This appeal involves the issue of whether appellant's use of intra-year pension fund returns in its forward pricing estimates of pension costs violates Cost Accounting Standard (CAS) 412. The parties have filed Cross-Motions for Summary Judgment. We grant the government's motion and deny the appeal.

STATEMENT OF FACTS (SOF) FOR PURPOSES OF THE MOTIONS

1. Appellant is General Dynamics Corporation and its corporate subsidiaries (collectively GD or appellant) that contract with various agencies of the Department of Defense (stip. 1). Respondent is the Defense Contract Management Agency (DCMA or government) of the Department of Defense (DoD). The Contracting Officer (CO) is the DCMA's Defense Corporate Executive for GD (stip. 2).

1 Appellant and the government have entered into the "Parties' Stipulation of The Facts" which are referenced as stip. followed by the appropriate number.
2. GD has entered into, and continues to enter into, contract and contract modifications with various agencies of the DoD, including, but not limited to: fixed-price contracts, fixed-price incentive contracts, cost-plus-fixed-fee contracts, cost-plus-award-fee contracts, and time-and-materials contracts (stip. 3). Many of these contracts and contract modifications contain a contract clause requiring compliance with CAS, including CAS 412. See, e.g., FAR 52.230-2. (Stip. 4)

3. During the year, GD regularly prepares Retirement Plan Forward Pricing Rates ("RPFPR") that project the "assignable CAS 412 costs" for the remainder of current year and a variable number of later years. GD incorporates by reference the applicable RPFPR in its pricing proposals for specific contracts and contract modifications. (Stip. 5) At least one CO responsible for evaluating GD’s pricing proposal has allowed GD to incorporate the applicable RPFPR (stip. 6). However, at least one CO has required that appellant propose prices based on the government’s alternative method of calculating forward pricing rates. This requirement was based in part on guidance from the Defense Contract Executive that the RPFPR does not comply with CAS 412. (Stip. 7)

4. On 17 November 2008, the CO issued a final determination of noncompliance with CAS 412. The CO determined that GD failed to comply with CAS 412 during the following periods: (a) 30 September 2004 to 24 January 2005; (b) 12 May 2005 to 12 April 2006; (c) 5 September 2006 to 30 April 2007; and 17 October 2008 to 14 January 2009. (Stip 8) CAS 412, Cost Accounting Standard for Composition and Measurement of Pension Cost, 48 C.F.R. § 9904.412 (2001), states in part:

9904.412-20 Purpose.

(a) The purpose of this Standard 9904.412 is to provide guidance for determining and measuring the components of pension cost. The Standard establishes the basis on which pension costs shall be assigned to cost accounting periods. The provisions of this Cost Accounting Standard should enhance uniformity and consistency in accounting for pension costs and thereby increase the probability that those costs are properly allocated to cost objectives.

....

9904.412-30 Definitions.

(a) The following are definitions of terms which are prominent in this Standard.
(3) Actuarial assumption means an estimate of future conditions affecting pension cost; for example, mortality rate, employee turnover, compensation levels, earnings on pension plan assets, changes in values of pension plan assets.

(4) Actuarial cost method means a technique which uses actuarial assumptions to measure the present value of future pension benefits and pension plan administrative expenses, and which assigns the cost of such benefits and expenses to cost accounting periods. The actuarial cost method includes the asset valuation method used to determine the actuarial value of the assets of a pension plan.

(5) Actuarial gain and loss means the effect on pension cost resulting from differences between actuarial assumptions and actual experience.

(6) Actuarial valuation means the determination, as of a specified date, of the normal cost, actuarial accrued liability, actuarial value of the assets of a pension plan, and other relevant values for the pension plan.

(10) Defined-benefit pension plan means a pension plan in which the benefits to be paid or the basis for determining such benefits are established in advance and the contributions are intended to provide the stated benefits.

(14) Immediate-gain actuarial cost method means any of the several cost methods under which actuarial gains and losses are included as part of the unfunded actuarial liability of the pension plan, rather than as part of the normal cost of the plan.

(15) Market value of the assets means the sum of the funding agency balance plus the accumulated value of any permitted
unfunded accruals belonging to a pension plan. The Actuarial Value of the Assets means the value of cash, investments, permitted funded accruals, and other property belonging to a pension plan, as used by the actuary for the purpose of an actuarial valuation.

