereof as an allowance for all overhead and administrative expenses. The contractor represents, based on experience, that this amount does not include any element of profit, and represents no more than actual costs allocable to manufacture. [Emphasis added]

8 Fed. Reg. 14153-54. Accordingly, even when facilities were furnished or to be acquired under a supply contract, a standard clause provided the contractor was only to be reimbursed for the "cost" of such facilities and not receive profit on the acquisition cost. *Id*.

Eleven days after the Japanese attack on Pearl Harbor, Congress enacted the first War Powers Act, Pub. L. No. 77-354, 55 Stat. 838, bestowing on the President power to authorize an agency to enter into contracts without regard to provisions of law relating to making, performance, amendment, or modification of contracts whenever he deemed such action would facilitate prosecution of the war, provided the Act not be construed as authorizing use of cost-plus-a-percentage-of-cost contracting or entry into a contract violating existing profit limitations. 55 Stat. 839. On 27 December, by Executive Order 9001, President Roosevelt delegated to the Secretaries of War and Navy, and Maritime Commission, the sweeping powers vested in him by the Act.

After World War II, agencies did not wish to return to the "archaic forms of pre-war procurement." Congress, however, was suspicious of any form of procurement other than traditional advertised competitive bidding. During February 1948, Congress enacted the Armed Services Procurement Act of 1947 (ASPA), Pub. L. No. 80-413, 62 Stat. 21 (1948) (codified in 10 U.S.C. § 2301, et seq.) providing a comprehensive framework for procurement by the military (including NASA's predecessor, the National Advisory Committee for Aeronautics). 62 Stat. 21. ASPA stated that "[a]ll purchases and contracts for supplies and services shall be made by advertising,...except that such purchases and contracts may be negotiated" if one of 17 circumstances exist. 62 Stat. 21-22. With respect to negotiated contracts, ASPA essentially followed the practices used during the War. Section 4 of the Act stated negotiated contracts may be of "any type" but "the cost-plus-a-percentage-of-cost system of contracting shall not be used, and in the case of a cost-plus-a-fixed-fee contract the fee shall not exceed 10 per centum of the estimated cost of the contract, exclusive of the fee." 62 Stat. 23.

ASPA did not contain a specific provision on issuance of regulations, but the Court of Claims held that the comprehensive terms of the Act, buttressed by general statutory sections authorizing the Defense and Service Secretaries to adopt directives and regulations in their fields of competence, including procurement, authorized the promulgation of the Armed Service Procurement Regulation. G.L. Christian & Assocs. v. United States, 320 F.2d 345 (Ct. Cl. 1963) (rehearing motion); Ernest F. Leathem, Defense Procurement – A Complex of Conflicts and Tensions, 5 Boston College L. Rev. 1, 5 (1963), available at http://lawdigitalcommons.bc.edu/bclr/vol5/iss1/1.

ASPR Part 412 stated:

It is the general policy of the Armed Services that contractors will furnish all facilities required for the performance of Government contracts. However, subject to and within the limitations of existing authority, facilities may be provided by the Government for use by Contractors when such providing is considered necessary to meet essential production or program schedules or when otherwise considered...to be in the best interest of the Government.

ASPR 412.102-3 (1951). According to Part 412, "[i]ndustrial facilities shall be provided only under a facilities contract separate from any related contract for supplies or services, except that industrial facilities may be provided under suitable clauses in a supply or service contract" under specific circumstances, including when "the contract is for the performance of work within establishments or installations operated by the Government." ASPR 412.402. Part 412 defined "Facilities Contract" simply as "a contract under which industrial facilities are provided by the Government for use in connection with the performance of a separate contract or contracts for supplies or services." ASPR 412.101-3 (1951).

Within four years of the promulgation of ASPR Part 412, Part 412 and other parts of ASPR received new numbers in Title 32 of the Code of Federal Regulations. "Part 412 – Government Property" became "Part 13 – Government Property." *Compare* 32 C.F.R. § 412.000 (1954 rev.) with 32 C.F.R. § 13.000. More importantly, DoD revised the definition of "Cost contract" set forth in ASPR to include two "illustrative situations" in which the use of this type of contract might be appropriate. The second such situation was "Facilities contracts," thereby expressly stating DoD continued to contemplate that facilities acquired for the account of the government on a facilities contract would be at "cost" with "no profit." ASPR 3.404-1 (Rev. No. 4, 1955 ed.).

From 1955 through 1961, DoD promulgated modifications to ASPR Part 13, but did not significantly alter the regulatory provisions discussed. *Compare* ASPR 13.101-6, 13.101-8, 13.102-3, 13.402, 13.403 (1955 rev.) with ASPR 13.101-6, 13.101-16,

13.102-3, 13.402, 13.403 (1961 rev.); see 25 Fed. Reg. 14076, 14279 (29 Nov. 1960). A fourth exception was added to ASPR 13.402(a), stating facilities may be provided in a supply or service contract if "the contract is for the performance of services, involving the operation of a Government-owned plant or installation for a specified period of time and the facilities provided are to be used only in connection with such contract." 23 Fed. Reg. 3633 (27 May 1958). The Air Force had its own regulations specifically addressing "facilities." As of 1 October 1957, the Air Force Procurement Instruction provided that "[w]here industrial facilities are to be provided a contractor under the circumstances set forth in ASPR 13-402(a), the supply, service, or research and development contract (procurement) will provide" —

- (a) Facilities in Cost-Type Procurement Contracts.
- (1) Where existing facilities are to be furnished under the terms of a cost-type procurement contract, no separate clauses covering such facilities are required other than the Government furnished property clause.... The items of facilities will be listed and specified in the schedule as Government-furnished property.
- (2) Where the acquisition or fabrication of facilities is authorized in a cost-type contract, the following clause will be set forth in the schedule. The facilities authorized will be listed following the clause, and the maximum cost of each set forth.

FACILITIES ACQUIRED OR FABRICATED Subject to the approval of the [CO], the Contractor may acquire or fabricate the facilities hereafter listed at costs not to exceed those specified. Costs incurred therefor, if not in excess of those specified in the following list, will be allowable costs, but no fee will be paid thereon. The facilities so acquired or fabricated shall be considered Government property and subject to the provisions of the Government property clause of this contract.

- (b) Facilities in Fixed-Price Procurement Contracts.
- (1) Where existing facilities are to be furnished under the terms of a fixed-price contract, no separate clauses covering such facilities are required other than the Government-furnished property clause.... The items of facilities will be listed in the schedule as Government-furnished property.
- (2) Where the acquisition or fabrication of facilities is authorized in a fixed-price contract:

(A) The general provisions of the contract will be designated "Section I," and the following clause will be set forth in the schedule. The facilities authorized will be listed following the clause and the maximum cost of each set forth.

FACILITIES ACQUIRED OR FABRICATED

Subject to the approval of the [CO], the Contractor may acquire or fabricate the facilities hereafter listed at costs not to exceed the costs specified in that list. The Contractor shall be reimbursed for costs incurred therefor in accordance with the General Provision hereof entitled "Reimbursement." Such facilities and the acquisition or fabrication thereof shall be subject to the provisions of both Section I and Section II of General Provisions of this contract....

(B) In addition to the clause set forth in subparagraph (A) above, the following will be included in the contract as General Provisions, Section II:

II-1 REIMBURSEMENT

(a) Upon inspection and acceptance by the [CO] of the facilities specified in the Schedule, the Government will pay to the Contractor the costs thereof as determined in accordance with...Section XV [Cost Principles] of the [ASPR]....

(d)The Contractor represents that the costs to be incurred and for which it will be reimbursed under this clause are not and will not be included as an element of cost under any other provision of this contract or any other contract with the Government or suppliers of the Government, and do not include any allowance for profit or fee.

Air Force Procurement Instruction ¶ 13-402 at 1320, 1321 (1947) (emphasis added). While the Air Force promulgated a revised Instruction ¶ 13-402 in both February of 1958 and 1959, the instruction continued to provide that (1) the Clause "FACILITIES ACQUIRED OR FABRICATED" required to be included in the schedule of cost-type contracts states "no fee" will be paid or payable on costs incurred in either acquiring or

fabricating facilities and (2) paragraph (d) of Clause II-1 "REIMBURSEMENT" required to be included in fixed-price type contracts states the contractor represents that costs to be incurred "do not include any allowance for profit or fee." AFPI ¶ 13-402 at 1320.1 (1958); AFPI ¶ 13-402 at 1322, 1322.1, 1322.2 (1959). During August 1959, the Air Force deleted existing AFPI ¶ 13-402, and added a new AFPI ¶ 13-402 (Separate facilities contract) providing "[i]f additional facilities are to be acquired or fabricated under a service contract under which a Government-owned plant or installation is operated, the requirements of ¶ 1013-402.50 will be complied with." Newly added AFPI ¶ 1013.402-50 (Provisions applicable to procurement contracts) stated:

FACILITIES ACQUIRED OR FABRICATED

Subject to the approval of the [CO], the Contractor may acquire or fabricate, the facilities hereafter listed. Costs incurred therefor will be allowable costs, provided that the contractor shall have no obligation to acquire or fabricate facilities and the Government will have no obligation to reimburse any amount for such facilities in excess of the total estimated facilities cost set forth herein, unless this contract is amended to increase such amount. No fee will be payable based on the cost of facilities acquired or fabricated hereunder. [Emphasis added]

24 Fed. Reg. 7006 (29 Aug. 1959).

During 1960, the Comptroller General advised the Army that GAO had examined the procurement of industrial facilities and special tooling by Chrysler Corporation under cost-plus-a-fixed-fee contracts and found it incurred unnecessary costs because Chrysler was allowed fees under the contracts based upon estimated costs of industrial facilities when the facilities could have been procured under a cost-reimbursable, no-fee facilities contract in accordance with ASPR. 1960 U.S. Comp. Gen. LEXIS 2443, B-133304 (Oct. 31, 1960). The Comptroller General, therefore, also deemed the government's regulatory policy to be that contractors acquiring facilities for the government's account were not to receive "profit" on the cost of those facilities. *Id*.

During February 1965, DoD significantly revised ASPR Part 13. Compare 30 Fed. Reg. 1744-49 with 32 C.F.R. §§ 13.000 – 13.506 (1955). The revision stated it was DoD policy contractors furnish all facilities, except the Government may provide facilities when necessary to obtain contract performance or the furnishing of existing Government-owned facilities was likely to result in a substantially lower cost to the Government of items produced. ASPR 13.301(a), (b), 30 Fed. Reg. 1746 (9 Feb. 1965). With respect to use of facilities contracts, ASPR 13.303, similar to ASPR 13.402(a) (1958), stated:

- (a) Except as provided in paragraph (b) of this section, facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract.
- (b) Facilities may be provided to a contractor under a contract other than a facilities contract when:
- (1) The cumulative total acquisition cost (actual or estimated) of the facilities provided to the contractor at one plant or general location does not exceed \$50,000;
 - (2) The contract is for construction;
- (3) The contract is for the performance of work within an establishment or installation operated by the Government; or
- (4) The contract is for the performance of services involving the operation of a Government-owned plant or installation and the facilities provided are to be used only in connection with such contract, which shall to the extent practicable, contain the clauses in Subpart G, Part 7 of this chapter. [Emphasis added]

30 Fed. Reg. 1746 (1965). Most importantly, however, a new ASPR 13.104 entitled "Profits and fees" expressly stated: "No fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104, 30 Fed. Reg. 1746 (emphasis added).

While DoD amended ASPR Part 13 between 1965 and 1970, the 1965 facilities provisions discussed were not significantly changed. *E.g.*, 30 Fed. Reg. 12009 (1965), 33 Fed. Reg. 274 and 33 Fed. Reg. 10198 (1968); *compare* 30 Fed. Reg. 1744 *with*, *e.g.*, 32 C.F.R. Part 13 (1967-1970). Similarly, during the same period, the Air Force modified some Instructions, but AFPI ¶ 1013.402-50 continued to require inclusion of clauses in facilities contracts stating "[n]o fee will be payable based on the cost of facilities acquired or fabricated hereunder" and "the costs to be incurred and for which it will be reimbursed under this clause...do not include any allowance for profit or fee." *Compare* 24 Fed. Reg. 7006 (29 Aug. 1959) *with* ASPR 1013.402-50(a), (b) (1968). From 1970 through 1977, there was no significant change in ASPR 13.104 and 13.303. In sum, ASPR continued to state "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except as specified in the ASPR and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104, 13.303(a) (1976).

While DoD "redesignated" the ASPR as the DAR in 1978, from 1978 through 1983, the DAR continued to provide "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except as specified in the

DAR and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." DAR 13.104, 13.303(a) (1983).

In 1983, DoD, NASA, and the General Services Administration created a new Federal Acquisition Regulation (FAR), effective 1 April 1984, in Title 48 of the Code of Federal Regulations replacing the DAR. 48 Fed. Reg. 42102 (1983); FMC Corp. v. United States, 853 F.2d 882, 884 n.2. Similar to ASPR and DAR 13.104 and 13.303, the FAR specified facilities be furnished by the Government to a contractor only under a facilities contract, except as otherwise provided in the FAR, and that "no fee" shall be allowed under a facilities contract. FAR 45.302-2 (1984), 48 Fed, Reg. 42102. It also specified, similar to ASPR and DAR 13.303, Facilities "may be provided to a contractor under a contract other than a facilities contract when -.(3) [t]he contract is for services and the facilities are to be used in connection with the operation of a Government-owned plant or installation; or (4) [t]he contract is for work within an establishment or installation operated by the Government." FAR 45.302-3 (1984). With respect to "cost contracts," the FAR, again similar to the DAR and ASPR, stated "[a] cost contract is a cost-reimbursement contract in which the contractor receives no fee" and "[a] cost contract may be appropriate for...facilities contracts." FAR 16.302 (1984), 48 Fed. Reg. 42102. Thus, the FAR continued to reflect the rule established during World War I that contractors were not to receive profit on facilities acquired for government account to be used in performing a government contract.

During March 1986, after conducting a review of the manner in which contractors acquire government-furnished equipment (GFE), GAO testified before Congress that inadequate FAR instructions, "especially for service contractors," were among "factors impeding DoD's policy implementation" with respect to GFE. GAO stated that, while facilities contracts existed allowing the government to reimburse a contractor only for the actual cost of equipment with "no add-ons for profit or fees," some government officials were ignoring the requirement to obtain facilities under such contracts and allowing contractors to acquire new plant equipment under supply or service contracts, which allow contractors to add profits or fees to the purchase price. GAO added that, while FAR can be applied to service contractors, "DOD and service directives implementing FAR are silent on this topic." GAO, The Department of Defense Has Not Minimized the Amount of Equipment It Provides to Contractors at 1, 5, 11, 17, 23, 24, 28, 30-31 (20 Mar. 1986), available at http://gao.justia.com/department-of-defense/1986/3/. GAO recommended DOD establish firm equipment-acquisition guidelines for service contractors and better enforce the existing FAR on equipment acquisitions. Id. at 39-40.

Eight months later, in November 1986, the Under Secretary of Defense for Acquisition issued to the Secretaries of the Military Departments and directors of Defense Agencies a memorandum stating:

The GAO and DoDIG have found examples where contractors have received a profit when acquiring equipment

for the government's account. Industrial facilities are normally to be provided on a cost reimbursable no-fee facilities contract. The FAR policy of providing facilities on a no-fee facilities contract must be followed by DoD components.

The Under Secretary added that "[a]ctions that need to be taken range from...placing more discipline into the implementation of existing policies, to revising the [FAR]." Office of the Inspector General, DoD Audit Report No. 87-140, Appx. D at 1, 3, 5, 7 of 7 (6 May 1987).

In May 1987, DoD's IG issued a final report, No. 87-140, finding "contracting officials inappropriately awarded fees totaling \$2.8 million to [DoD] contractors at 18 of 33 government-owned contractor-operated plants for facilities acquired on other than facilities contracts." The IG stated, "when facilities are acquired under supply, service or production type contracts," no fee or profit should "be awarded on the facilities portion of the contract." The IG recommended FAR be modified to "expressly prohibit" payment of fee or profit on that portion of any contract, regardless of type, under which facilities are acquired. Office of the Inspector General, DoD Audit Report No. 87-140 at 1, 3, 7 and Audit Report Transmittal Memorandum at 1 (6 May 1987).

In December 1990, DoD, NASA, and GSA amended the FAR (via Federal Acquisition Circular 90-3) by adding the following paragraph to FAR 45.302-3:

(c) No profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract.

FAC 90-3, Item 35 stated:

The [GAO] and the [DoD] Inspector General studies have found that contractors are being paid fee or profit for facilities acquired for the Government when other than facilities contracts are used. The regulations clearly prohibit payment of this kind on facilities contracts but do not address this prohibition when other than facilities contracts are used to purchase facilities. The policy is that regardless of the type of contract used, fee or profit will not be paid for facilities purchased for the account of the Government. FAR 45.302-3(c) is added to clarify this policy. [Emphasis added]

55 Fed. Reg. 52782 (1990).

Eight years after promulgation of FAR 45.302-3, SGS and NASA entered into the J-BOSC. Thus, when they entered into their multi-year contract valued at potentially more than two billion dollars, it had been government policy for over 80 years to not pay profit or fee on the acquisition of equipment for the account of the government to be used in performing a government contract.