(18) Normal cost means the annual cost attributable, under the actuarial cost method in use, to current and future years as of a particular valuation date, excluding any payment in respect of an unfunded actuarial liability.

(19) Pay-as-you-go cost method means a method of recognizing pension cost only when benefits are paid to retired employees or their beneficiaries.

(20) Pension plan means a deferred compensation plan established and maintained by one or more employers to provide systematically for the payment of benefits to plan participants after their retirement, provided that the benefits are paid for life or are payable for life at the option of the employees. Additional benefits such as permanent and total disability and death payments, and survivorship payments to beneficiaries of deceased employees may be an integral part of a pension plan.

9904.412-40 Fundamental requirement.

(a) Components of pension cost. (1) For defined-benefit pension plans, except for plans accounted for under the pay-as-you-go cost method, the components of pension cost for a cost accounting period are (i) the normal cost of the period, (ii) a part of any unfunded actuarial liability, (iii) an interest equivalent on the unamortized portion of any unfunded actuarial liability, and (iv) an adjustment for any actuarial gains and losses.
(b) Measurement of pension cost. (1) For defined-benefit plans other than those accounted for under the pay-as-you-go cost method, the amount of pension cost of a cost accounting period shall be determined by use of an immediate-gain actuarial cost method.

(2) Each actuarial assumption used to measure pension cost shall be separately identified and shall represent the contractor's best estimates of anticipated experience under the plan, taking into account past experience and reasonable expectations. The validity of each assumption used shall be evaluated solely with respect to that assumption. Actuarial assumptions used in calculating the amount of an unfunded actuarial liability shall be the same as those used for other components of pension cost.

(c) Assignment of pension cost. Except costs assigned to future periods by 9904.412-50(c)(2) and (5), the amount of pension cost computed for a cost accounting period is assignable only to that period. For defined-benefit pension plans other than those accounted for under the pay-as-you-go cost method, the pension cost is assignable only if the sum of (1) the unamortized portions of assignable unfunded actuarial liability developed and amortized pursuant to 9904.412-50(a)(1), and (2) the unassignable portions of unfunded actuarial liability separately identified and maintained pursuant to 9904.412-50(a)(2) equals the total unfunded actuarial liability.

....

9904.412-50 Techniques for application.

....

(b) Measurement of pension cost....

....

(4) Actuarial assumptions shall reflect long-term trends so as to avoid distortions caused by short-term fluctuations.

....
(6) If the evaluation of the validity of actuarial assumptions shows that any assumptions were not reasonable, the contractor shall:

(i) Identify the major causes for the resultant actuarial gains or losses, and

(ii) Provide information as to the basis and rationale used for retaining or revising such assumptions for use in the ensuing cost accounting period(s).

5. On 12 February 2009, GD appealed the CO's final determination of non-compliance. For the purposes of this appeal, the “affected contracts” include appellant's fixed-price, fixed-price incentive, cost-plus-fixed-fee, cost-plus-award-fee, and time-and-materials contracts and contract modifications that were negotiated and/or entered into during the above-mentioned time periods. (R4, tab 19; stip. 9)

6. The parties have identified Contract Nos. N00421-05-C-0110 (Contract 0110) and W52H09-09-C-0012 (Contract 0012) to serve as “test contracts” (stip. 10).


9. Pursuant to CAS 412, GD annually calculates the actuarial value of pension plan assets as of 1 January (“the January 1 actuarial value”) by first comparing (a) the “expected” estimated actuarial value to (b) the final actual “January 1 market value” (stip. 11).

10. The “expected” actuarial value is equal to the “January 1 actuarial value” of the previous year increased by the assumed per annum interest rate of 8%, with adjustments for trust income and disbursements (stip. 12).
11. The “January 1 market value” is equal to the final market value of plan assets on 31 December of the previous year (stip. 13).

12. In the past, and sometimes currently, GD may refer to the January 1 market value as the “end-of-year” or “December 31” market value of the previous year (stip. 14).

13. The “January 1 actuarial value” is set equal to the “expected” actuarial value plus 20% of the difference between the actual “January 1 market value” and the “expected” actuarial value (stip. 15).