2. As a Matter of Law, SGS Charged With Knowledge of FAR Profit Prohibition

The two most recent iterations of the prohibition against fee or profit on facilities purchased for account of the government and use in performing a government contract, FAR 45.302-2 (1984) (no fee allowed under a facilities contract) and FAR 45.302-3(c) (no fee allowed under "other than a facilities contract") both appeared in the Federal Register when promulgated. 48 Fed. Reg. 42102 (1984), 55 Fed. Reg. 52782 (1990). Publication in the Federal Register constitutes constructive notice. 44 U.S.C. § 1507; Federal Crop Ins. Corp. v. Merrill, 332 U.S. 380, 384-85 (1947); Lynsky v. United States, 130 Ct. Cl. 149, 153, 126 F. Supp. 453, 456 (1954). Thus, after their publication in the Federal Register, SGS and all other contractors seeking government contracts are deemed to have been on notice of the FAR prohibitions against profit or fee on facilities purchased for the account of the government and use by the contractor in performing a government contract even if they were otherwise unaware of the long-standing regulatory prohibition at the time NASA awarded SGS's contract. See Porter v. United States, 204 Ct. Cl. 355, 366, 496 F.2d 583, 590 (1974), cert. denied, 420 U.S. 1004 (1974); Winston Bros. Co. v. United States, 198 Ct. Cl. 37, 44-45, 458 F.2d 49, 52-53 (1972).

3. <u>Knowledge Each Party Has of Other's Intended Meaning</u> Considered to Determine If Acquiescence in One Meaning

While SGS asserts that the term "equitable adjustment" used in the Changes clause mandates payment to it of "profit" on costs of facilities it acquired for the government's account and use by it in performing contract work, the knowledge each party possesses regarding the intended meaning of a contract provision by the other party to the contract is to be considered in construing the contract. *Lykes-Youngstown Corp. v. United States*, 190 Ct. Cl. 348, 363, 420 F.2d 735, 743-44 (contract is to be read in light of declared policy communicated to contractor since contractor entered contract with knowledge and is deemed to have acquiesced), *cert. denied*, 400 U.S. 865 (1970); *Perry and Wallis*, 192 Ct. Cl. 310, 316, 427 F.2d 722, 726 (knowledge each of the parties had as to intended meaning of other party must be considered); *Overseas Navigation Corp.*, ASBCA No. 10438, 65-2 BCA ¶ 5192 (although not a part of contract by incorporation or attachment thereto, contract is to be construed in light of government directive known to contractor). SGS, a sophisticated contractor performing a multi-year cost-plus contract with a potential value exceeding \$2 billion, is charged with knowledge of government

regulations (current and former) published in the Federal Register spanning over half a century which prohibit the payment of profit or fee on facilities acquired for government account and use by the contractor in performing work under a government contract. 44 U.S.C. § 1507; Federal Crop Ins., 332 U.S. at 384-85; Winston Bros., 198 Ct. Cl. at 44-45, 458 F.2d at 52-53. There is nothing in the record here showing SGS objected to the government's longstanding policy of not paying profit on the cost of facilities or otherwise expressed any disagreement with the government-wide regulatory prohibition "prior to entering into" the J-BOSC with NASA. A party who willingly, and without protest, enters into a contract with actual or imputed knowledge of the other's interpretation of it is bound by such interpretation and cannot later claim that it thought something else was meant. Perry and Wallis, 192 Ct. Cl. at 315, 427 F.2d at 725; Lockheed Aircraft Corp. v. United States, 192 Ct. Cl. at 44, 426 F.2d at 326 (1970); accord United States v. Human Resources Mgmt., Inc., 745 F.2d at 649 (contractor aware of government interpretation when entering into contract, acquiesced in that interpretation and is bound by that interpretation); Jet Forwarding, Inc., v. United States, 194 Ct. Cl. 343, 346, 437 F.2d 987, 988 (1971) (party knowing meaning his opposite gives to an agreement to be consummated is bound by that understanding unless party speaks up). The Court of Claims stated in Cresswell v. United States, 146 Ct. Cl. 119, 127, 173 F. Supp. 805, 811 (1959) that:

If one party to a contract knows the meaning that the other intended to convey by his words, then he is bound by that meaning. The same is true if he had reason to know what the other party intended.

Accord Lykes-Youngstown, 190 Ct. Cl. at 363, 420 F.2d at 743-44; Sun Shipbuilding & Dry Dock Co. v. United States, 183 Ct. Cl. 358, 376-77, 393 F.2d 807, 817-18 (1968). Thus, when entering into the J-BOSC, SGS (a) knew (as a matter of law) of the government's interpretation that profit or fee on purchase of facilities for account of the government and use by the contractor in performing a government contract was barred by regulation, (b) acquiesced in the government's longstanding interpretation by failing to express any type of objection to the interpretation, and (c) is bound by that interpretation and cannot now successfully advance a differing interpretation. E.g., Perry and Wallis, 192 Ct. Cl. at 315, 427 F.2d at 725.

In a case analogous to these appeals, a contractor sought "unearned profit" as part of an "equitable adjustment" for a change – an improper default termination deemed by the Court of Claims to be a deductive change in quantity. The Court denied recovery of such profit upon the ground that experienced government contractors were certainly aware, and inexperienced government contractors charged with making themselves aware, of the government's longstanding policy that an equitable adjustment does not encompass anticipated but unearned profits. *Gen. Builders Supply*, 187 Ct. Cl. 477, 484-85, 409 F.2d 246, 250-51 (1969). Thus, even if we were to ignore that SGS is

legally charged with notice of FAR 45.302-3(c) prior to its entry into the J-BOSC, binding precedent precludes our acceptance of SGS's contract construction. See id.; Timber Access Indus. Co. v. United States, 213 Ct. Cl. 648, 656-57, 553 F.2d 1250, 1253-55 (1977) (Forest Service manual so commonly known it was tantamount to a trade usage and a knowledgeable contractor would have been aware of its contents.); Overseas Navigation, 65-2 BCA ¶ 5192.

4. FAR Profit Prohibition Has Force of Law

SGS appears to challenge the legal effect of FAR 45.302-3. It contends the language of the regulation cannot apply to it or bind it unless expressly a term of its contract. (App. supp. reply br. at 2-3; app. supp. br. at 1, 7; app. br. 11-13) In sum, SGS argues a federal procurement regulation cannot apply to it or the J-BOSC due to lack of express incorporation or inclusion of that regulation in the NASA contract.

Seventy years ago, procurement regulations were viewed as "proprietary" and not having the force and effect of law. They were deemed to create duties to the government alone, and characterized as instructional guideposts intended to keep the government's own house in order. E.g., Perkins v. Lukens Steel, 310 U.S. 113 (1940); Penn Dairies v. Milk Control Comm'n, 318 U.S. 261 (1943); accord Flying Tiger Line, Inc., ASBCA No. 2060 (1954) (contract not open to scrutiny where there is compliance with regulations promulgated for the guidance of procurement officials). Under this view of procurement regulations, rules set forth in such regulations were not binding on contractors unless they were expressly set forth in their contract. This was true even though it was established that properly authorized government regulations had the "force and effect of law." E.g., United States v. Eliason, 41 U.S. 291, 302 (1842). Regulations relating to procurement simply were treated differently, as proprietary instructions to contracting personnel for the government's own use and benefit. See generally, Perkins, 310 U.S. at 127-28; Hartford Accident & Indemnity Co. v. United States, 130 Ct. Cl. 490, 492-93 (1955).

The different treatment of procurement regulations, however, began to change in the mid-1950s. In Leslie Miller, Inc. v. Arkansas, 352 U.S. 187, 188-89 (1956), the Supreme Court held subjecting a federal contractor to licensing requirements imposed by state statute would frustrate the federal policy of selecting the lowest responsible bidder set forth in ASPR and "conflict with the federal law regulating procurement" (emphasis added). Two years later, in Pub. Utilities Comm'n of Cal. v. United States, 355 U.S. 534, 542 (1958), the Court stated that Army, Navy, and Air Force regulations governing the procurement of services to ship property "have the force of law." In 1963, in another case similar to Penn Dairies involving state regulation of the price of milk being sold the military, Paul v. United States, 371 U.S. 245, 255 (1963), the Supreme Court expressly held that the ASPR had "the force of law" and overrode inconsistent state statutes.

Procurement regulations, such as the FAR, therefore, are no longer considered guideposts or instructions that must be expressly set forth in a contract to be binding on a contractor. Rather, for nearly half a century, the FAR and other procurement regulations have been deemed to have the "force and effect of law" if validly authorized and not inconsistent with any statute, and are the law which governs the award and interpretation of a contract as fully as if made a part of the contract. See SCM Corp. v. United States, 227 Ct. Cl. 12, 32, 645 F.2d 893, 904 (1981); Chris Berg v. United States, 192 Ct. Cl. 176, 182, 426 F.2d 314, 317 (1970); Schoenbrod v. United States, 187 Ct. Cl. 627, 634, 410 F.2d 400, 403 (1969); G.L. Christian & Assocs., 160 Ct. Cl. 1, 312 F.2d 418, reh'g denied, 160 Ct. Cl. 58, 320 F.2d 345, cert. denied, 375 U.S. 954 (1963). The FAR are binding on government COs, who must abide by them. See Chris Berg, 192 Ct. Cl. at 182, 426 F.2d at 317; Newport News Shipbuilding & Dry Dock Co. v. United States, 179 Ct. Cl. 97, 115, 374 F.2d 516, 530 (1967) (failure to apply profit procedures prescribed by ASPR is an error of law).

a. FAR 45.302-3(c) Is Validly Authorized

When NASA, DoD and GSA, along with OFPP, first promulgated the FAR in 1984, the FAR (similar to ASPR and DAR 13.104 and 13.303) specified facilities be furnished to a contractor only under a facilities contract, except as provided in FAR 45.302-3, and that "no fee" shall be allowed under a facilities contract. FAR 45.302-2(a), (c) (1984), 48 Fed. Reg. 42102. FAR 45.302-3(a)(4) (1984) (similar to ASPR and DAR 13.303) stated that "[f]acilities may be provided to a contractor under a contract other than a facilities contract when — ... (3) The contract is for services and the facilities are to be used in connection with the operation of a Government-owned plant or installation; or (4) The contract is for work within an establishment or installation operated by the Government." FAR 45.302-3(b) also stated simply, "[w]hen a facilities contract is not used, the Government's interest shall normally be protected by using the appropriate Government property clause or...appropriate portions of the facilities clauses." 48 Fed. Reg. 42102. During 1986, GAO testified to Congress that some contracting personnel were ignoring regulatory requirements that facilities be acquired for government account under a facilities contract or, in specified circumstances, under another type of contract containing relevant portions of facilities contract clauses, and permitting contractors to acquire new plant equipment under service and supply contracts that allow contractors to add profit or fee to purchase price. GAO explained FAR provisions concerning GFE (or facilities) could be applied to service and other types of contracts, but a lack of explicit, clear direction regarding their application was resulting in some contracting personnel ignoring the regulatory requirements regarding acquisition of facilities. GAO, The Department of Defense has Not Minimized the Amount of Equipment it Provides to Contractors at 1, 5, 11, 17, 23, 24, 28, 30-31, 39-40, available at http://gao. justia.com/department-of-defense/1986/3/. About one year later, DoD's OIG issued a final report finding contracting officials inappropriately awarded fees totaling \$2.8 million to contractors for "facilities acquired on other than facilities contracts" at 18

GOCO plants. OIG stated, "when facilities are acquired under supply, service or production type contracts," no fee or profit should "be awarded on the facilities portion of the contract." OIG recommended the Under Secretary request modification of the FAR to expressly prohibit payment of fee or profit on that portion of any contract, regardless of type, under which facilities are acquired. OIG, DoD Audit Report No. 87-140 at 1, 3, 7 and Audit Report Transmittal Memorandum at 1 (6 May 1987).

While the IG report was being circulated for comment, the Under Secretary of Defense for Acquisition issued to the Secretaries of the Military Departments and the directors of Defense Agencies a memorandum stating "[s]ervice contracts have accounted for a high percentage in the growth of government-owned property in the possession of contractors," "industrial facilities are normally to be provided on a cost reimbursable no-fee facilities contract," "the GAO and DoDIG have found examples where contractors have received a profit when acquiring equipment for the government's account," and "[t]he FAR policy of providing facilities on a no-fee facilities contract must be followed by DoD components." He added: "[a]ctions that need to be taken range from...placing more discipline into the implementation of existing policies, to revising the [FAR]." Office of the Inspector General, DoD Audit Report No. 87-140, Appx. D at 1, 3, 5, 7 (6 May 1987).

About two years after the OIG Report, in March 1989, the Civilian Agency Acquisition Council and the Defense Acquisition Regulatory Council announced in the Federal Register they were considering changing FAR 45.302-3 because both GAO and DoD's OIG found some contractors were being "paid fee or profit for facilities acquired for the Government when other-than facilities contracts" were used. The Councils stated the government's policy is that, regardless of the type of contract used, fee or profit will not be paid for facilities purchased for the account of the Government, and published a proposed rule, *i.e.* new paragraph (c) to be added to 45.302-3, to clarify the existing "no-profit" policy. 54 Fed. Reg. 12128 ("No profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other-than a facilities contract.").

After receiving comments on the proposed rule, during December of 1990, NASA, DoD, and GSA amended FAR 45.302-3 (via Federal Acquisition Circular 90-3) to add the proposed paragraph (c) stating "[n]o profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract." They stated "the policy is that regardless of the type of contract used, fee or profit will not be paid for facilities purchased for the account of the Government" and FAR 45.302-3(c) is added to clarify this policy. 55 Fed. Reg. 52782 (1990).

The threshold question in analyzing the enforceability of a regulation is whether its promulgation was within the authority granted by Congress. E.g., Adams Fruit Co. v. Barrett, 494 U.S. 638, 649 (1990) (citing Bowen v. Georgetown Univ. Hosp., 488 U.S.

204, 208 (1988)); Westinghouse Elec. Corp., ASBCA No. 25787, 85-1 BCA ¶ 17,910 at 89,697, aff'd, 782 F.2d 1017 (1986). We must ascertain if there is an indication that Congress intended the rule to carry the force and effect of law. United States v. Mead Corp., 533 U.S. 218, 229-33 (2001). "It is of course possible, even common, for agencies to give instructions or legal opinions to their officers and employees in one form or another, without intending to bind the public." United States v. Haggar Apparel Co., 526 U.S. 380, 388 (1999). The first issue in de novo proceedings which presume a foundation of law, such as these appeals, therefore is whether the rule in question is part of that controlling law. Id. at 391.

Paragraph (c) of FAR 45.302-3 was an "addition" to an existing regulation, amending the regulation to clarify that the prohibition against receipt of profit or fee on the cost of facilities acquired for government account set forth in FAR 45.302-2(c) (1984) applies regardless of contract type, i.e., to facilities acquired under a contract other than a "facilities contract" such as a service contract awarded pursuant to FAR 45.302-3(a)(3), (4) (1984). The proposed rule was published in the Federal Register and comments sought regarding its publication. 55 Fed. Reg. 52782 (1990); 54 Fed. Reg. 12128. The notice of the proposed rule amending Part 45 of the FAR stated the authority for Part 45's promulgation was 40 U.S.C. § 486(c), 10 U.S.C. Chapter 137, and 42 U.S.C. 2473(c). 54 Fed. Reg. 12128. (Chapter 137 of 10 U.S.C. appears at 10 U.S.C. §§ 2301 – 2334.) The statutory authorities cited provide, respectively, for GSA, DoD, and NASA to engage in rulemaking regarding contracts they award. 40 U.S.C. § 486(c) (1990) now codified at 40 U.S.C. § 121(c); 42 U.S.C. 2473(c) (1990) now codified at 51 U.S.C. § 20113(a); see United States v. Ga. Pub. Serv. Comm'n, 371 U.S. 285, 289 (1963) (federal procurement regulation issued pursuant to Federal Property and Administrative Services Act of 1949, 63 Stat. 393 has force of law); Paul v. United States, 371 U.S. at 255 (ASPR has force of law); 62 Stat. 21, 23 (1948) (ASPA) codified at 10 U.S.C. § 2306 (1990); 10 U.S.C. § 2303 (1990). Congress thus delegated general authority to all the agencies referenced to make rules regarding contracts carrying the force and effect of law. E.g., Mead Corp., 533 U.S. at 226-27 (delegation of such authority may be shown in a variety of ways, including citation to an agency's power to engage in notice-and-comment rulemaking). It also more specifically delegated authority to the agencies (and OFPP) to promulgate a uniform government-wide procurement regulation, the FAR. Congress expressly provided by statute that "the Administrator of General Services, the Secretary of Defense, and the Administrator of National Aeronautics and Space, pursuant to their respective authorities under division C of this subtitle [41 U.S.C.S. §§ 3101 et seq.], chapters 4 and 137 of title 10 [10 USCS §§ 131 et seq. and 2301 et seq.], and the National Aeronautics and Space Act of 1958 (42 U.S.C. 2451 et seq.), shall jointly issue and maintain...a single Government-wide procurement regulation, to be known as the Federal Acquisition Regulation." OFPP Act Amendments of 1988, 102 Stat. 4055, 4057 (1988) codified at 41 U.S.C. § 421(c), now codified at 41 U.S.C. § 1303(a). It further expressly provided by statute the OFPP "Administrator may prescribe Government-wide procurement policies" and those "policies shall be implemented in a single Government-wide procurement

regulation called the [FAR]." 41 U.S.C. §§ 405, 405a (1988) now codified at 41 U.S.C. § 1121(b) (2011); Brownlee v. Dyncorp, 349 F.3d 1343, 1354 (Fed. Cir. 2003); see 48 C.F.R. § 1.102(b) (1991) ("FAR is prepared, issued, and maintained, and the FAR system is prescribed jointly by Secretary of Defense and the Administrator of General Services, and the Administrator, [NASA]."). Accordingly, FAR 45.302-3(c) was promulgated in 1990 pursuant to authority granted by Congress. See Mead, 533 U.S. at 226-27 (Congress delegated authority to the Executive to make rules carrying force of law and provision at issue promulgated in exercise of that authority); Doe v. United States, 372 F.3d 1347, 1357-58 (Fed. Cir. 2004) (Executive not limited by statute to promulgating merely administrative directives, but empowered to issue regulations setting forth substantive requirements); Brownlee, 349 F.3d at 1354 (same).

b. Congress Has Not Spoken Directly to the Precise Issue of a Profit Prohibition

Where there is no question as to the authority to issue the regulation, as here, the next issue we must examine is the validity of the regulation. In *Chevron U.S.A.*, *Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984), the Supreme Court established a two-step framework to be utilized in determining the validity of a regulation. The first step requires us to determine whether Congress has spoken directly to the precise question at issue. *Heino v. Shinseki*, 683 F.3d 1372, 1377 (Fed. Cir. 2012); *GMS HMO, Inc. v. United States*, 536 F.3d 1293, 1296-97 (Fed. Cir. 2008); *Tunik v. MSPB*, 407 F.3d 1326, 1336 (Fed. Cir. 2005); *Doe*, 372 F.3d at 1358; *Brownlee*, 349 F.3d at 1354.

"Identifying the 'precise question at issue' is a necessary prerequisite to [our] determining whether or not Congress has directly spoken" on that issue. *E.g., GMS HMO*, 536 F.3d at 1297. In these appeals, the precise question is whether the Executive can prohibit or bar a contractor's receipt of profit or fee on the cost of facilities acquired for the account of the government and use by the contractor in performing a government contract, under other than a facilities contract. FAR 45,302-3(c) (1990); see FAR 45,302-2(c), 45,302-3(a)(3), (4) (1984).

To determine whether a statute clearly shows intent by Congress to speak directly on that precise issue, we employ traditional tools of statutory construction and examine "the statute's text, structure, and legislative history." Heino, 683 F.3d at 1377; Delverde, SrL v. United States, 202 F.3d 1360, 1363 (Fed. Cir. 2000), reh'g granted with modification, 2000 U.S. App. LEXIS 15215. When employing the traditional tools of statutory construction, if we ascertain that Congress expressed an intention on the precise question, that intention is the law and must be given effect. Where the statutory language is plain and unambiguous, it controls, and we may not look to the agency regulation for further guidance. Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. at

842-43; GHS HMO, 536 F.3d at 1297; Gallegos v. Principi, 283 F.3d 1309, 1312 (Fed. Cir.), cert. denied, 537 U.S. 1071 (2002).

Neither 41 U.S.C. § 421(c) (1990), now codified at 41 U.S.C. § 1303(a) (2011), nor 41 U.S.C. §§ 405 & 405a (1990) now codified at 41 U.S.C. 1121(b) (2011), address specifically the receipt of profit by a contractor on the cost of acquisition of facilities for the account of the government and use by the contractor in performing a government contract. The statutes – 41 U.S.C. § 421(c) (1990), now codified at 41 U.S.C. § 1303(a) (2011), and 41 U.S.C. §§ 405 & 405a (1990) now codified at 41 U.S.C. 1121(b) (2011) are silent on this question. The laws do not mention acquisition of facilities at all, much less receipt of profit on the cost of facilities acquired. Rather, their plain language simply grants to the Executive broad discretion to issue uniform regulations deemed necessary to govern the procurement of supplies and services. 41 U.S.C. §§ 405 & 405a (1990) now codified at 41 U.S.C. § 1121(b) (2011); 41 U.S.C. § 421(c) (1990), now codified at 41 U.S.C. § 1303(a) (2011). However, because Congress frequently addresses Executive procurement of supplies and services in a variety of statutes addressed to a specific problem, which often are implemented by procurement regulations, e.g., Brownlee, 349 F.3d at 1352 (48 C.F.R. § 31.205-47(b) and 10 U.S.C. § 2324(e)(1)(O)); Info. Tech. & Applications Corp. v. United States, 316 F.3d at 1312 (48 C.F.R. § 15.306 and 41 U.S.C.S. § 253b), we also need to ascertain if Congress addressed acquisition and provision of facilities in some other statute intended to be implemented by procurement regulation. See, e.g., Nat'l Org. of Veterans' Advocates, Inc. v. Sec'y of Veterans Affairs, 669 F.3d 1340, 1347 (Fed. Cir. 2012) (no existing statute specifically addresses the issue raised in new rule so as to create a conflict or contradiction).

Providing a contractor with government-furnished property/equipment is a means of indirect financing for the contractor. A contractor possessing government-furnished equipment does not have to incur the direct cost of acquiring similar property and, with respect to capital assets, will not have to capitalize and allocate equipment acquisition costs to particular government contracts. The most obvious advantage to a contractor receiving government-furnished equipment/property is the opportunity afforded the contractor to use the funds it otherwise would have expended for such equipment or property for its other operating needs. Steven N. Tomanelli, Competitive Advantage Arising from Contractor Possession of Gov't-Furnished Property, 23 Pub. Cont. L.J. 243, 244 (1994); E.K. Gubin, Financing Defense Contracts, 29 L. & Contemp. Probs. 438, 448 (1964); Paul M. Trueger, Accounting Guide for Defense Contracts 65 (3rd ed. 1960). Congress addressed contractor financing in 10 U.S.C. § 2307. It imposed statutory limitations with respect to forms of contractor financing used by the government since the earliest days of the nation, i.e., advance, partial, progress and other payments by the military to a contractor under a contract, id., as it historically has done. E.g., 62 Stat. 23-24 (1948) (ASPA); 54 Stat. 680; 37 Stat. 32; 3 Stat. 723. Congress did not, however, address, in any fashion, financing through acquisition of facilities acquired for account of

the government and use by a contractor to perform a government contract. 10 U.S.C. § 2307.

Congressional authorization to furnish government-owned facilities to contractors for the performance of government contracts dates to World War I. Prior to 1917, the military limited financing of its contractors to "advance payments," "progress payments," and the "bundling of requirements" necessary to justify "contractor investment" in equipment needed to perform a government contract. This was true even where our government greatly desired that the nation's industry produce a specific item, e.g., American muskets, armor plate, and armored ships. See, e.g., Nagle, A History of Gov't Contracting. Advent of a world war and lack of preparedness of the nation for such a war, however, altered that state of affairs. Germany's destructive warfare against ocean shipping, which was essential to the Allies' successful prosecution of the war, made it necessary for our nation to build the greatest possible number of ships in the shortest possible time. As a result, Congress gave the President sweeping war powers. E.g., 40 Stat. 182-83 (the President may take immediate possession of any ship; cost of purchasing or otherwise acquiring plants and the expediting of ship construction shall not exceed \$250 million); 39 Stat. 1192 ("[t]o enable the President to secure the more economical and expeditions delivery of materials, equipment, and munitions and secure purchase or construction of such additional torpedo boat destroyers, submarine chasers and such other naval small craft, including aircraft, guns and ammunition for all of said vessels and aircraft and for each and every purpose connected therewith, as the President may direct, to be expended at the direction and in the discretion of the President" \$115 million immediately available); Bethlehem Steel Corp., 315 U.S. at 292. As the Supreme Court stated in Russell Motor Car Co. v. United States, 261 U.S. 514, 521 (1923):

[W]e were in the midst of a great war, which called for the utilization of all our resources. The necessities were great, beyond the power of statement. The Government was confronted with the vital necessity not only of producing ships and supplies in unprecedented quantities but of producing them with the utmost haste. Hence, it was necessary that everything which stood in the way of or hindered such production be put aside.

To expedite the acquisition of naval vessels, Congress removed longstanding statutory requirements that government contracts be advertised and competed, authorizing the use of negotiated contracts "upon the basis of actual cost, plus a reasonable profit to be determined by" the Secretary of the Navy if, in the judgment of the Secretary, the most rapid and economical construction could be obtained thereby. 39 Stat. 1194; 39 Stat. 617. While cost-plus type contracts had not been used by the government for over 100 years, i.e., since the Revolutionary War, Congress did not set forth limitations upon the Executive's use of such contracts, other than requiring that they be on "the basis of actual

cost, plus a reasonable profit to be determined by" the Secretary. 39 Stat. 1194; 39 Stat. 617.

The Executive Branch, among other things, was concerned about possible "war profiteering" under cost-plus contracts, which unfortunately has occurred during every war fought by our nation, e.g., Bethlehem Steel Corp., 315 U.S. at 292, and its effect upon the morale of our troops and nation, see generally Lord Mfg. Co. v. United States, 114 Ct. Cl. 199, 269-70, 84 F. Supp. 748, 752 (1949) (young men who never had a fling at life were taken from their homes to face hardship and even death on distant battlefields, while women and children at home were performing uncomplainingly all kinds of difficult tasks to support the war effort). The Executive Branch, therefore, elected to impose two principal limitations on use of cost-plus contracts. It attempted to restrict the profit realized on such contracts to no more than 10% of estimated cost. Navy Sec'y Ann. Rep. 1917 at 33, Rep. 1918 at 685, Rep. 1919 at 572-76, Rep. 1920 at 147-48; 1 War Sec. Ann. Rep. 1917 at 28, Rep. 1918 at 1319, Rep. 1919 at 4138-42; see Crowell, Gov't War Contracts 85; Muschany v. United States, 324 U.S. 49, 62 (1945) (evil of such contracts is that contractor profit increases in proportion to the costs incurred in contract performance). It also prohibited a contractor's receipt of profit on the cost of equipment or other facilities acquired for account of the government and use in performing government contracts, with one exception. In the rare case where a contractor did not purchase the equipment or facility required to perform from another, but was actually engaged in the business of manufacturing such equipment or otherwise producing the facility to be acquired, and actually did so for account of the government, the contractor generally was allowed to receive profit on cost it incurred if such profit was expressly specified in the parties' cost-plus contract. Instructions to Accountants at 18-19 (GPO 11 July 1917); Navy Paymaster Gen. Ann. Rep. 1918 at 94-96; Crowell, Gov't War Contracts at 146-47, available at http://books.google.com/books; Nicholson & Rohrbach, Cost Accounting at 487, 497-98, available at http://books.google. com/books.

While Congress was aware of the Executive Branch's furnishing of facilities to contractors and restrictions on use of cost-plus contracts from extensive investigations and hearings conducted regarding cost-plus contracting during World War I, e.g., 57 Cong. Rec. 883, 885, 906 (1918) (Report to Attorney General on Aircraft Production Investigation); S. Rep. No. 74-944, pt. 4, 27-28 (1936) (Nye Committee report); S. Rep. No. 74-944, pt. 1 (1935) (same), we have not been cited, nor are we aware, of any statute specifically addressing the Executive's prohibition against profit on facilities acquired for account of the government and use in performing government contracts. Indeed, when Congress authorized further Navy ship construction in the mid-1930s, it did so only after adopting a limitation on profits to be realized by contractors, as the Executive Branch had done during World War I. Under the Vinson-Trammel Act, 48 Stat. 503, 505, all profits in excess of 10% of the contract price realized by a contractor were to be recaptured by the government. Moreover, when Congress once again authorized use of

"cost-plus" negotiated contracts due to advent of World War II, it expressly barred the Executive's use of cost-plus-a-percentage-of-cost contracts due to profiteering that had occurred during World War I, see Muschany, 324 U.S. at 62, permitted use of the cost-plus-a-fixed-fee form of contract, specified any fixed fee to be paid a contractor on a Navy or War Department contract shall not exceed a specific percentage of the estimated cost of the contract, and authorized the furnishing to contractors of "necessary buildings, facilities, utilities, and appurtenances thereto on Government owned land or elsewhere" needed to expedite national defense. 54 Stat. 677-78, 680, accord 54 Stat. 712; 53 Stat. 590-91. While making the Executive's limitation on profits on a cost-plus contract a statutory limitation and otherwise addressing by statute the issue of war profiteering. Congress did not address the Executive's other principal limitation applicable to World War I cost-plus and other contracts – the prohibition of profit on the cost of facilities acquired for government account – or any of the other procedures adopted by the Executive to implement cost-plus contracts (e.g., use of Navy compensation Board to determine contract cost). In sum, since the modern inception of cost-plus government contracts early in the 20th Century, Congress historically has not provided detailed requirements, but been silent and accorded broad discretion to the Executive regarding implementation of cost-plus contracts, when authorized by Congress, and the acquisition and furnishing of facilities acquired for government account to contractors for their performance of government contracts under cost-plus and other contracts. See, e.g., Schweiker v. Gray Panthers, 453 U.S. 34, 43 (1981) (perhaps appreciating complexity of what it has wrought, Congress conferred exceptionally broad authority to prescribe standards); GHS HMO, Inc., 536 F.3d at 1297 (statute does not contain detailed requirements, only broad goals); Amer. Standard, Inc. v. United States, 220 Ct. Cl. 411, 417, 602 F.2d 256, 260 (1979) (should examine congressional basis for regulation even where it goes back as far as 1917).

After examining the plain language of the pertinent statutory provisions using the traditional tools of statutory construction, we conclude Congress has not spoken directly to the precise question at issue here. If Congress has not addressed directly the precise question at issue, as in these appeals, we must proceed to step two of the analytical framework set forth in *Chevron* and determine whether the Executive's regulation is "based on a permissible construction of the statute." *Chevron*, 467 U.S. at 842-43; *Heino*, 683 F.3d at 1377.

c. The Profit Prohibition Has A Reasonable Basis

Where Congress explicitly has left a gap for the Executive to "fill," as here, there is an express delegation of authority to the Executive to elucidate the specific provision of the statute by regulation. *Chevron*, 467 U.S. at 843-44; *Mead Corp.*, 533 U.S. at 227. The Executive's power to administer a congressionally-created program necessarily requires the formulation of policy and making of rules to fill gaps left, implicitly or explicitly, by Congress. *Chevron*, 467 U.S. at 843 (legislative delegation with respect to

a particular question sometimes is implicit rather than explicit); *Mead Corp.*, 533 U.S. at 229 (Congress may confer authority to speak with force of law even over issues about which Congress had no intent); *Tunik v. MSPB*, 407 F.3d 1326,1337 (Fed. Cir. 2005) (the Congress may implicitly delegate authority to fill gaps even if there is not an explicit gap in the statute); *Paralyzed Veterans of Amer. v. Sec'y of Veterans Affairs*, 345 F.3d 1334, 1340 (Fed. Cir. 2003) (power to fill gap left, implicitly or explicitly). Regulations issued by the Executive to fill gaps left, however, must be consistent with the policies reflected in the statutory program. *Doe*, 372 F.3d at 1357; *accord Amer. Standard*, 220 Ct. Cl. 411, 417, 602 F.2d 256, 261 (broad legislative authority must be construed in terms of Congress' purpose). The Executive Branch's regulation is invalid if inconsistent with statute. *Amer. Standard*, 220 Ct. Cl. at 417, 602 F.2d at 261.

A regulation need not have a compelling basis to be sustained, only a reasonable one. Westinghouse Elec., 85-1 BCA ¶ 17,910 at 89,698. To determine if a regulation is reasonable, we must perform an analysis of the factual underpinning for the action. See Amer. Trucking Assns. v. United States, 344 U.S. 298, 300 (1953); Westinghouse Elec., 85-1 BCA ¶ 17,910 at 89,698-99. To sustain the regulation, our analysis need only show that the promulgator was not acting unreasonably. Amer. Trucking Ass'ns, 344 U.S. at 314; Westinghouse Elec., 85-1 BCA ¶ 17,910 at 89,696-97.

In authorizing the Executive Branch to forgo advertised competitive bidding for government contracts and negotiate cost-plus contracts to supply necessary supplies and services during 1917, Congress intended to expedite (and ensure) the nation's acquisition of goods and services needed to prepare for (and possibly) prosecute our military's effort regarding the World War then ensuing. Congress expressly stated that use of cost-plus contracts was authorized where the Executive determined it could obtain "the most rapid and economical" acquisition of necessary goods and services through the use of such contracts. E.g., 39 Stat. 617, 1192; Navy Sec'y Ann. Rep. 1915 at 57-60; Bethlehem Steel Corp., 315 U.S. 289, 302 (quoting Rep. of Chief of Constr. Div., War Sec'y Ann. Rep. 1919 at 4147 ("no sane man would bid on a lump-sum contract under such conditions [as now exist], unless perchance he should treat the matter as a pure gamble and include an excessive margin in his proposal for unforeseen contingencies")). By eliminating the risk of loss from rising labor and material costs due to war demand and shortage through direct reimbursement of costs incurred in performing a contract, Congress sought primarily prompt performance and lower over-all expenditures for contracts in a rising labor and commodity market than would be offered by contractors who were compelled themselves to assume the risk of these unpredictable costs. See Muschany, 324 U.S. at 62. To further expedite the performance of contracts for goods and supplies needed for the military effort, Congress appropriated significant monies to the military with no purpose other than utilization by the military to speed up performance of military contracts, as the Executive deemed appropriate. E.g., 40 Stat. 182-83 (cost of purchasing or otherwise acquiring plants and expediting of ship construction shall not exceed \$250 million); 39 Stat. 1192 ("[t]o enable the President to

secure the more economical and expeditions delivery of materials, equipment, and munitions," President may direct in his discretion the expenditure of \$115 million). With unrestricted monies appropriated to expedite the performance of military contracts, for the first time in the nation's history, the military expended "government funds" to acquire "equipment" and other "facilities" necessary for contractors to successfully perform military contracts to supply goods and services. See, e.g., Paymaster Gen. Ann. Rep. 1918 at 24-25, 91; Instructions to Accountants at 15, 18-19 (GPO 11 July 1917); Nicholson & Rohrbach, Cost Accounting at 487, 497-98, 501-02, available at http://books.google.com/books; Bethlehem Steel Corp., 315 U.S. at 294 n.3.