14. In no event may the “January 1 actuarial value” be less than 80% or more than 120% of the “January 1 market value” of assets. If the January 1 actuarial value exceeds 120% of the “January 1 market value” of assets, then the “January 1 actuarial value” is set equal to 120% of the January 1 market value. If the “January 1 actuarial value” is below 80% of the January 1 market value of assets, then the January 1 actuarial value is set equal to 80% of the “January 1 market value.” Finally, if the “January 1 actuarial value” is less than 3% above or below the “January 1 market value,” then the “January 1 actuarial value” is set equal to the “January 1 market value” of plan assets. (Stips. 16, 17)

15. In its RPFPRs, GD also must estimate the “January 1 actuarial value” of plan assets for future years. However, to do this, appellant cannot perform the identical CAS 412 calculations described above because the “January 1 market value” of plan assets for future years is not yet known. Thus, in its RPFPRs, GD must first estimate the “January 1 market value” for future years. It then performs the CAS 412 calculations described above to estimate the “projected January 1 actuarial value” based on the “projected January 1 market value.” (Stip. 18)

16. In its RPFPRs, appellant estimates the “January 1 actuarial value” for the next year by comparing (a) the “expected” actuarial value to (b) the “projected” January 1 market value (stip. 19).

17. For example, on or about 26 July 1994, GD, through its actuaries, provided a RPFPR proposal to the government that projected the 1 January 1995 actuarial value of plan assets based on the following facts and assumptions (stips. 20a.-20e.iv.):

   a. The market value of assets on the previous January 1 (1 January 1994) was $2,122,371,000.

   b. The actuarial value of assets on the previous January 1 (1 January 1994) was $1,697,968,000.
c. The "expected" actuarial value of assets on January 1 (1 January 1995) was $1,772,424,000. This was based on the actuarial value of assets on the previous valuation date, 1 January 1994, multiplied by 1.08, and further adjusted for income and disbursements.

d. The "projected" market value of assets on January 1 (1 January 1995) was determined to be $1,998,698,000, which reflected an annual rate of return of negative 3%. This was based on an actual 6.9% rate of return for the first six months of 1994, an assumption that the final six months of 1994 would experience an annual rate of return on assets of 8%, and adjustment for income and disbursements.

e. The "projected" January 1 actuarial value of assets was determined by comparing the "expected" actuarial 1 January 1995 value of plan assets ($1,772,424,000) to the "projected" 1 January 1995 market value of plan assets ($1,998,698,000):

i. First, GD determined that the "projected" January 1 market value of $1,998,698,000 exceeded the "expected" actuarial January 1 value of $1,772,424,000 by $226,274,000.

ii. Second, GD calculated the excess of the difference between the "projected" and "expected" values ($226,274,000) over five percent of the "expected" actuarial value of plan assets ($88,621,000). (GD no longer employs this 5% threshold in its calculation of January 1 actuarial value of plan assets.) This excess equaled $137,653,000.

iii. Third, appellant calculated 20% of the excess of the difference between the "projected" and "expected" values over five percent of the "expected" actuarial value of plan assets to be $27,531,000 (0.20 x $137,653,000).

iv. Fourth, this 20% of the excess was added to the "expected" actuarial value of $1,772,424,000 to yield the "projected" 1 January 1995 actuarial value of assets of $1,799,955,000, which was 90.1% of the "projected" 1 January 1995 market value of plan assets ($1,799,955,000/$1,998,698,000).

Eight Percent Anticipated Growth Rate

18. As discussed above, in its RPFPR proposals, GD estimated the January 1 actuarial value of plan assets by comparing: (a) the "expected" actuarial value of plan assets to (b) the "projected" January 1 market value of plan assets (stip. 21).