To implement use of cost-plus contracts and the furnishing of equipment and other facilities to contractors for performance of military contracts, whether they be cost-plus or another contract type, the Executive Branch imposed two principal limitations – (1) a percentage limitation on profit based on estimated cost of cost-plus contracts and (2) a bar to the receipt of profit on the cost of facilities acquired at government expense for the performance of military contracts. The former limitation issued because the Executive fully understood the drawbacks of cost-plus contracts, *i.e.*, the possibility they presented for "war profiteering." *E.g.*, *Uniform Contracts & Cost Accounting Definitions & Methods* at 3-7, 20 (GPO July 1917) (with the use of a cost-plus contract, temptation is great for contractor to inflate its own costs as well as costs of subcontractors in order to receive a greater profit or fee).

The latter issued for two reasons. The first was that agreement on a fixed profit or fee "per unit," as recommended by the interdepartmental conference, simplified profit and fee accounting, making it easier for both the military and contractors to ensure that a contractor was complying with the percentage limitation on profit or fee specified for a cost-plus contract. See, e.g., Uniform Contracts & Cost Accounting Definitions & Methods at 3-7, 20 (because the task of United States is difficult and burdensome in checking and determining proper costs, interdepartmental conference recommends "a fixed profit of a definite sum of money per article" be agreed on instead of a percentage of cost); Graske, The Law of Gov't Defense Contracts at 18; 20 Comp. Gen. 95 ("act of June 28, 1940,...recognizes that the contract price may include the cost of additional equipment and facilities required...and, in effect, authorizes and requires the segregation of such additional costs from the balance of the contract price for the purpose of determining excess profits"). If profit or fee were to be paid on government-reimbursed costs of acquisition of equipment for contractors to perform military contracts, there would be an issue of how to attribute such profit or fee in enforcing the percentage limitation on profit. Government-furnished facilities were often used by contractors to perform a number of contracts, including contracts awarded by different government departments, e.g., Navy and Army. Denial of profit or fee on the cost of facilities furnished eliminated any issue of how to account for such profit among the various contracts awarded a contractor, simplifying the contractor's and military's already complicated task of accounting for such contracts and helping ensure contractor

compliance with the percentage profit/fee limitation intended to discourage profiteering, which was deemed important by the military to maintain the nation's morale for the war effort. See Bethlehem Steel Corp., 315 U.S at 306 (the problem of war profits not new); Int'l Harvester Co. v. United States, 169 Ct. Cl. 821, 845, 342 F.2d 432, 445 (1965) (contractor should not make abnormal profits from the nation's war or defense effort); Report to the Att'y Gen. on the Aircraft Inquiry 134 (1918) ("contracts of this sort lead to waste, foster abuses, and impose an almost intolerable burden of cost accounting, in itself a hindrance to rapid production").

The second reason for prohibition of profit on government-reimbursed costs of facilities acquired to perform military contracts was that the military did not wish to do anything that may discourage contractors from using their own funds to invest in and acquire equipment or facilities necessary for the performance of military contracts. For over 140 years, the government had not supplied its military contractors with equipment or other facilities, but expected its contractors to have obtained with their own funds all equipment and other facilities necessary for performance of contract work. Although Congress had several times been presented with proposals to provide assistance to the private sector to perform government contracts or have the government own the facilities necessary for manufacture of items required by the military, the nation ultimately elected each time to rely on the ingenuity of the private sector to perform government contracts. See, e.g., (A) Alexander Hamilton, Report on Manufactures (1791), reprinted in S. Doc. 63-172 at 1, 23, 33, 38-40, 48, 58 (1913); Keeny, The Foundations of Gov't Contracting, J. Contract Mgmt., at 7, 13 (Summer 2007); 1 Amer. Mil. History 108 (1996), available at www.history.army.mil/books/amh-v1/index.htm (Congress adopted many of Treasury Secretary Alexander Hamilton's recommendations, but rejected his idea of giving monies to individuals or entities to facilitate engaging in manufacturing); (B) 2 Stat. 696-97;732; 3 Stat. 203; Nagle, A History of Gov't Contracting at 92-93, 95-99, 116-17; Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 141, 147-54; Keeny, The Foundations of Gov't Contracting, J. Contract Mgmt. at 14 (Commissary General Irvine preferred "government" production over private contracts but Congress placed Ordnance Department in charge of all contracts for arms and nation continued to enter into contracts with private sector); (C) Letter from Henry Foxall to the Secretary of War (Aug. 1807), in 1 American State Papers: Military Affairs at 215-17 available at http://memory.loc.gov/ammem/amlaw/lwsplink.html#anchor5; Nagle, A History of Gov't Contracting at 79, 87; Cannon, Small Arms and Other Munitions (16 Dec. 1811) in 1 Amer. State Papers: Mil. Affairs at 303, available at http://memory.loc.gov/cgibin/ampage; Contracts for Cannon and Shot (24 Feb. 1832), in 4 Amer. State Papers: Mil. Affairs at 933-34, available at http://memory.loc.gov/cgi-bin/ampage (proposal to establish government cannon foundry not pursued since Congress determined nation's 530 privately-owned foundries could meet wartime artillery needs); (D) Report on the Expediency of Establishing a Nat. Foundry in the District of Columbia (9 May 1836), in 6 Amer. State Papers: Mil. Affairs at 413-16, available at http://memory.loc.gov/cgibin/ampage; Select Committee Report on Expediency of Establishing a National

Foundery [sic] in 5 Amer. State Papers: Mil. Affairs at 518-21, available at http://memory.loc.gov/cgi-bin/ampage; War Sec'y Ann. Rep., in 7 Amer. State Papers: Mil. Affairs at 571, 576, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Provide for Establishment of a National Foundry, H.R. 628, 24th Cong. (1836), in Amer. State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Establish a Foundry, S. 12, 24th Cong. (1836), in Amer. State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Establish a Foundry, S. 234, 24th Cong. (1836), in Amer. State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Establish a Foundry, S. 239, 25th Cong. (1838), in Amer. State Papers, available at http://memory.loc.gov/cgi-bin/ampage; Bill to Provide for Establishment of a National Foundry, H.R. 1032, 25th Cong. (1839), in Amer. State Papers, available at http://memory.loc.gov/cgi-bin/ampage (President's proposal the nation establish a government cannon foundry and gun powder works not adopted).

The election by Congress to rely on the private sector to perform needed supply of military goods and services held true even where the work to be performed was "greatly desired" by the Congress and nation. See, e.g., (A) Nagle, A History of Gov't Contracting at 213-16; McKay v. United States, 27 Ct. Cl. at 422-23 (Ericsson and partners organized network of subcontractors to build the "armored" USS Monitor and save the nation from the Confederacy's armored Merrimac during Civil War); (B) 1 Stat. 352, 553; Nagle, A History of Gov't Contracting at 70-71, 78-79; MacGregor, The Formative Years 1783-1812 in 1 Amer. Mil. Hist. at 108, 115, available at www.history.army.mil/books/amh-v1/index.htm; Claim for Loss on a Contract for Muskets (6 Jan. 1820) in 1 Amer. State Papers: Mil. Affairs at 684-85, available at http://memory.loc.gov/cgi-bin/ampage (government awarded contracts to Eli Whitney and 26 others to produce over 40,000 needed American muskets); Navy Sec'y Ann. Rep. 1883 at 3-4, 56 (list of bids on ABCD vessels), at 57-60 (Chicago contract), at 63-67 (Boston contract identical to Atlanta contract), at 69-72 (Dolphin contract); S. EXEC. Doc. No. 49-153 at 20-25 (Dolphin contract) (1886); Navy Sec'y Ann. Rep. 1884 at 3-4, 7, 9-11, Rep. 1883 at 3-4, 52-55; Nagle, A History of Gov't Contracting at 232; Myerle, 31 Ct. Cl. at 136; 22 Stat. 472, 474, 476, 477 (government awarded ABCD ship contracts for the nation's transition to an "all-steel" Navy to John Roach); (D) Simpson, Rep. of Gun Foundry Board reprinted as H.R. EXEC. DOC. No. 48-97 at 48-49 (1884), available at http://books.google.com/books; S. REP. No. 49-90, XIII, XXX (Select Comm. on Ordnance and War Ships Rep.), available at http://books.google.com/books; 1 Navy Sec'y Ann. Rep. 1884 at 30-31 (to acquire necessary ship armor plate, Gun Foundry Board stated Congress could (1) grant outright subsidies, as suggested by Alexander Hamilton a century earlier, (2) furnish needed facilities and machinery to industry, as occurred in Russia and Briton, or (3) specify appropriations for annual ordnance procurement, as it did in the 1808 militia arms act, and recommended the latter).

Contractors were to have the "fixed capital" necessary to successfully perform contracts awarded them. The government often assisted contractors with "working" or

"operating capital" through partial, advance, or progress payments on contracts awarded. See, e.g., (A) Nagle, A History of Gov't Contracting at 80-81, 87; Joy, Eli Whitney's Contracts for Muskets, 8 Pub. Cont. L.J. at 143-44 (Whitney received advance and progress payments on musket contract); (B) 11 Stat. 247; Hackemer, The U.S. Navy and the Origins of the Military Industrial Complex at 14, 45, 48 & n.9, 49, 51-54, 102-03; and 1 Canney, The Old Steam Navy at 61 (Navy adjusted high-cost steam power plant contracts to provide for a lien on uncompleted machinery and all material, and payment of 20% of total contract price at completion of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and the entirety of contract work); (C) 37 Stat. 32 and 3 Stat. 723 (authorization for Executive to provide progress payments). Sometimes, the government also "bundled" its requirements to provide justification for contractors to make the necessary fixed capital investment in equipment or other facilities. See, e.g., (A) Nagle, A History of Gov't Contracting at 87; 2 Stat. 490; Huston, The Sinews of War: Army Logistics at 96-97, 115-18 (musket contracts were start of a government practice of providing orders on a long-term basis); (B) Nagle, A History of Gov't Contracting at 230-31, 233-35; Cooling, Gray Steel & Blue Water at 64-69, 71-76, 83 (circular solicited bids for 1,310 tons of gun forgings and 4,500 tons of armored steel). The government did not, however, during the nation's first 140 years, own or otherwise furnish equipment or other types of facilities to its contractors for performance of its military contracts.

Ordinarily, a contractor invested its own funds in equipment and other facilities needed to perform contracts intended to make a profit for the contractor. In acquiring equipment and other facilities for its own account to perform military contracts, the contractor did not receive "profit or fee" on the costs incurred for equipment and facilities acquired. Rather, it hoped to receive profit or fee on items produced with the equipment and facilities acquired. See Mason & Hanger-Silas Mason Co. v. United States, 207 Ct. Cl. 106, 136-37, 518 F.2d 1341, 1359 (1975) (contractor should expect a return on capital it has employed or contributed); Worthington & Goldsman, Contracting with the Fed. Gov't at 90 ("profit" is considered the reward for efforts or services performed and resources provided (both human and facilities)).

As discussed more fully below, contractors who are furnished equipment or other facilities by the military to perform government contracts receive a significant benefit from such action. They have monies available to them to be utilized as operating or working capital that they otherwise would have expended for the acquisition of "fixed capital." They also are exposed to less risk with respect to contract performance than the contractor who uses its own equipment and facilities to perform a military contract. See, e.g., Trueger, Accounting Guide at 65; Tomanelli, Competitive Advantage Arising from Contractor Possession of Gov't-Furnished Property, 23 Pub. Cont. L.J. 244 (1994); E.K. Gubin, Financing Defense Contracts, 29 L. & Contemp. Probs. 438, 448 (1964). To additionally reward a contractor who uses facilities and equipment furnished by the military to perform a government contract with "profit or fee" on the acquisition cost of the equipment/facilities acquired for the contractor's use and for the account of the

government, would be to establish a financial incentive for a contractor to NOT invest in its own equipment or facilities to perform military contracts, but seek furnishing of equipment and facilities by the military whereby a contractor can obtain greater profit or fee than if it utilized equipment and facilities acquired for its own account.

"Profit" generally is considered the reward for (1) efforts or services performed and resources provided (both human and facilities) and (2) uncertainty or risk undertaken. Worthington & Goldsman, Contracting with the Fed. Gov't at 90. With respect to acquisition of equipment or facilities for the account of the government and use by a contractor in performing a government cost-plus contract, for all practical purposes, there is no risk. See, e.g., Mason & Hanger-Silas Mason, 207 Ct. Cl. at 132, 518 F.2d at 1356 (risk to cost-plus contractor practically eliminated). The contractor is reimbursed promptly for the costs it incurs in acquiring such property for its use. E.g., Mason & Hanger-Silas Mason, 207 Ct. Cl. at 121, 518 F.2d at 1350 (under cost-plus contracts, costs reimbursed promptly after incurrence). Further, no significant "direct" effort or service (facilities or human) typically is provided by a contractor acquiring facilities or equipment for the government's account and use by the contractor. Rather, as occurred in these appeals with respect to SGS, equipment or other facilities generally are acquired by the contractor from another with government purchase funds simply being "passed through" by the contractor to the entity actually expending the "direct" effort to produce such equipment/facilities. Thus, payment of profit or fee on the cost of facilities or equipment for account of the government and use by a contractor does not come within the generally accepted concept of "profit." See Mason & Hanger-Silas Mason, 207 Ct. Cl. at 136-37, 518 F.2d at 1359 (contractor cannot expect a return on capital it has not employed or contributed); Worthington & Goldsman, Contracting with the Fed. Gov't at 90; see also Newport News Shipbuilding & Dry Dock, 179 Ct. Cl. at 116, 374 F.2d at 531 (contractors encouraged to perform with minimum of financial, facilities, or other government assistance and, if this "kind of crutch" is provided, it must modify what is deemed a fair and reasonable profit).

There is no language in the statutes here, which authorized the use of cost-plus contracts and provided funds to the Executive to otherwise expedite the performance of contracts, stating or indicating that Congress wished to deviate from its long history of relying primarily on the private sector to perform necessary government contracts. 40 Stat. 182-83; 39 Stat. 617, 1192. The military needed industry to invest its own funds in equipment and other facilities necessary for successful performance of military contracts whenever such action was economically feasible for industry. For example, the established policy of the government was to encourage, financially and otherwise, the construction and maintenance of shipyards by private interests. See 1st Ann. Rep. of the U.S. Shipping Board at 12-13 (1917); 2d Ann. Rep. at 33-36, 120-22 (1918); Rep. of Director General Charles Piez to the Board of Trustees of the U.S. Shipping Board Emergency Fleet Corp. 13-14, 78, 123 (Apr. 30, 1919); Rep. of the President of the U.S. Shipping Board Emergency Fleet Corp. to the Board of Trustees at 25-26 (Aug. 1, 1919).

Similarly, the Army's established policy was to obtain supplies from "private manufacturers" and "operate its own factories only for purpose of establishing standards, understanding costs of production, insuring attention is given to improvement, and qualifying its officers in all respects as experts with respect to the material needed." Nagle, A History of Gov't Contracting 282-83; Kreidberg, History of Military Mobilization in the U.S. Army at 195, 326, 337.

Private industry investment in equipment and facilities necessary to produce items for the military also expedited the performance of military contracts – the purpose of the statutes authorizing use of cost-plus contracts and funds to expedite the performance of military contracts. Discouraging such investment by paying profit to military contractors on the cost of facilities and equipment acquired for government account and contractor use, would impede, not further, the congressional purpose. Why would any contractor invest its own capital in equipment and facilities needed to perform military contracts if it could use government funds to acquire the needed property and receive extra "profit or fee" on the government's cost of such property? Imposition of a bar against receipt of profit or fee on the costs of facilities or equipment acquired for government account and use by a contractor in performing a military contract precludes the existence of this major disincentive for contractors to invest in and acquire their own equipment and facilities to perform government contracts. See Kern-Limerick, Inc. v. Skurlock, 347 U.S. 110, 116 (1954) (where there is no prohibition against use of provision, Executive free to follow business practices); accord United States v. Linn, 40 U.S. 290, 315-16 (1841). Neither Congress nor the Executive is required to furnish equipment or facilities to contractors to successfully perform contracts. Furnishing of such property to contractors is simply a matter of "legislative grace." See generally INDOPCO, Inc. v. Comm'r, 503 U.S. 79, 84 (1992) (income tax deduction is exception to general rule and matter of legislative grace); U.S. Const. art. IV, § 3 (Congress is invested by Constitution with power of disposing of and making needful rules respecting government property); Ashwander v. TVA, 297 U.S. at 330; Irvine v. Marshall, 61 U.S. at 566; United States v. Gratiot, 39 U.S. at 537. The Executive entrusted by Congress with the power to administer a program of expediting military contracts accordingly may establish conditions for the supply of such property consistent with the purposes of the statutory provisions creating the program, such as the prohibition of receipt of profit on facility acquisition cost adopted in 1917. See, e.g., Doe, 372 F.3d at 1357 (Executive authorized to fill gaps if done in manner consistent with the policies reflected in the statutory program); Contreras v. United States, 215 F.3d 1267 (Fed. Cir. 2000) (same).

The military desired to take no action in expediting contract performance that might discourage capital investment by private industry, which it additionally deemed essential to its prompt receipt of needed military items. See, e.g., Bethlehem Steel Corp., 315 U.S. at 292 (necessary to build the greatest possible number of ships in the shortest possible time); Russell Motor Car, 261 U.S. at 521 (government confronted with producing supplies in unprecedented quantities with the utmost haste necessitating

anything hindering production be put aside); 1st Ann. Rep. of the U.S. Shipping Board at 12-13 (1917); 2d Ann. Rep. of the U.S. Shipping Board at 33-36, 120-22 (1918). It also desired to simplify accounting for the new "cost-plus" contracts to assist in ensuring contractor compliance with the percentage limitation on profit or fee it imposed on such contracts to attempt to prevent war profiteering, a long-time concern of Congress and the nation. See e.g., Uniform Contracts & Cost Accounting Definitions & Methods at 3-7, 20 (GPO July 1917); Rep. to the Att'y Gen. on the Aircraft Inquiry at 135 (1918). The Executive Branch accordingly had a "reasonable basis" for prohibiting the receipt of profit on the "pass-through" acquisition costs of equipment and facilities acquired for government account and contractor use in performing contracts, which was not in conflict with any statutory provision and deemed to advance the purposes of the statutory provisions Congress had enacted. Amer. Trucking Ass'ns, 344 U.S. at 314 (facts need only show the promulgator was not acting unreasonably); Nat'l Org. of Veterans' Advocates, 669 F.3d at 1347 (question presented is whether there is a logical basis for new rule and we determine that such a basis exists); Westinghouse, 85-1 BCA ¶ 17,910 at 89,698 (regulation rationally related to accomplishment of a legitimate governmental objective).

d. FAR 45.302-3(c) Has the Force and Effect of Law and Applies to SGS

When use of cost-plus contracts (except CPPC) was again authorized by Congress as the nation prepared for a second World War, e.g., 54 Stat. 599, 602-03, 610, 676, 680, the Executive again elected to implement the use of cost-plus contracts and furnishing of equipment and other facilities to contractors for the performance of government contracts (whether they be cost-plus or another contract type) by prohibiting receipt of profit upon the cost of facilities acquired for government account and performance of government contracts. Newly-created standard Emergency Plant Facilities (EPF) contracts expressly stated that "[f]he true cost of the facilities provided for hereunder to be paid by the Department shall not include any profit to the contractor" (emphasis added). E.g., 5 Fed. Reg. 4147 (1940); Lake Erie Eng'g, 268 F.2d at 341 (EPF contract provided contractor was to make no profit on facilities constructed); Shaffer, 128 Ct. Cl. at 306, 337, 340, 121 F. Supp. at 659; Irving Trust Co., Emergency Plant Facilities Contract to Expedite Nat'l Defense at 1-2 (1940). Also, newly-created standard "Facilities Contracts" expressly stated that "The true cost of the facilities provided for hereunder to be paid by the Department shall not include any profit to the Contractor." E.g., Shaffer, 128 Ct. Cl. at 337-41, available at 1954 U.S. Ct. Cl. LEXIS 135, 73-80 (findings); Cramp Shipbuilding, 122 Ct. Cl. at 74-75, 92 (Navy facilities contracts to acquire, rehabilitate, and enlarge shipyard provided for "reimbursement of costs" but no fee); 6 Fed. Reg. 356 (Navy contract with Camden Forge for additional equipment to be "done at actual cost without profit"); Navy Procurement Directives § 6011 (1943); see Navy Procurement Directives § 13-102 (Apr. 1961). Similarly, newly-created standard Defense Plant Corporation (DPC) contracts used to acquire facilities for contractors to

perform government contracts were "cost" reimbursement only with **no profit or fee paid** on the "costs" of equipment or other facilities acquired. E.g., U.S. Navy Dep't,
Office of the Gen. Counsel, Navy Contract Law at 233-34 (1949); Glover, Defense
"Lending", 19 Harv. Bus. Rev. at 205; Klagsbrunn, Some Aspects of War Plant
Financing, 33 The Amer. Econ. Rev. at 123, available at http://www.jstor.org/stable/
1818994; Lipton, Contractual Arrangements Covering the Use of Gov't Property by
Defense Contractors, 32 Fordham L. Rev. 217, 218; see RFC v. Beaver County, 328 U.S.
at 206-07. Moreover, where facilities were acquired and furnished to a contractor under a
standard War Department supply or service contract, a special clause in the contract
expressly stated that "[t]he contractor represents, based on experience," that the amount
of reimbursement claimed "does not include any element of profit, and represents no
more than actual costs allocable to manufacture." PR 3 § 332, 8 Fed. Reg. 14153-54
(emphasis added); accord PR 3 § 332, 7 Fed. Reg. 8093.

After World War II, Congress enacted the Armed Services Procurement Act of 1947, Pub. L. No. 80-413, 62 Stat. 21 (1948), authorizing use of negotiated contracts, such as CPFF, if one of 17 circumstances existed. 62 Stat. 21-22. Shortly thereafter, regulations started appearing which interpreted, explained and enlarged upon the Act. Armed Services Procurement Regulation Part 412 stated that "[i]ndustrial facilities shall be provided only under a facilities contract separate from any related contract for supplies or services, except that industrial facilities may be provided under suitable clauses in a supply or service contract" when "the contract is for performance of work within establishments or installations operated by the Government" or certain other situations. ASPR 412.402 (1951). Part 412 defined "Facilities Contract" as simply "a contract under which industrial facilities are provided by the Government for use in connection with the performance of a separate contract or contracts for supplies or services," ASPR 412.101-3 (1951). Part 412, however, was amended within four years of issuance to additionally state that an "illustrative situation" in which a "cost only" reimbursement contract (i.e., "no profit" contract) might be used was a "Facilities contract." ASPR 3.404-1 (Rev. No. 4, 1955 ed.). While ASPR "Part 412 - Government Property" became ASPR "Part 13 - Government Property," compare 32 C.F.R. § 412.000 (1954 rev.) with 32 C.F.R. § 13.000, and DoD promulgated other modifications to ASPR, it did not significantly alter the regulatory provisions discussed through 1965. Compare ASPR 13.101-6, 13.101-8, 13.102-3, 13.402, 13.403 (1955 rev.) with ASPR 13.101-6, 13.101-16, 13.102-3, 13.402, 13.403 (1961 rev.); see 25 Fed. Reg. 14076, 14279 (29 Nov. 1960).

From 1957 through 1959, similar to ASPR, the Air Force Procurement Instruction (AFPI) stated that, "[w]here industrial facilities are to be provided a contractor..., the supply, service, or research and development contract (procurement) will provide" no fee will be paid on facilities acquired or fabricated and, where the acquisition or fabrication of facilities is authorized in a fixed-price contract, the contractor represents the costs to be incurred and for which it will be reimbursed do not include any allowance for profit

or fee. AFPI ¶ 13-402 at 1320, 1321 (1947) (emphasis added); accord 24 Fed. Reg. 7006 (29 Aug. 1959).

During 1965, DoD significantly revised ASPR Part 13. Compare 30 Fed. Reg. 1744 – 1749 with 32 C.F.R. §§ 13.000 – 13.506 (1955). It promulgated a new ASPR 13.104 entitled "Profits and fees," which expressly reaffirmed that: "No fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104, 30 Fed. Reg. 1746 (emphasis added).

From 1965 through 1977, ASPR continued to state "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104 (1976). In 1978, DoD "redesignated" the ASPR as the DAR (Defense Acquisition Regulation). *Lincoln Servs.*, 678 F.2d at 162 n.11, 230 Ct. Cl. at 425 n.11. Between 1978 and 1983, the DAR provided (as had the ASPR) that "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." *E.g.*, DAR 13.104 (1983).

During 1983, DoD, NASA, and the General Services Administration created the FAR, a new Federal Acquisition Regulation effective 1 April 1984, in Title 48 of the Code of Federal Regulations to replace the DAR and FPR. 48 Fed. Reg. 42102 (1983); Hercules, Inc., 292 F.3d at 1383 n.1; FMC Corp., 853 F.2d at 884 n.2. Similar to ASPR and DAR 13.104 and 13.303, the FAR specified that facilities be furnished to a contractor only under a facilities contract, except as otherwise provided in the FAR, and that "no fee shall be allowed under a facilities contract." FAR 45,302-2 (a), (c) (1984), 48 Fed. Reg. 42102 (emphasis added). Similar to ASPR and DAR 13.303, the FAR further specified "Facilities may be provided to a contractor under a contract other than a facilities contract when" "[t]he contract is for services and the facilities are to be used in connection with the operation of a Government-owned plant or installation" or "[t]he contract is for work within an establishment or installation operated by the Government." FAR 45.302-3(a)(3), (4) (1984), 48 Fed. Reg. 42102.

Because GAO and DoD Inspector General studies found some contractors were being paid fee or profit for facilities acquired for the Government when "other" than a facilities contracts was used, DoD, NASA, and GSA amended the FAR in 1990 to add the following language to FAR 45.302-3: "No profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract." The agencies explained that "[t]he regulations clearly prohibit payment of this kind on facilities contracts," do not specifically address this prohibition when other than facilities contracts are used to purchase facilities, "[t]he policy is that, regardless of the type of contract used, fee or profit will not be paid for facilities purchased for the account of the Government," and new language is added to FAR 45.302-3(c) "to clarify this policy." 55 Fed. Reg. 52782 (1990) (emphasis added).

As noted by the Under Secretary of Defense in his memorandum to all parts of the military, "service" contracts were now accounting for a high percentage in the growth of government-owned property in the possession of contractors. OIG, DoD Audit Report No. 87-140 Appx. D (6 May 1987). When the Executive Branch issued a modified version of FAR 45.302-3 in 1990 with additional language, it thus intended to do nothing more than clarify the regulation to make explicit its long-standing policy of over 70 years that fee or profit on the cost of facilities acquired for account of the government is barred regardless of contract type and thereby provide the "express" guidance for procurement officials administering "service" and certain other types of contracts deemed lacking in the FAR by both GAO and the DoD OIG in recent critical reports. See GAO, The Dep't of Defense has Not Minimized the Amount of Equipment it Provides to Contractors at 1, 5, 11, 17, 23, 24, 28, 30-31, 39-40, available at http://gao. justia.com/ department-of-defense/1986/3/; OIG DoD Audit Rep. No. 87-140 at 1, 3, 7, Audit Rep. Transmittal Mem. at 1 (6 May 1987); 55 Fed. Reg. 52782 (1990).

Executive Branch regulations which are reasonably adapted to the administration of a congressional act, and not inconsistent with any statute, such as FAR 45.302-3, have the "force and effect of law." Gen. Eng'g & Mach. Works v. O'Keefe, 991 F.2d 775, 780 (Fed. Cir. 1993); De Matteo Constr. Co. v. United States, 220 Ct. Cl. 579, 591, 600 F.2d 1384, 1391 (1979); Schoenbrod, 187 Ct. Cl. at 634, 410 F.2d at 403-04. FAR 45.302-3(c), by its express terms, bars contractor receipt of "profit or fee" on "the cost of ...facilities when purchased for the account of the Government under other than a facilities contract." The FAR is applicable to contracts "other than facilities contracts" providing for the acquisition of facilities, such as SGS's CPAF contract, and thus prohibits the grant by COs of profit or fee to contractors upon the costs of facilities acquired for government account and contractor use in contract performance.

In sum, FAR 45.302-3(c) has the force and effect of law, and is controlling upon NASA's COs here. COs are agents of the government and as such may bind the United States only in accord with authority granted them by statute and regulation. *Schoenbrod*, 187 Ct. Cl. at 634, 410 F.2d at 404; *Condec Corp. v. United States*, 177 Ct. Cl. at 966, 369 F.2d at 757-58; *Prestex, Inc. v. United States*, 162 Ct. Cl. 620, 625, 320 F.2d 367, 371 (1963). For the forgoing reasons, as a matter of law, we must deem the requirements of FAR 45.302-3(c) applicable to SGS and its contract, despite SGS's assertions to the contrary.

5. FAR 45.302-3 Benefits Both the Government and Contractors

Moreover, even if we did not hold FAR 45.302-3 controlling upon NASA's COs and the J-BOSC, we would conclude that it applied to SGS's contract here because the regulation benefits both the government and contractors. Paragraph (a) of the regulation authorizes a CO to provide facilities to a government contractor under a contract "other

than a facilities contract" if six circumstances exist. FAR 45.302-3(a)(1)-(6) (1993). The remaining two paragraphs of the regulation set forth conditions for a CO's furnishing of facilities under such contracts. Paragraph (b) of the regulation specifies that, where facilities are furnished a contractor pursuant to a contract other than a facilities contract, a CO is to protect the government's interest by including in the contract the appropriate standard property clause or, if the contract is for services and the facilities are to be used in connection with the operation of a Government-owned plant or installation, the CO may elect to simply include appropriate portions of standard FAR facilities clauses. FAR 45.302-3(b) (1993). Paragraph (c) of the regulation further specifies that, when facilities are "purchased for the account of the Government under other than a facilities contract," a CO shall allow "[n]o profit or fee" on "the cost of facilities." FAR 45.302-3(c) (1990). The regulation thus authorizes the furnishing of "facilities" to contractors under contracts other than facilities contracts in certain situations and establishes the parameters for the furnishing of such property to a specific class of persons, i.e., contractors possessing contracts other than facilities contracts. See, e.g., Chris Berg, 192 Ct. Cl. at 182, 426 F.2d at 317; Fletcher v. United States, 183 Ct. Cl. 1, 392 F. 2d 266 (1968).

While the government receives a "benefit" from its furnishing of equipment and facilities to contractors regardless of the contract type it uses, contractors who obtain such property from the government for performance of government contracts likewise receive or obtain a "benefit." Furnishing government property to contractors to perform their contracts is an indirect method of financing. E.K. Gubin, Financing Defense Contracts, 29 L. & Contemp. Probs. at 438, 448. Contractors possessing property owned by the government do not have to incur the direct cost of acquiring such property. Tomanelli, Competitive Advantage Arising from Contractor Possession of Gov't-Furnished Property at 244, 23 Pub. Cont. L.J. They can use the monies that they would have expended for such purposes for their other operating needs. Trueger, Accounting Guide at 65. Further, using government property, allows contractors to avoid two kinds of risk encountered by other contractors who use their own property -(1) the possibility that procurement quantities may be reduced and (2) the possibility another firm will obtain subsequent contract award. Gov't-Owned Plant Equipment Furnished to Contractors: An Analysis of Policy and Practice, The Rand Corp. Mem. RM-6024-IPR at v (1969); Tomanelli, Competitive Advantage Arising from Contractor Possession of Gov't-Furnished Property at 244, 23 Pub. Cont. L.J. A contractor possessing government property need not worry that it will be overcapitalized and overextended for equipment or other facilities if its contract ends early or if it does not obtain a subsequent follow-on contract because it is the government that has made the investment in needed equipment or other facilities. Similarly, a contractor possessing government facilities avoids the risk (and expense) associated with its own equipment failing to function during contract performance. See FAR 52.245-2(a)(2); FAR 52.245-5(a)(3); 52.245-7(k)(4); Tomanelli, Competitive Advantage Arising from Contractor Possession of Gov't-Furnished Property at 244, 23 Pub. Cont. L.J. Moreover, although contractors are not suppose to receive subsequent contract awards based upon an unfair competitive advantage arising from their possession

of government equipment or facilities, the award of follow-on contracts is common because COs must consider the costs and savings associated with government property regardless of possible competitive advantage. FAR 45.201; B-155691;1968 U.S. Comp. Gen. LEXIS 27, 1965 WL 2541; Tomanelli, Competitive Advantage Arising from Contractor Possession of Gov't-Furnished Property at 244, 23 Pub. Cont. L.J. Thus, the authorization under FAR 45.302-3 for COs to provide "facilities" to contractors under other than "facilities contracts," such as SGS's CPAF contract, in six specified situations, including where a contract "is for work within an establishment or installation operated by the Government," as here, when COs follow the parameters established in the regulation for the furnishing of such property, thus benefits government contractors, such as SGS, who use such property to perform their contracts, such as the J-BOSC here. Compare, e.g., De Matteo Constr., 220 Ct. Cl. at 593, 600 F.2d at 1392 (nothing in regulation may be deemed for benefit of contractor), Amer. Elec. Contracting, 217 Ct. Cl. at 357, 579 F.2d at 613 (regulation only for benefit of government), and Nat'l Elec. Labs., 148 Ct. Cl. at 314, 180 F. Supp. at 340 (regulation vesting authority for use of clause in official more senior than CO solely for benefit of government), with Applied Devices Corp. v. United States, 219 Ct. Cl. 109, 120, 591 F.2d 635, 640 (1979) (regulation for the benefit of contractors because inducement to enter into multiple-year contracts), CRF, 224 Ct. Cl. 312, 325 n.4, 624 F.2d 1054, 1061 n.4 (1980) (regulations requiring substantial adherence to invitation for bids for the benefit of both government and contractors); and Bethlehem Steel Corp., 191 Ct. Cl. at 148, 423 F.2d at 304 (a regulation prescribing techniques for a CO to determine reasonable profit level for the benefit of contractors).

In determining whether a regulation is issued for the benefit of contractors, it is not required that the regulation be "exclusively" for their benefit. If it benefits both parties, as here, that is sufficient. See CRF, 224 Ct. Cl. at 325 n.4, 624 F.2d at 1061 n.4. It is well established that a procurement regulation defining and stating the rights of a class of persons, e.g., recipients of government-furnished facilities under other than facilities contracts, is intended presumptively to benefit those persons and is the law governing award and interpretation of a contract as fully as if it were made a part thereof. E.g., Chris Berg, 192 Ct. Cl. at 182, 426 F.2d at 317. Such a regulation must be deemed a term of the contract even if not specifically set out therein. Applied Devices, 219 Ct. Cl. at 120, 591 F.2d at 640; Chris Berg, 192 Ct. Cl. at 182, 426 F.2d at 317-18.

While SGS would have us ignore FAR 45.302-3(c), the regulatory provision was in effect when SGS entered into its contract and is binding on NASA, SGS, and us. *E.g.*, *Moran Bros., Inc. v. United States*, 171 Ct. Cl. 245, 249, 346 F.2d 590, 593 (1965). In fact, under our Circuit's binding precedent, it would be reversible error for us to ignore such a regulation. *See*, *e.g.*, *Newport News Shipbuilding & Dry Dock*, 179 Ct. Cl. at 120, 374 F.2d at 516 (ASBCA should show it followed applicable procurement regulation).