19. In calculating the "expected" actuarial value of assets, GD assumes an 8.0% per annum interest rate (stip. 21a.).
20. In calculating the “projected” January 1 market value of assets, appellant first determines the actual rate of return on plan assets for the year to date. Second, GD assumes that the market return for the remainder of the year will be equal to 8% per annum. (Stip. 21b.) For example:

i. On 3 November 2003, GD projected an annual market return for 2003 of 14.0% based on (i) an actual return of 12.0% for the first nine months of 2003 and (ii) an assumed rate of return of 8.0% per annum for the remainder of 2003.

ii. On 30 September 2004, appellant estimated an annual market return for 2004 of 2.6% on the assets held in the GD (Government) Pension Plan based on (i) actual investment returns through the first eight months of 2004 and (ii) an assumed rate of return of 8.0% per annum for the remainder of 2004.

iii. On 30 September 2005, GD estimated an annual market return for 2005 of 4.8% on the assets held in the GD (Government) Pension Plan based on (i) an actual return of 2.1% for the first eight months of 2005 and (ii) an assumed rate of return 8.0% per annum for the remainder of 2005.

iv. On 5 September 2006, GD estimated an annual market return for 2006 of 4.2% on the assets held in the GD (Government) Pension Plan based on (i) an actual return of 0.9% for the first seven months of 2006 and (ii) an assumed rate of return of 8.0% per annum for the remainder of 2006.

v. On 6 December 2006, GD estimated an annual market return for 2006 of 8.4% on the assets held in the GD (Government) Pension Plan based on (i) an actual return of 7.0% for the first ten months of 2006 and (ii) an assumed rate of return of 8.0% per annum for the remainder of 2006.

vi. On 15 October 2008, GD projected an annual market return for 2008 of negative 33% based on (i) an actual negative return of 34% during the first 9.5 months of 2008 and (ii) an assumed rate of return of 8.0% per annum for the remainder of 2008.

(Stips. 21b.i.-21b.vi.)

Desktop Procedure

21. On 2 February 2007, GD codified its pension forward pricing practice described above into a desktop procedure (stip. 22). GD’s desktop procedure for Retirement Plan (Pension) Forward Pricing states, in relevant part, that (stips. 23a.-23h.):
a. For illustration purposes, all of the dates referenced are based on an initial cost accounting period of 2007 and an initial 1 January 2007 actuarial valuation date. Each year, the initial cost accounting period and initial actuarial valuation date will determine the target timeline dates. For example, next year the initial actuarial valuation date becomes 1 January 2008 and all references to “2007” change to “2008,” references to “2008” change to “2009,” and so on.

b. To illustrate the target timeline for preparing and submitting Forward Pricing Proposals, this statement of policy and procedure uses an initial cost accounting period of 2007 and the associated initial actuarial valuation as of 1 January 2007.

c. Forward Pricing Proposals are based on projections derived from the actuarial valuations for the initial cost accounting period.

d. The 2007 assignable CAS cost is presented on an “estimated” basis because the final 2007 assignable CAS cost cannot be determined until annual flow through is known following the close of December 2007.

e. Projected asset values on each future January 1 are developed from the market and actuarial values at January 1 in the initial 1 January 2007 actuarial valuation. The projected market value on each subsequent January 1 reflects the anticipated benefits to be paid from the trust during the year; the company contributions expected to be deposited into the trust during the year; and the estimated investment return during the year. The projected actuarial value is then developed from the projected market value.

f. The projected market value on 1 January 2008 incorporates an estimate of the market return during 2007. The estimated market return for 2007 reflects the actual year to date return on assets through 30 June 2007 and a proportionate share of the assumed long-term rate (currently 8%) for the remaining six months of the year.

g. The projected market value on 1 January 2009 incorporates an estimate of the market return during 2008. The estimated market return for 2008 reflects the assumed long-term rate of return (currently 8%) for the entire year. Likewise, projected market values on 1 January 2010 and 1 January 2011 incorporate an estimated market return in the previous year that reflects the assumed long-term rate of return (currently 8%) for the entire year.

h. GD’s RPFPRs may be updated and resubmitted. Examples of events that may lead GD to consider an update include:

1. The adoption or negotiation of a significant change in benefit provisions.
2. A significant change in the future workforce projections (e.g., the implementation of an early retirement incentive program).