In essence, in asserting we should not follow FAR 45.302-3(c), SGS is asking us to reform its contract to "eliminate" from its contract the "regulatory" term prohibiting receipt of profit or fee on the costs of facilities acquired for account of the government. See, e.g., Amer. Elec. Contracting, 217 Ct. Cl. at 348-49, 579 F.2d at 607-08 (contractor asserts mutual mistake where its contract did not "physically" incorporate specifications and qualified products list); Fraass Surgical Mfg. Co. v. United States, 215 Ct. Cl. 820, 826, 571 F.2d 34, 37 (1978) (contractor asserts a mutual mistake where term included not what it had anticipated based on prior contract and not what it deemed to be required). SGS appears to suggest here it lacked notice it was being furnished "facilities" by NASA because the CO did not include in its contract (which was "other than a facilities contract") unspecified portions of standard clauses for facilities contracts and therefore its contract should not include a prohibition against profit or fee on facilities acquired in order to conform with its belief it was not receiving "facilities." (App. supp. reply br. at 2; app. supp. br. at 5-6; app. br. at 13) We are not aware, however, of any regulation requiring "facilities contract" clauses or parts thereof be included in a contract other than a facilities contract where the CO has included the standard "property" clause appropriate for such a contract, as occurred here. FAR 45.302-3(b), 52.245-5. Moreover, the contract at issue here contained a list exceeding 600 pages of property valued in excess of \$120 million being furnished SGS by NASA. FAR Part 45 set forth numerous rules for the handling of government furnished property, such as procedures for identifying and maintaining such property, and had to be consulted by contractors such as SGS receiving government property. See, e.g., FAR 45.000; Trueger, Accounting Guide. Among other things, FAR Part 45 contained the definition of "facilities" necessary to determine if items of government property supplied by NASA comprised "facilities," and SGS does not dispute that the property at issue fell within the definition set forth. FAR 45.301. We grant reformation when there has been "a mutual mistake of fact causing the terms of a written contract to depart from the actual intention of the parties." Fraass Surgical Mfg., 205 Ct. Cl. at 596, 505 F.2d at 713; Space Corp. v. United States, 200 Ct. Cl. 1, 8-9, 470 F.2d 536, 540 (1972). To obtain such relief, a contractor must show the government would have agreed to the contract if worded pursuant to the contractor's asserted intention. Fraass Surgical Mfg., 215 Ct. Cl. at 826, 571 F.2d at 37. SGS cannot satisfy that burden here because the CO must abide by FAR 45.302-3, which contains an express prohibition and affords the CO no discretion to grant profit or fee to a contractor upon the cost of facilities acquired for the account of the government and use by the contractor. FAR 45.302-3(c). As a result of the FAR, the CO lacks authority to enter into an agreement providing otherwise. See Federal Crop Ins., 332 U.S. at 384-85 (no authority to make promise contrary to regulations); Whiteside v. United States, 93 U.S. 247, 254-57 (1876) (same); Schoenbrod, 187 Ct. Cl. at 634, 410 F.2d at 404 (CO has only that authority conferred by statute or regulation); Jackson v. United States, 216 Ct. Cl. 25, 36, 573 F.2d 1189, 1194 (1978) (law in effect at time agreement made becomes part of contract). While the remedy of reformation has been extended to include instances where the Government knew or should have known of a mistake in bid costly to a bidder, there is nothing in the record here showing NASA knew or should have known of any mistake

by SGS or of its "asserted" belief that the property furnished did not include any "facilities." See Bromley Contracting Co. v. United States, 219 Ct. Cl. 517, 527, 596 F.2d 448, 454 (1979); Amer. Elec. Contracting, 217 Ct. Cl. at 349, 579 F.2d at 607-08 (a contractor must consult information, such as list of property being furnished, and other materials available and about which it is informed by contract, such as FAR Part 45).

In sum, SGS is not free to avail itself of the benefits provided by FAR 45.302-3, e.g., NASA's supply of equipment and other facilities needed to perform its contract, and ignore the parameters established in the regulation for its receipt of such "benefits." SGS cannot "cherry-pick" the parameters for supply of facilities it is willing to have govern NASA's furnishing to it of facilities under the J-BOSC. FAR 45.302-3, which benefits SGS, must be deemed a term of SGS's contract even though not set forth therein.

6. FAR 45.302-3(c) Sets Forth a Deeply Ingrained Strand of Federal Procurement Policy

Finally, even if we did not hold FAR 45.302-3 to be controlling on NASA's COs and the J-BOSC, we would conclude it applied to SGS's contract here because it presents a significant or deeply ingrained strand of public procurement policy. As we discussed above, we believe that well-established contract law doctrines permit us to conclude a party, such as SGS, who willingly, and without protest, enters into a government contract with imputed knowledge of the government's interpretation -- as prohibiting the payment of profit or fee on cost of facilities acquired for the account of the government and use by the contractor -- is bound by such interpretation and cannot subsequently claim that it thought something else was meant. Perry and Wallis, 192 Ct. Cl. at 315, 427 F.2d at 725; Lockheed Aircraft, 192 Ct. Cl. at 44, 426 F.2d at 326; Cresswell, 146 Ct. Cl. at 127, 173 F. Supp. at 811 (where one party to contract "had reason to know" the meaning other intended to convey, he is bound by that meaning); Lykes-Youngstown, 190 Ct. Cl. at 363, 420 F.2d at 743-44 (same); accord United States v. Human Resources Mgmt., 745 F.2d at 649 (contractor aware of interpretation, acquiesced in that interpretation, and is bound). Alternatively, however, we conclude that the prohibition on profit or fee set forth in FAR 45.302-3(c) is incorporated in SGS's contract by the Christian doctrine set forth by the Court of Claims nearly 50 years ago. We recognize the so-called Christian doctrine is not tied to the intent of the contracting parties, is not invoked frequently by tribunals, see, e.g., Chamberlain Mfg. Corp., ASBCA No. 18103, 74-1 BCA ¶ 10,368, and is thought by some to provide less certainty than standard contract doctrines because what comprises a "significant or deeply ingrained strand of public procurement policy" may not be readily predictable. S.J. Amoroso Constr. Co. v. United States, 12 F.3d 1072, 1079 (Fed. Cir. 1993) (concurrence of J. Plager). We rely upon the doctrine here as an alternative ruling because the doctrine remains binding precedent, id. at 1077, and this is one of those rare instances of a significant procurement policy spanning 95 years of our nation's history.

In G.L. Christian & Assocs. v. United States, 160 Ct. Cl. 1, 12, 15, 312 F.2d 418, 424, 426, reh'g denied, 160 Ct. Cl. 58, 320 F.2d 345, cert. denied, 375 U.S. 954 (1963), the Court of Claims held that a "significant or deeply ingrained strand of public procurement policy is considered to be included in a contract by operation of law." S.J. Amoroso Constr., 12 F.3d at 1075; Gen. Eng'g & Mach. Works, 991 F.2d 775, 779; accord SCM Corp., 227 Ct. Cl. at 31-32, 645 F.2d at 903-04. While Christian involved a standard clause which was mandated by "regulation" be included in certain government contracts, G.L. Christian, 160 Ct. Cl. at 12, 312 F.2d at 423, application of the Christian doctrine does not depend upon whether there has been an "intentional or inadvertent omission of a mandatory contract clause," but upon "whether procurement policies are being avoided or evaded (deliberately or negligently) by lesser officials." S.J. Amoroso Constr., 12 F.3d at 1075; accord Gen. Eng'g & Mach. Works, 991 F.2d at 779. In denying the contractor's motion for rehearing in Christian, the Court of Claims explained:

To accept plaintiff's plea that a regulation is powerless to incorporate a provision into a new contract would be to hobble the very policies which the appointed rule-makers consider significant enough to call for a mandatory regulation. Obligatory Congressional enactments are held to govern federal contracts because there is a need to guard the dominant legislative policy against *ad hoc* encroachment or dispensation by the executive. There is a comparable need to protect the significant policies of superior administrators from sapping by subordinates. [Citations omitted]

G.L. Christian, 160 Ct. Cl. at 66-67, 320 F.2d at 351.

As discussed above, the rule set forth in FAR 45.302-3(c) – that no profit or fee shall be allowed on the cost of facilities when purchased for account of the government – has existed for nearly a century. The policy originated during World War I. It was followed by both the Departments of War and Navy. The Navy issued a "standard form" for its cost-plus contracts involving manufacturing providing:

The Department will pay the contractors a profit of (percentage of cost of product or stated amount per unit) completed and accepted hereunder and also actual cost of production, defined in sub-paragraphs (a) to (e) below. No profit will be allowed on costs under subparagraph (e). [Emphasis added]

Subparagraph (e) stated "Cost of machinery and equipment, patterns and drawings and temporary structures needed for the utilization and protection thereof acquired

exclusively for and devoted exclusively to navy work." Navy Paymaster Gen. Ann. Rep. 1918 at 94-96 (emphasis added); Crowell, *Gov't War Contracts* at 46-47, *available at* http://books. google.com/books. The War Department's Chief of Ordnance issued a 26-page "booklet" entitled "Instructions to Accountants" stating with respect to "SPECIAL PURCHASES FOR INCREASING FACILITIES":

81. Special purchases of buildings, machinery, equipment, and the like may be made by the contractor on the authority of the contracting officer and such authority must be contained in writing in every instance.

85. The cost of such special purchases is not subject to any addition for profit to the contractor unless otherwise specified in contract. [Emphasis added]

Instructions to Accountants Attached to Cost Accounting Section Fin. Div. Office of the Chief of Ordnance War Dep't, 18-19 (GPO 11 July 1917) (emphasis added). After the first World War, the Chief, Division of Cost Accounting, Department of Commerce, authored a treatise on cost accounting specifically dealing with government cost-plus contracts. In addressing "equipment" as an item of cost under such contracts, the treatise stated:

BETTERMENTS AND EQUIPMENT

Treatment of Additions and Special Facilities

Expenditures for special facilities, which usually are in the nature of a betterment, may be charged as cost when they are exclusively employed on cost-plus work, providing that the contract authorizes the charge. In all other cases, they should be charged to a Betterment account and be subject to depreciation, of which the cost-plus contracts would bear their proportionate share.

Unless clearly stated in the contract itself, expenditures of the above character should not be treated as a part of the normal costs, but should be reimbursed and profit should be added only when the betterment is manufactured in the plant. All purchases of betterments, where provided for

in the contract, should be reimbursed without profit. Some contracts do not allow profit on increased or special facilities whether purchased or manufactured in the plant. [Emphasis added]

Nicholson & Rohrbach, *Cost Accounting* at 487, 497-98, *available at* http://books.google.com/books. In addressing replacement of equipment, the book stated:

Wherever replacements of machinery are made necessary by cost-plus work and a purchase is made, the contractor is entitled to reimbursement, but **profit should not be added**.... [Emphasis added]

Id. at 501-02.

To finance complete plants, additional capacity or equipment for performance of defense contracts for contractors during World War II, the government relied upon five methods -(1) contractor use of its own funds; (2) EPF contracts; (3) DPC contracts; (4) Facilities contracts; and (5) Facilities clauses in supply contracts. Under all five methods of financing acquisition of facilities, the contractor did not receive "profit" on the cost of facilities acquired. E.g., 5 Fed. Reg. 4147 (1940); Lake Erie Eng'g, 268 F.2d 341 (2d Cir. 1959) (EPF contract with Navy provided contractor was to finance and construct needed facilities at its own expense and be reimbursed in 60 installments, but make no profit): Navy Dep't Office of Gen. Counsel, Navy Contract Law at 233-34, 239-40 (1949); Glover, Defense "Lending", 19 Harv. Bus. Rev. 197, 205 (1941); Lipton, Contractual Arrangements Covering the Use of Gov't Property by Defense Contractors, 32 Fordham L. Rev. 217, 218; Navy Contract Law at 239-40 (1949); Shaffer, 128 Ct. Cl. at 299, available at 1954 U.S. Ct. Cl. LEXIS 135, 73-80; 6 Fed. Reg. 2398 (Navy contract with GE for the acquisition and installation of additional equipment to be "done at actual cost without profit to the Contractor"); 7 Fed. Reg. 6139 (1942) ("Plan V: Government Ownership Supply Contract"); PR 3 § 332, 8 Fed. Reg. 14153-154.

After World War II, Congress enacted the ASPA providing a comprehensive framework for procurement by the military (including NASA's predecessor, the National Advisory Committee for Aeronautics). 62 Stat. 21. According to Part 412 of the ASPR, which was promulgated by the Executive pursuant to the ASPA, as sometimes occurred during World War II, industrial facilities were to be provided a contractor only under a "facilities contract" separate from any related contract for supplies or services, except under specific circumstances, including when "the contract is for the performance of work within establishments or installations operated by the Government." ASPR 412.402. Within four years of the promulgation of ASPR "Part 412 – Government Property" became "Part 13 – Government Property," compare 32 C.F.R. § 412.000 (1954)

rev.) with 32 C.F.R. § 13.000 and DoD revised the definition of "Cost contract" set forth in ASPR to include two "illustrative situations," one of which was "Facilities contracts," thereby expressly stating that DoD continued to contemplate that facilities acquired for the account of the government on a facilities contract would be at "cost" with "no profit." ASPR 3.404-1 (Rev. No. 4, 1955 ed.).

From 1955 through 1965, DoD promulgated modifications to ASPR Part 13, but did not significantly alter the regulatory provisions discussed. Compare ASPR 13.101-6, 13.101-8, 13.102-3, 13.402, 13.403 (1955 rev.) with ASPR 13.101-6, 13.101-16, 13.102-3, 13.402, 13.403 (1961 rev.); see 25 Fed. Reg. 14076, 14279 (29 Nov. 1960); accord AFPI § 13-402 at 1320, 1321 (1947); AFPI § 1013.402-50 (no fee will be payable based on cost of facilities acquired or fabricated), 24 Fed. Reg. 7006 (29 Aug. 1959). During 1965, DoD promulgated a new ASPR 13.104 entitled "Profits and fees" which stated "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract," thereby continuing its policy of not paying profit or fee on facilities acquired for account of the government and use by the contractor. ASPR 13.104, 30 Fed. Reg. 1746.

DoD amended ASPR Part 13 between 1965 and 1977, but it continued to state "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except as specified and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." ASPR 13.104, 13.303(a) (1976). While DoD "redesignated" ASPR as the DAR in 1978, from that year through 1983, the DAR continued to provide "facilities shall be provided by the Government to a contractor or subcontractor only under a facilities contract" except as specified in the DAR and "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." DAR 13.104, 13.303(a) (1983).

In 1983, DoD, NASA, and GSA created a government-wide procurement regulation, the FAR, 48 Fed. Reg. 42102 (1983); FMC Corp., 853 F.2d at 884 n.2. Similar to ASPR and DAR 13.104 and 13.303, the FAR specified facilities be furnished by the government to a contractor only under a facilities contract, except as otherwise provided in the FAR, and that "no fee" shall be allowed under a facilities contract. FAR 45.302-2 (1984), 48 Fed. Reg. 42102. Thus, the FAR continued to reflect the rule which had been established during World War I that contractors were not to receive profit on facilities acquired for government account and use in performing a government contract.

In 1990, eight years before SGS and NASA entered into the J-BOSC, DoD, NASA, and GSA amended the FAR by adding paragraph (c) to FAR 45.302-3 stating "[n]o profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract." The purpose of this additional language was to make clear that "the policy is that regardless of the type of

contract used, fee or profit will not be paid for facilities purchased for the account of the Government." 55 Fed. Reg. 52782 (1990).

While SGS appears to suggest that the deletion of FAR 45.302-3 from FAR Part 45 during revision of that Part in 2007, nine years after it entered into its NASA contract, indicates the regulatory prohibition on profit or fee on facilities acquired for government account and contractor use is not a significant and deeply ingrained strand of public procurement policy sufficient to require incorporation as a matter of law (app. supp. br. at 8-9), the government subsequently realized that, in revising FAR Part 45 to reflect a life-cycle, performance-based approach to property management permitting the adoption of more typically commercial business practices, it omitted any reference to the profit or fee provision for contracts other than facilities contracts. It therefore amended FAR 15.404-4 (effective 2 August 2010) to add the following sentence to (c)(3):

Before applying profit or fee factors, the contracting officer shall exclude from the pre-negotiation cost objective amounts the purchase cost of contractor-acquired property that is categorized as equipment, as defined in FAR 45.101, and where such equipment is to be charged directly to the contract.

75 Fed. Reg. 38679 (2010). It explained:

Prior to the publication of FAR Case 2004-025, June 2007, FAR 45.302-2(c) and FAR 45.302-3(c) contained language intended to prevent contractors from acquiring facilities and treating the facilities in the same manner as a contract line item deliverable with associated profit or fee. FAR Case 2004-025 deleted this language. The requirements of this language were added to the proposed rule in FAR 15.404-4 because the policy still applies.

Accordingly, the prohibition against profit or fee on facilities remains in the FAR today, but simply at a different location and in a different linguistic form, FAR 15.404-4 (2012).