3. A significant restructuring of business units or workforces.

4. Acquisitions, divestitures, plan mergers, plan spinoffs.

5. The issuance of regulatory changes or new legislation.

6. A significant change in contract status (e.g., bidding on a major new contract).

**Alleged Non-Compliance with CAS 412**

22. Since 1986, in its RPFPRs, GD has estimated the January 1 market value of plan assets using the actual market performance to date in the preceding year. For example:

   a. On 23 July 1986, based on the 1986 market performance to date, GD estimated a 1986 market return of 17.5%.

   b. On 21 September 1987, based on the 1987 market performance to date, GD estimated a 1987 market return of 15%.

   c. On 21 September 1989, based on the 1989 market performance to date, GD estimated a 1989 market return of 19%.

   (Stips. 24a.-24c.)

23. For approximately twenty years, the government did not object to GD's practice of estimating the January 1 market value of plan assets using the actual market performance in projecting the January 1 market value of plan assets (stip. 25).

24. However, in 2006, the government objected to GD's use of actual market performance in projecting the January 1 market value of plan assets (stip. 26).

25. On or about 5 September 2006, GD provided the CO with the RPFPR for 2006 to 2009, which stated (stip. 26a.):

   The forward pricing calculations presented in the letter incorporate the actual 2005 investment returns... In addition, the actual investment performance of the retirement trust assets through the first seven months of 2006 coupled with a
proportionate share of the assumed annual 8% return for the balance of the year.

(Emphasis in stip.)

26. On or about 22 September 2006, Defense Contract Audit Agency ("DCAA") issued a draft opinion that asserted that CAS 412 prohibited GD from estimating the January 1 market value of assets using market performance to date (i.e., "the actual rate of return for the first seven months of 2006") in the RPFPR (stip. 26b.). This letter was followed by DCAA's issuance of a draft audit report on 1 December 2006 reaching the same conclusion (R4, tab 8 at 15).

27. GD responded to the draft audit report in a letter dated 8 December 2006, which described appellant's rationale for using the "composite rate" as follows (R4, tab 8 at 17-18):

The annual January 1 actuarial valuation assumes a long-term return on assets of 8% per annum. This means that the actual value of assets on January 1 is assumed to earn an annual rate of return of 8% in the future – until the assets are exhausted when the last participant receives the last payment in about 80 years or so. This assumption is actually reflected in the calculation of the liabilities in that the present value of future payments is obtained by discounting the payments at this assumed long-term rate of 8%.

So how does this work in GDC's forward pricing? Looking at the September 5, 2006, proposal reveals the process. GDC begin [sic] with the most recent completed actuarial valuation. In this case, it is the January 1, 2005, valuation. Assets reflect actual January 1, 2005, values and liabilities are discounted at the long-term rate of 8%.

The next step is to estimate what the January 1, 2006, valuation results will be. This valuation will reflect asset values at January 1, 2006, and liabilities will again be discounted at the long-term rate of 8%. We then estimate what the January 1, 2007, valuation results will be. This valuation will reflect asset values at January 1, 2007, and liabilities will again be discounted at the long-term rate of 8%. The same holds true for the 2008 and 2009 valuations.
The forward pricing projections are sequential. CAS costs for 2005 were developed in the January 1, 2005, actuarial valuation. Next, GDC estimates the January 1, 2006, valuation results. In September of 2006 we know what the investment performance was for 2005 and what the asset value was at January 1, 2006--so we don't need to make any assumptions about it. Accordingly, our estimate of the January 1, 2006, valuation results reflects the actual investment return of 6.2% in 2005. CAS costs for 2006 are then developed from the estimated January 1, 2006, valuation results.

Our estimate of the January 1, 2007, valuation results needs to reflect an estimate of what the asset value at January 1, 2007 will be. In September of 2006, GDC doesn't know what that value will be; however, we do know what the investment performance has been through the first seven months of the year. Whereas we had knowledge of the actual investment performance for all 12 months of 2005, we only have such information for seven months of 2006--so we need to make an assumption for the balance of the year. We have no basis for using anything other than the assumed long-term annual rate of 8% for future periods. Combining the actual return for the first seven months (a gain of 0.9%) with a proportionate share of the assumed annual 8% return for the remaining five months of the year (a gain of 3.3%) produces our estimate of the total return for the 2006 year (a gain of 4.2%). This estimated return is then used to develop the estimate of the January 1, 2007 asset value.

Our estimate of the January 1, 2008, valuation results needs to reflect an estimate of what the asset value at January 1, 2008 will be. Since we have no knowledge of actual investment performance in 2007 we use the long-term assumed return of 8% as the estimated return for 2007. This is then used to develop the estimate of the January 1, 2008 asset value. Similarly, the estimated asset value at January 1, 2009, for the estimated 2009 valuation is also developed using the 8% assumed return.

Our methodology for developing estimated January 1 asset values is based on:
FAR 42.1701(b)

The ACO shall obtain the contractor’s proposal and require that it include cost or pricing data that are accurate, complete, and current as of the date of submission.

It is also GDC’s understanding that the Truth in Negotiations Act (TINA) requires the use of accurate, complete, and current pricing data. Therefore, when the forward pricing proposal is prepared, GDC recognizes as much actual asset information as is available to us at the time. The objective is to develop the best estimate of future valuation results and costs.

28. On 29 December 2006, DCAA issued an audit report that concluded that appellant’s “use of actual year-to-date returns in establishing a ‘Composite rate of return’” in its RPFPRs was in noncompliance with CAS 412 (R4, tab 8 at 2).

29. On 17 November 2008, the CO issued a final determination of CAS 412 noncompliance, which stated (stip. 26c.):

GDC remains in noncompliance with CAS 412 on the basis indicated in the 6 March 2007 Determination of Noncompliance. In the future, GDC should stop basing its Pension Forward Pricing Proposal on partial year actual rates of return....

30. In addition to the known market return, GD uses new information that it learns during the year about other actual events to update the projection of the January 1 actuarial valuations in its RPFPRs (stip. 27). For example (stips. 27a.-27h.):

a. On 5 December 2002, GD updated its projection for the 1 January 2003 actuarial valuations based upon: the anticipated mergers of the ASDS Non-Represented, ASDS Represented, and ATS Occupational Plans into the GD (Government) Plan at the close of 31 December 2002; the extension of pension coverage to salaried employees of the former Advanced Technical Products operation and to salaried employees at the OTS Camden facility effective 1 January 2003; and the 1 January 2002 membership data and updated membership projections.

c. On 30 September 2004, GD updated its projection for the 1 January 2005 actuarial valuations based upon: a change in the benefit structure for the salaried workforce at certain segments; a plan amendment to provide that employees hired after 31 December 2004 at GSC IES, ATS Management/Technical, Defense Non-Represented, GDIS C4 East, and C4 West were not eligible to participate; and a change to the underlying basis of the statutorily determined interest rate used to calculate Current Liability and the associated RPA ’94 full Funding Limitation Override.

d. On 12 May 2005, GD based its projection for the 1 January 2006 actuarial valuations, in part, upon the transfer of assets and liabilities associated with the 28 February 2005 sale of the GDLS Muskegon Getty Street Operation.


f. On 13 April 2006, GD based its projection for the 1 January 2007 actuarial valuations, in part, upon the expiration of the provisions of the Pension Funding Equity Act of 2004 pertaining to the determination of the required interest rate to be used in the calculation of current liability.

g. On 5 September 2006, GD updated its projection for the 1 January 2007 actuarial valuations based upon a presumption that the IRS would finalize proposed regulation 1.412(1)(7)-1, which mandates the use of an updated mortality table for certain funding purposes.

h. On 6 December 2006, GD updated its projection for the 1 January 2007 actuarial valuations based upon the implementation of a 1% Final Average Pay benefit formula for the salaried benefit structure effective 1 January 2007.

31. GD has previously disclosed to the government that it uses new information in between valuation dates, besides the known return on assets, to update the RPFPRs. For example, GD disclosed that it incorporates new information regarding plan census information and changes in benefits. (Stip. 28) There is no evidence indicating whether the types of information (and that described in SOF ¶ 17) “updating” or resulting in adjustments to GD’s retirement plans are out of the ordinary or materially impact pension costs computable under CAS 412. The government does not contend that updating or
inclusion in RPFPRs of the information and examples cited in SOF ¶ 17 result in a violation of CAS 412.

DECISION

The parties have filed cross-motions for summary judgment. Summary judgment is appropriate where the moving party establishes that it is entitled to judgment as a matter of law. *Mingus Constructors, Inc. v. United States*, 812 F.2d 1387, 1390 (Fed. Cir. 1987); *Riley & Ephriam Construction Co. v. United States*, 408 F.3d 1369, 1371 (Fed. Cir. 2005). In this case, the parties have entered into extensive stipulations and agree that there are no material facts in dispute.