One of the principal purposes of the prohibition against profit or fee on cost of facilities acquisition was that the Executive Branch did not wish to do anything to discourage other contractors not being furnished facilities by the government from investing in their facilities to perform contracts. As discussed above, a contractor ordinarily invests its own funds in the equipment and other facilities it needs to perform contracts intended to make a profit for the contractor. In acquiring equipment and other facilities for its own account to perform military contracts, a contractor does not receive "profit or fee" on the costs incurred for equipment and facilities acquired. Rather, it

hopes to receive profit or fee on the items it produces with the equipment and facilities acquired. See, e.g., Mason & Hanger-Silas Mason, 207 Ct. Cl. at 136-37, 518 F.2d at 1359 (contractor should expect return on capital it employs or contributes); Worthington & Goldsman, Contracting with the Fed. Gov't at 90 ("profit" is considered reward for efforts or services performed and resources provided (both human and facilities)). A contractor is unlikely to invest its own capital in equipment or facilities needed to perform contracts if it might obtain such property from the government plus "profit or fee" on the government's cost of such property. The bar against profit or fee on facilities acquired thus contributes to encouraging contractors to invest in their own equipment and facilities and promotes competition in contracting, two goals historically endorsed by Congress and the Executive Branch. This history shows, in our view, both the Executive and Congress "would be loath to sanction" a large contract, such as SGS's J-BOSC with a potential value exceeding \$2 billion, which did not bar receipt of profit upon facilities acquired for the government's account and contractor use. See G.L. Christian & Assocs., 160 Ct. Cl. at 16, 312 F.2d at 426-27; see also S.J. Amoroso Constr., 12 F.3d at 1075.

FAR 45.302-3(c) thus reflects a significant and deeply ingrained strand of public procurement policy sufficient to require incorporation of the profit and fee bar as a matter of law. See S.J. Amoroso Constr., 12 F.3d at 1075; General Eng'g & Mach. Works, 991 F.2d at 779; G.L. Christian & Assocs., 160 Ct. Cl. at 15, 312 F.2d at 426; accord SCM Corp., 227 Ct. Cl. at 31-32, 645 F.2d at 903-04; De Matteo Constr., 220 Ct. Cl. at 591-92, 600 F.2d at 1391; Condec Corp., 177 Ct. Cl. at 966-69, 369 F.2d at 757-60.

7. Incorporation As a Matter of Law

SGS suggests that incorporation of FAR 45.302-3(c) in its contract as a matter of law contravenes the Federal Circuit's holding in Aydin Corp. v. Widnall, 61 F.3d 1571 (Fed. Cir. 1995). According to SGS, in Aydin, the court held that (a) the contract at issue incorporated a different FAR provision (52.232-13) than was relied upon by the CO (32.503-5) to direct the contractor to segregate costs by delivery order in requesting progress payments as if each order were a separate contract, (b) the FAR provision actually incorporated (52.232-13) in the contract mentioned FAR Part 32, but did not expressly incorporate FAR Part 32 into the contract as this Board had held, (c) the FAR provision actually incorporated (52.232-13) merely reassured a contractor it would suffer no penalty for relying on progress payments to perform the contract, and (d) the contractor thus was entitled to receive an equitable adjustment for complying with the CO directive to segregate contract costs by delivery order in contravention of its existing accounting practice. (App. reply to NASA supp. br. at 3)

The Federal Circuit's holdings in *Aydin* are not inconsistent with our holdings here. In *Aydin*, this Board found a contractor's obligation to follow FAR 32.503-5 and segregate contract costs by delivery order derived from the contract's Progress Payments clause, which stated that a "contractor shall maintain an accounting system and controls

adequate for the proper administration of th[e] clause." Aydin, 61 F.3d at 1578 (citing Aydin Corp. (West), ASBCA No. 42760, 94-2 BCA ¶ 26,899 at 133,924). The Progress Payments clause, however, further expressly stated that "each progress payment shall be computed as... eighty percent (80%) of the Contractor's cumulative total costs under this contract." Aydin, 61 F.3d at 1577. The Federal Circuit held "the clause focuses on 'cumulative total costs' from delivery order to delivery order" and "[n]othing in the clause directs Aydin to segregate its costs by delivery order." Id. As a result, the appeals court reversed this Board, holding simply that the contract did "not expressly or impliedly incorporate FAR 32.503-5," which "at most" merely established "a preference" for cost segregation and discouraged progress payment requests based upon total contract costs in two circumstances, which did not exist there. Aydin, 61 F.3d at 1577-78. Unlike FAR 45,302-3, which benefits contractors by authorizing the Executive to furnish facilities for contract performance under other than facility contracts in certain situations where there is compliance with specific parameters, the regulation sought to be incorporated in Aydin, FAR 32.503-5, was written solely for the "benefit" of the "Government." As the Federal Circuit noted in Gen. Eng'g & Mach. Works, 991 F.2d at 780, regulations which are deemed "less fundamental or significant," such as FAR 32.503-5, generally have been incorporated in a contract as a matter of law only where they are "not written to benefit or protect the party seeking incorporation." Moreover, no one asserted in Aydin that either segregation of costs by delivery order or FAR 32.503 itself reflected a "significant and deeply ingrained strand of public procurement policy" sufficient to require incorporation as a matter of law. See Aydin, 61 F.3d at 1577-78. In fact, in that appeal, the Federal Circuit expressly held alternatively, even if FAR 32.503 had been incorporated, it would not have required segregation of costs by delivery order, the issue in dispute. Id. at 1577 n.1. Accordingly, no significant or deeply ingrained strand of public procurement policy existed which might justify incorporation. Finally, and most importantly, in Aydin, it was contended that FAR 32.503-5 imposed a duty or obligation upon the contractor – to maintain an accounting system making it possible to segregate costs by delivery order, rather than by contract. See Aydin, 61 F.3d at 1577. Here, there is no assertion FAR 45.302-3 imposes any duty or obligation upon a contractor. Rather, the regulation makes available to contractors a benefit (the furnishing of facilities by the government to perform a contract) and sets forth the parameters, or extent of authority, for a CO to provide such a benefit to a contractor. As discussed previously, a regulation setting forth the authority of government procurement officials need not be physically part of a contract to be binding on a contractor in its dealings with the government. E.g., Federal Crop Ins., 332 U.S. 380, 384-85. Accordingly, the Federal Circuit's holdings in Aydin are not applicable here and do not mandate a result different than we reach.

In sum, despite SGS's various assertions to the contrary, FAR 45.302-3 applies here. Accordingly, in these appeals, we must examine that regulation to ascertain what it provides.

IV. <u>Interpretation of FAR 45.302-3(c)</u>

SGS asserts that, if FAR 45.302-3 applies, it cannot be construed as barring or prohibiting SGS's receipt of profit on equipment or facilities acquired here for NASA's account and SGS's use in performing the J-BOSC. According to SGS, "the regulatory history of FAR part 45 – both before and after the promulgation of FAR 45.302-3(c) – establishes that the term 'facilities' has consistently been used to refer to property [which is] provided under one contract for use on a separate contract." (App. reply to NASA supp. br. at 2; app. supp. br. at 7) SGS states, "[c]onsistent with this usage, fee is [to be] provided on the contract for which the facilities are used, but not on the contract under which the facilities are provided," and NASA's interpretation is "contrary to the established usage" because it "would deny [SGS] any fee whether or not 'facilities' were being provided or used under [SGS's] contract" (id).

NASA asserts that the purpose of FAR 45.302-3(c) "is to prevent the payment of fee on facilities, period, not just the double payment of fee on facilities in two separate contracts," as SGS suggests. According to NASA, "[n]owhere [in FAR 45.302-3(c)] is there reference to a second contract." NASA adds, while SGS cites the government's 2007 modification of the FAR to eliminate the regulatory fee prohibition and provisions relating to facilities contracts as indicating that the fee limitation applied previously only where facilities were provided and used under different contracts, FAR 45.302-3(c) is the law controlling for purposes of SGS's NASA contract and such action with respect to a later version of the FAR "does not equate to approval of charging the government fee on the cost of facilities purchased for the account of the government" prior to 2007. (NASA reply to app's supp. br. at 5-8)

We generally accord an agency's interpretation of its regulations considerable deference. E.g., Udall v. Tallman, 380 U.S. 1, 16-17 (1965). Such deference, however, is not allowed here because the FAR (which is issued by DoD, GSA, NASA, and OFPP) is not considered to be a regulation promulgated by an individual department or agency. See Newport News Shipbuilding & Dry Dock, 6 F.3d at 1551 (rejecting contention that whenever the Navy Department interprets the FAR it is interpreting its own regulations); accord Perry v. Martin Marietta Corp., 47 F.3d 1134, 1136 (Fed. Cir. 1995). We therefore must begin with our own examination of the FAR's language.

A. Plain Meaning

We construe a regulation in the same manner that we construe a statute. Tesoro Hawaii Corp. v. United States, 405 F.3d at 1346-47 (citing Bowles v. Seminole Rock & Sand Co., 325 U.S. at 414-15). We look at the regulation's plain language and consider the terms in accord with their common meaning. Lockheed Corp. v. Widnall, 113 F.3d 1225, 1227 (Fed. Cir. 1997) (citing Perrin v. United States, 444 U.S. 37, 42 (1979));

Ingalls Shipbuilding, Inc. v. Dalton, 119 F.3d 972, 976 (Fed. Cir. 1997); Whelan v. United States, 208 Ct. Cl. 688, 693, 529 F.2d 1000, 1002-03 (1976) (plain meaning rules of statutory construction apply to interpretation of Executive Branch regulation); see Rio Hondo Mem'l Hosp. v. United States, 231 Ct. Cl. 657, 669 n.11, 689 F.2d 1025, 1034 n.11 (1982) (interpretation of regulation must give way to plain meaning of regulation).

The regulation at issue here, FAR 45.302-3(c), which was added in 1990, expressly states:

No profit or fee shall be allowed on the cost of the facilities when purchased for the account of the Government under other than a facilities contract.

The parties agree the plain language of this FAR bars a CO from allowing or granting profit or fee to a contractor on the acquisition cost of facilities, which will become the property of the government, under "certain circumstances." (*E.g.*, app. supp. br. at 6; app. supp. reply at 1; NASA supp. br. at 3) FAR 45.302-3(c) ("No profit or fee shall be allowed on the cost of facilities when purchased for the account of the Government")). They disagree however on what those certain circumstances are. (*E.g.*, app. supp. br. at 2, 7-10; NASA supp. br. at 3-5) The parties' disagreement thus centers on the following language set forth in the regulation – "under other than a facilities contract."

Outside of government contracting, the term "facilities contract" does not appear to have a commonly understood meaning. It does not appear in any of the dictionaries we generally consult. E.g., Rumsfeld v. United Technologies Corp., 315 F.3d at 1369-70 (to interpret regulatory language, we first examine dictionary definitions and other pertinent regulations). The term, however, is expressly defined in the FAR for purposes of "FAR Subpart 45.3," of which FAR 45.302-3(c) is a part. FAR 45.301 defines "facilities contract" as:

[A] contract under which Government facilities are provided to a contractor or subcontractor by the Government for use in connection with performing one or more related contracts for supplies or services.... Facilities contracts may take any of the following forms:

- (a) A facilities acquisition contract providing for the acquisition, construction, and installation of facilities.
- (b) A facilities use contract providing for the use, maintenance, accountability, and disposition of facilities.

(c) A consolidated facilities contract, which is a combination of a facilities acquisition and a facilities use contract.

The FAR further states "Facilities shall be provided to a contractor or subcontractor only under a facilities contract..., except as provided in [FAR] 45.302-3," and that "[n]o fee shall be allowed under a facilities contract." FAR 45.302-2(a), (c). For purposes of FAR Subpart 45.3, a "facilities contract" therefore is a "cost-only" contract pursuant to which a contractor is reimbursed for allowable costs of performance incurred and not paid profit or fee upon any costs incurred, and which may take any one of three forms, including a contract for both the use and acquisition of facilities. FAR 16.302; FAR 45.301(c).

Because there is no express restriction or other limiting language set forth in the regulatory phrase "under other than a facilities contract," the plain meaning of that phrase is that payment of fee is prohibited under types of contracts other than the three forms of "cost only" contracts providing for contractor acquisition and/or use of facilities. Such an interpretation of FAR 45.302-3(c) is consistent with the other provisions of FAR Subpart 45.3. Since facilities are to be furnished only under separate "facilities contracts" absent specific circumstances set forth, FAR 45.302-2(a), and the FAR already bars the payment of fee or profit on facility acquisition cost under facility contracts, FAR 16.302; FAR 45.302-2(c), there is no need or reason to have a second provision restating the fee prohibition with respect to "separate" contracts providing for furnishing of facilities, FAR 45.301. Fee or profit already is barred under separate contracts providing for the furnishing of facilities, i.e., under "cost-only" facilities contracts. FAR 16.302; FAR 45.302-2(c). The only "loophole" which existed in the FAR's "express" language prior to the time when FAR 45.302-3(c) was added in 1990 was with respect to acquisition and provision of facilities under a services contract, such as SGS's J-BOSC, or other "fee-bearing" type of contract employed under the FAR's limited exceptions for the use of a contract "other than a facilities contract" to provide facilities to a contractor. Compare FAR 45.302-2(a), (c) and 45.302-3 with FAR 16.302 and 45.301(c); see, e.g., Pitsker v. OPM, 234 F.3d 1378, 1381 (Fed. Cir. 2000) (we must find an interpretation harmonious with regulatory scheme and thus look not only to particular language but to design of provision as a whole).

While FAR 45.302-2(c) states, as SGS asserts, that "[p]rofit or fee (plus or minus) shall be considered in awarding any related supply or service contract, consistent with the profit guidelines of 15.404-4," its reference to "plus or minus" and "profit guidelines," indicates simply that a contractor's "receipt" of facilities from the government will be considered in arriving at the amount of profit or fee a contractor is to receive under any related supply or service contracts. For example, it might be determined that profit or fee on a related contract should be lower than normal because the government was supplying significant facilities to the contractor requiring little capital investment on the part of the contractor or that profit or fee should be slightly higher than otherwise in view of supply

of facilities because there might be significant maintenance associated with the facilities supplied. E.g., FAR 15.404-4(d)(1)(i)(D)(iv), (v); see generally Bethlehem Steel Corp., 191 Ct. Cl. at 153, 423 F.2d at 307; Newport News Shipbuilding & Dry Dock, 179 Ct. Cl. at 116-20, 374 F.2d at 531-33.

To adopt SGS's interpretation of FAR 45.302-3(c) — as barring profit or fee on facility acquisition cost only on a separate contract under which facilities are acquired and provided, but not on a contract under which facilities are acquired, provided and "utilized," such as SGS' contract with NASA, imposes a limitation on the fee bar where none is set forth in the language of the regulation. For us to undertake implementation of a totally unarticulated procurement policy when interpreting the language of a regulation, as SGS suggests, would amount to an impermissible overreaching of our legitimate role. *E.g., Victory Constr. Co. v. United States*, 206 Ct. Cl. 274, 286, 510 F.2d 1379, 1386 (1975). When there is no ambiguity in the meaning of a regulation, it is our duty to "enforce it according to its obvious terms and not to insert words and phrases so as to incorporate therein a new and distinct provision." *Tesoro Hawaii*, 405 F.3d at 1346-47 (citing *Gibson v. United States*, 194 U.S. 182, 185 (1904)). Our task is to interpret the regulation, not to rewrite it. *Rumsfeld*, 315 F.3d at 1377, *cert. denied*, 540 U.S. 1012.

B. Subsequent Amendment of Regulation

SGS asserts "streamlining efforts undertaken since the late 1990s, culminating in the final rule published on May 15, 2007, have treated the fee limitation as applying only to the contract under which 'facilities' are provided...and not the separate supply or service contract for the performance of which the facilities are used" (app. supp. mem. at 8). Although NASA counters that we should not examine the revision of FAR Part 45, which included the elimination of FAR 45.302-3(c) in favor of other provisions, because FAR 45.302-3(c) was in effect when NASA awarded the contract to SGS and controls the J-BOSC, SGS is correct in contending that a revision's subsequent effective date does not detract from its relevance to an interpretation of its predecessor, which was in force when the subject contract was awarded. E.g., Victory Constr., 206 Ct. Cl. at 286, 510 F.2d at 1386. The revision of FAR Part 45, however, does not lend support to SGS's interpretation of FAR 45.302-3(c), the controlling regulation here. While FAR 45.302-3(c) was eliminated, along with most provisions relating to facilities contracts, when FAR Part 45 was revised in 2007 to reflect a performance-based approach to the management of property permitting the adoption of commercial business practices, 72 Fed. Reg. 27364-65, after publication of the final rule, FAR case 2008-011 proposed an amendment to the FAR to "add clarity and correction to the previous FAR rule for Part 45, Government Property" expressly stating "[u]nless the contractor acquired property is a deliverable under the contract, no profit or fee shall be permitted on the cost of the property." 74 Fed. Reg. 39262-63 (2009). In discussing comments received on the proposed amendment, it was explained:

The revision does not change, expand or constrict existing contracting policy. Rather the purpose of the revised language is to clarify policy, and ensure its awareness within the acquisition community.

Prior to the publication of FAR Case 2004-025, June 2007, FAR 45.302-2(c) and FAR 45.302-3(c) contained language intended to prevent contractors from acquiring facilities and treating the facilities in the same manner as a contract line item deliverable with associated profit or fee. FAR Case 2004-025 deleted this language. The requirements of this language were added to the proposed rule in FAR 15.404-4 because the policy still applies.

The proposed amendment, with some changes based upon comments received, was issued in 2010. Thus, while FAR 45.302-3(c) no longer exists, its prohibition against profit or fee on facilities acquired for government account under other than facilities contracts simply was relocated to FAR 15.404-4(c)(3) and continues to bar receipt of profit or fee. Effective 2 August 2010, FAR 15.404-4(c)(3) states:

Before applying profit or fee factors, the contracting officer shall exclude from the pre-negotiation cost objective amounts the purchase cost of contractor-acquired property that is categorized as equipment, as defined in FAR 45.101, and where such equipment is to be charged directly to the contract.

75 Fed. Reg. 38679 (2010). The plain language of the 2010 revised FAR makes it explicit there is to be "no" profit or fee on facilities acquired for government account under "any" type of contract. The revision and rewrite of FAR Part 45 therefore offers no support for SGS's construction of the language of FAR 45.302-3(c) at issue here as barring profit or fee on facility acquisition cost only on a separate contract under which facilities are acquired and provided, but not on a contract under which facilities are acquired, provided and "utilized," such as SGS' contract with NASA.

C. Regulatory History

SGS also asserts that we should examine the "regulatory history" of FAR 45.302-3(c) because it establishes that the term "facilities" has consistently been used to refer to property which is provided under one contract for use on a separate contract consistent with its interpretation of the regulation (app. reply to NASA supp. br. at 2; app. supp. br. at 7). SGS maintains that "the reason the FAR Council added FAR 45.302-3(c) was because [the Council] knew...[a] contractor would receive" fee for facilities it

acquired under "a separate contract" and hence the FAR bar "does not apply *unless* 'facilities' are provided under one contract for use on a separate (fee-bearing) contract." (app. supp. br. at 7; NASA reply to app. supp. mem at 7).

We determined above that the plain language of FAR 45.302-3(c) clearly bars payment of profit or fee on the cost of facilities acquired for government account under types of contracts other than the three forms of cost-only contracts authorizing acquisition and/or use of facilities by a contractor. Under traditional rules of interpretation, we look initially to the textual language alone. E.g., Weddel v. HHS, 23 F.3d 388, 391 (Fed. Cir. 1994) (citing Toibb v. Radloff, 501 U.S. 157 (1991)). There is no more persuasive evidence of intent than the words used by the drafter to give expression to its wishes. See, e.g., Weddel, 23 F.3d at 391 (citing United States v. Amer. Trucking Ass'ns, Inc., 310 U.S. 534, 543 (1940)). Where the language of a regulation is clear, we are bound to give effect thereto. E.g., The Manhattan Savings Bank v. United States, 214 Ct. Cl. 599, 604-05, 557 F.2d 1388, 1390 (1977). Except in rare circumstances, when the words of a regulation are unambiguous, as here, our inquiry is complete. See, e.g., Hall v. United States, 677 F.3d 1340, 1346 (Fed. Cir. 2012) (citing Conn. Nat'l Bank v. Germain, 503 U.S. 249, 254 (1992)); Norfolk Dredging Co. v. United States, 375 F.3d 1106, 1110 (Fed. Cir. 2004) (we need not seek clarification where the language is clear and unambiguous absent extraordinary circumstances); Texas State Comm. for the Blind v. United States, 796 F.2d 400, 406 (Fed. Cir. 1986) (en banc), cert. denied, 479 U.S. 1030 (1987). An exception arises if the plain meaning produces a result that is "so bizarre" that the drafters "could not have intended it." See Weddel, 23 F.3d at 391 (citing Demarest v. Manspeaker, 498 U.S. 184 (1991)). An interpretation that causes an absurd result is to be avoided if at all possible. Haggar Co. v. Helvering, 308 U.S. 389, 394 (1940) (reading leading to absurd results is to be avoided if provision can be given a reasonable application consistent with its words and purpose); Pitsker v. OPM, 234 F.3d at 1383-84; Best Power Tech. Sales Corp. v. Austin, 984 F.2d 1172, 1175-76 (Fed. Cir. 1993). We use regulatory history to aid in construing an unambiguous regulation when such history offers clear and compelling support for an interpretation different from the ordinary meaning of the words. See Selman v. United States, 204 Ct. Cl. 675, 683, 498 F.2d 1354, 1358 (1974).

While SGS does not expressly so state, since it makes various assertions based on the regulatory history of the profit and fee prohibition, it appears that SGS contends a plain language interpretation of FAR 45.302-3(c) – as barring recovery of fee or profit on costs incurred in acquiring facilities for government account under SGS's CPAF services contract – is a result "so bizarre" that the drafters "could not have intended it" and that we must examine the regulatory history of the profit and fee limitation to divine the purpose of that limitation and properly construe FAR 45.302-3(c). In its supplemental brief, SGS asserts that "[w]hat is now contained in FAR part 45 was originally published as part 412 of the [ASPR]" in 1951. SGS explains that the 1951 ASPR required that "[i]ndustrial facilities shall be provided under a facilities contract separate from any

related contract for supplies or services, except that industrial facilities may be provided under suitable clauses in a supply or service contract which incorporates the applicable provisions," and defined a "facilities contract" as a "contract under which industrial facilities are provided by the Government for use in connection with the performance of a separate contract or contracts for supplies or services." ASPR 412.101-8, 412.402. SGS adds that, by 1965, ASPR part 412 was renumbered part 13 and included an express fee limitation, which "applied only to a contract under which facilities were provided, not the separate contract for which the facilities were used." The limitation, ASPR 13.104, stated "[n]o fee is to be provided or allowed a facilities contractor under a facilities contract." According to SGS, since the 1951 ASPR, "fee is provided on the contract for which the facilities are used, but not on the contract under which the facilities are provided." (App. supp. br. at 3-7; app. supp. reply br. at 2).

On first blush, SGS's apparent contention – that a flat prohibition on profit or fee on facility acquisition cost incurred could not have been intended - has a certain appeal. While we are familiar with a number of procurement regulations limiting the amount of profit or fee a contractor can receive, e.g., Perry & Wallis, 192 Ct. Cl. at 312, 427 F.2d at 723 (15% limit on overhead and profit); Koppers-Clough, 70-1 BCA ¶ 8150 at 37,870-71 (10% profit limit), the parties have not cited us, and we are not aware of, any other FAR expressly barring all profit or fee on "allowable" costs incurred. We know that ASPR 7-604.3 (later named "Suspension of Work" and renumbered 7-602.46, 32 Fed. Reg. 16268) and its successor FAR 52.242-14, and ASPR 7-104.77 (named "Delay of Work," ASPR Rev. No. 30, 1 Sept. 1968) and its successor FAR 52.242-17 expressly preclude receipt of profit on a contractor's increased cost of performance, but are aware both of those provisions arise from a "historic anomaly" - a desire to furnish an administrative remedy to contractors who experienced delay or suspension of their work without furnishing the contractors "greater rights" than they would have had in a "breach of contract" action in the Court of Claims, where binding precedent at the time precluded receipt of profit on amount of damages in a breach action. See Oliver-Finnie, 279 F.2d at 508, 150 Ct. Cl. 204 (profit not recoverable on amount of damages in a breach of contract action); Torres, 112 F. Supp. at 365, 126 Ct. Cl. at 79; Wyant, 46 Ct. Cl. at 210; T.C. Bateson Constr., 60-1 BCA ¶ 2552 at 12,346-49 (clause not intended to increase a contractor's substantive rights); 36 Comp. Gen. 302 (No. B-127764) (1956) (purpose of clause is to permit payment through contract modification of those extra costs which could otherwise be recovered by contractor as damages in litigation); see also Merritt-Chapman & Scott Corp., 528 F.2d at 1396; Bennett, 371 F.2d at 864, 178 Ct. Cl. at 69; Laburnum Constr., 325 F.2d at 459, 163 Ct. Cl. at 352; Clark, Gov't-Caused Delays in the Performance of Fed. Contracts: The Impact of the Contract Clauses, 22 Mil. L. Rev. 4, 27-28, Appx. B; Lane, Admin. Resolution of Gov't Breaches - The Case for an All-Breach Clause, 28 Fed. B.J. at 206-07; Seltzer & Gross, Fed. Gov't Constr. Contracts: Liability for Delays Caused by the Gov't, 25 Fordham L. Rev. 423, 446. Moreover, we are fully aware federal procurement regulations have emphasized for half a century the government is to be concerned with profit as a motivator of efficient and

effective contract performance, reducing profit (without proper recognition of the function of profit) is not in the Government's interest, and extremely low profits do not provide proper motivation for optimum contract performance. *E.g.*, FAR 15.901 (1984), 48 Fed. Reg. 42102; ASPR 3.402, 27 Fed. Reg. 4015-16 (1962). Last, but not least, we are aware that historically, when Congress has been presented with the opportunity to obtain necessary goods and services through a means other than the free market system of private contractors, as discussed above, it generally elects to rely upon the free market system of "for profit" contractors and has a keen interest in maintaining that competitive system. These factors indicate a complete bar upon profit or fee on the cost of facilities acquired for government account might be an "absurd" result, as suggested by SGS. An examination of the total regulatory history for the profit and fee limitation, rather than just the last 50 years, however, demonstrates otherwise.

We requested the parties provide us with the regulatory history of the limitation upon profit and fee on facility acquisition for account of the government set forth in FAR 45.302-3(c). The parties traced the provision to the early days of the ASPR. (App. supp. br. at 2; NASA supp. reply br. at 3) Needless to say, tracing regulatory history prior to the ASPR is not a simple or easy task. We found, however, in our own library, regulatory materials showing the profit and fee prohibition pre-dates the ASPR. We traced the prohibition to the early days of World War I and take judicial notice in these appeals of the military's implementation of the prohibition since 1917 in all types of contracts. United States v. Penn Foundry & Mfg. Co., 337 U.S. 198, 216 (1949) (may take judicial notice of official communications disclosing the policy of an agency, like reports, rules and regulations of agencies or other communications to Congress, which are reliable, authoritative, and need no further proof) (concurrence, J. Douglas); Tempel v. United States, 248 U.S. 121, 127 n.1, 130 (1918) (may take judicial notice of annual report of a Secretary provided to Congress); Caha v. United States, 152 U.S. 211, 222 (1894) (may take judicial notice of department regulations); Denkler v. United States, 782 F.2d 1003, 1007 (Fed. Cir. 1986) (may take judicial notice that certain activities existed throughout government); Bethlehem Steel Corp., 191 Ct. Cl. 141, 150-51, 423 F.2d 300, 305 (1970) (may take judicial notice of commonly recurring situation); Vulcanite Portland Cement Co. v. United States, 74 Ct. Cl. 692, 707 (1932) (may take judicial notice government was exercising its war powers, in immediate need of great quantities of supplies, and the terms of the contracts which might be entered into for the purchase thereof).

The profit and fee limitation originated during 1917 when this nation was engaged in World War I. It was used by the Navy and War Departments and Emergency Fleet Corporation in CPPC, CPFF, and CPFF with bonus savings clause contracts under which facilities were **both** acquired and used by contractors. *E.g.*, Navy Paymaster Gen. Ann. Rep. 1918 at 94-96; *Instructions to Accountants* at 18-19; Nicholson & Rohrbach, *Cost Accounting* at 487, 497-98, 501-02, *available at* http://books. google.com/books; Crowell, *Government War Contracts* at 146-47, 187, 189-90, 194-95, 209-10, 212-13,

214-18, 224-25, available at http://books.google.com/books; Williams, Josephus Daniels & the U.S. Navy's Shipbuilding Program during World War I, 60 J. Mil. Hist. at 12-14, available at http://www.jstor.org/stable/2944447; see Kingsbury, 68 Ct. Cl. at 680.

During World War II, the government again applied the profit and fee limitation to a variety of contracts. Similar to World War I, it imposed the limitation upon CPFF and supply contracts pursuant to which facilities were **both** acquired and used by contractors. E.g., 7 Fed. Reg. 6139 (1942) ("Plan V: Government Ownership Supply Contract"). For example, War Department PR 3 § 332 set forth a standard clause to be included in such contracts providing the contractor shall acquire or manufacture for government account the facilities listed in Schedule A, the government shall reimburse the contractor for its "actual cost" of facility acquisition, and where a contractor manufactures a facility its actual cost shall include an allowance for overhead and administrative expenses, which the contractor "represents, based on experience,...does not include any element of profit, and represents no more than actual costs allocable to manufacture." 8 Fed. Reg. 14153-54. The government also imposed the limitation on three types of contracts providing primarily for the acquisition of facilities -- EPF, DPC, and facilities contracts. 5 Fed. Reg. 5200-03 (1940 War Dept. EPF contract for plant addition); 6 Fed. Reg. 182-85 (1940 War Dept. EPF contract with Bell Aircraft for new plant), 186 (1940 Navy Dept. EPF contract with Fairchild Engine & Airplane for plant addition and equipment); Lake Erie Eng'g, 268 F.2d 341 (Navy EPF contract where contractor constructed needed facilities at its own expense and was reimbursed in 60 installments, but made no profit); Shaffer, 128 Ct. Cl. at 306, 337, 340, 121 F. Supp. 656, 659; Irving Trust Company, Emergency Plant Facilities Contract to Expedite National Defense at 1-2; U.S. Navy Dep't Office of the Gen. Counsel, Navy Contract Law at 233-34 (1949); Glover, Defense "Lending", 19 Harv. Bus. Rev. 197, 205 (1941); Lipton, Contractual Arrangements Covering the Use of Government Property by Defense Contractors at 32 Fordham L. Rev. 217, 218; RFC v. Beaver County, 328 U.S. at 206-07; Shaffer v. United States, 1954 U.S. Ct. Cl. LEXIS 135, 73-80; California v. United States, 132 Ct. Cl. 154, 132 F. Supp. 208 (1955) (Navy facilities contract with Bethlehem for expansion of shipyard); 6 Fed. Reg. 2398 (Navy contract with GE Corp. (Erie) for acquisition and installation of additional equipment to be "done at actual cost without profit").

During World War II, when the quantity of facilities furnished to contractors multiplied dramatically, the Navy Department issued a procurement directive stating, "[i]n most instances where the cost of major facilities of a non-expendable character is to be absorbed by the Navy, it will be more appropriate to do so by a separate facilities contract, rather than by the inclusion of the costs under a supply contract." E.g., Navy Procurement Directives § 6011 (1943); accord Navy Procurement Directives ¶ 13-102 (Apr. 1961). Such action allowed the Navy to better track (a) facilities it acquired, which often were utilized on more than one supply contract and sometimes for more than one governmental entity, e.g., also for the War Department or British, and (b) the costs of those facilities necessary to ensure proper charging of depreciation and certain other costs

under cost-plus contracts because such supply and service contracts typically were sent to storage or an archive once final payment was made. After the War, when the government was faced with the prospect of selling or retaining a multitude of facilities supplied to its contractors, the Navy's general practice of supplying major facilities under a "separate" contract for the furnishing of facilities, rather than in conjunction with a particular supply or services contract, was adopted by the ASPR with several exceptions. ASPR 412.402; see ASPR 412.101-3. Because the ASPR further stated, with only limited exceptions, "all industrial facilities provided by a procuring activity for use by a contractor at any one plant or general location shall be governed by a single facilities contract, amended from time to time as necessary, covering only the facilities at that plant or general location," the apparent reason for adoption of the Navy practice was principally to facilitate the tracking and identification of government facilities. ASPR 412.403 (1951).

In sum, the regulatory history of the profit and fee prohibition on costs of facilities acquired for government account and contractor use shows that the bar arose long before the 1951 ASPR established any requirement for provision of facilities under a contract "separate" from the supply or service contract where they would be used by a contractor. During both World Wars, the government applied the profit and fee prohibition or bar to contracts under which facilities were both furnished and used. The purpose of the bar does not appear to have been to preclude double payment of "profit" under the contract providing the facilities and related supply or service contract, as suggested by SGS, but (as discussed above) to facilitate compliance with contract percentage profit limitations and interfere as little as possible with the 140-year, Congressionally-sanctioned practice of private contractors investing their own "capital" necessary for the performance of government contracts, which also was deemed vital to our nation obtaining all items needed for its war efforts. The regulatory history provides significant insight into the factors motivating promulgation of the bar, and elucidates the types of problems the bar was intended to resolve. See Akins v. United States, 194 Ct. Cl. 477, 483, 439 F.2d 175, 177 (1971). A regulation cannot be divorced from the circumstances existing at the time it was issued or from the evils its promulgators sought to correct and prevent. See, e.g., United States v. Wise, 370 U.S. 405, 414 (1962); CAB v. Delta Air Lines, Inc., 367 U.S. 316, 323-24 (1961). Thus, the regulatory history of the prohibition supplies no support for SGS's contention that the language of FAR 45.302-3(c) should be construed as allowing fee or profit on the cost of facilities acquired for government account under the contract for which the facilities are used, but not under the contract where facilities are provided.

We find no reason to look beyond the plain words of FAR 45.302-3(c) to construe that regulation. The result they dictate – the prohibition of profit or fee upon the cost of facilities acquired for government account and contractor use under contracts other than cost-only facility contracts – is neither absurd nor unreasonable. See, e.g., Selman v. United States, 204 Ct. Cl. 675, 683, 498 F.2d 1354, 1358 (1974).

CONCLUSION

On the basis of the foregoing, both appeals are denied.

Dated: 29 January 2013

TERRENCE S. HARTMAN

Administrative Judge Armed Services Board of Contract Appeals

I concur in result (see separate opinion)

I concur in result (see separate opinion)

MARK N. STEMPLER Administrative Judge

Acting Chairman

Armed Services Board

of Contract Appeals

EINICE W THOMAS

Administrative Judge

Vice Chairman

Armed Services Board

of Contract Appeals

SEPARATE OPINION BY JUDGES STEMPLER AND THOMAS

We concur in result.

Dated: 29 January 2013

MARK N. STEMPLER

Administrative Judge

Acting Chairman

Armed Services Board

of Contract Appeals

Genera a Thomas

EUNICE W. THOMAS

Administrative Judge

Vice Chairman

Armed Services Board

of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA Nos. 55608, 55658, Appeals of Space Gateway Support, LLC, rendered in conformance with the Board's Charter.

Dated:

JEFFREY D. GARDIN Recorder, Armed Services Board of Contract Appeals