The primary issue in this appeal is whether CAS 412 prohibits GD from using part-year (or intra-year) market value data (and implied rates of return) to estimate future pension costs in its RPFPRs. In particular, the question presented is whether appellant’s use of the “actual investment performance” of pension fund assets through a portion of its fiscal year (year-to-date returns) in RPFPRs for the years in dispute violates the CAS.

The burden of proof is on the government to establish noncompliance with the CAS. *E.g.*, *Ball Corp.*, ASBCA No. 49118, 00-1 BCA ¶ 30,864. The government has met its burden in this case. We conclude that GD’s use of intra-year pension fund values and rates in its RPFPRs failed to comply with CAS 412.

Appellant contends:

1. CAS 412 is inapplicable because it addresses solely the measurement and assignment of pension costs to the “current” (or completed) accounting period and does not address the estimation of those costs in GD’s RPFPRs for future years.

2. Assuming *arguendo* that the standard does apply to GD’s “projection” of pension costs in its RPFPRs, appellant nevertheless maintains that its methodology complies with CAS 412 because:

   a. The part-year fund values/rates of return used in its RPFPRs are not “actuarial assumptions” as defined in CAS 412-30(a)(3) and, therefore, its methodology does not violate CAS 412-50(b)(4), or

   b. If the part-year fund returns qualify as “actuarial assumptions,” GD is nevertheless required to use those values because they represent appellant’s “best estimate” of future pension costs and must, therefore, be used to comply with CAS 412-40(b)(2).
3. FAR cost or pricing data requirements mandate the submission of “accurate, complete and current” data. Part-year fund values are the most “current” data available at the time the RPFPRs are submitted. Consequently, that most “current” data must be used in its RPFPR estimates and any requirement to the contrary in the CAS conflicts with the FAR cost or pricing data requirements.

We address each of these contentions below.

Applicability of CAS 412

Appellant argues that CAS 412 is inapplicable to estimation of projected market values in future years because it merely specifies a “measurement” method for determining pension costs assignable to the “current” (or completed) year using the end-of-year or “January 1” market value. According to appellant, CAS 412 does not prescribe a method for determining pension costs for future years, in particular estimating “projected market values” in an RPFPR.

These contentions are without merit. CAS 412 clearly encompasses estimation of pension costs in future years as well as the current year. Several provisions expressly or implicitly describe the measurement process as one applicable to future years. For example, CAS 412-40(a)(1) states that an integral component of pension cost for defined benefit plans not accounted for on a pay-as-you-go basis is “normal cost.” “Normal cost” is expressly defined in CAS 412-30(a)(18) to mean “the annual cost attributable, under the actuarial cost method in use, to current and future years as of a particular valuation date, excluding any payment in respect of an unfunded actuarial liability” (emphasis added). Measurement of pension costs under defined benefit plans where the benefits actually become payable to retirees often decades later, necessarily involves the use of numerous “actuarial assumptions” defined in CAS 412-30(a)(3) to mean “estimate[s] of future conditions...” (emphasis added). It is illogical to reason that the long-term pension cost estimation process prescribed in CAS 412 requires one methodology to be used for measuring the current year but permits materially different methods in estimates for future years. The necessity to annually measure pension costs in order to assign them to accounting periods, does not reasonably connote that estimations for forward pricing and future years can radically depart from that annual methodology.

Moreover, to the extent appellant’s argument assumes that it can estimate pension costs in its RPFPRs in a materially different way than it is required to measure such costs under CAS 412 that assumption patently violates CAS 401. The latter standard requires that the methodology used for estimating costs be consistent with the methodology used
for measuring costs. The comprehensive "consistency" requirement set forth in CAS 401 is a primary foundation and cornerstone of the CAS generally.2

The gravamen of appellant's position recognizes that the essential question is not whether GD is permitted under the CAS to use different measurement and estimating methodologies, but whether it has done so on the facts of this case. In that regard and from appellant's viewpoint, it has used the same methodology because it is using the value of pension fund assets both in measuring the costs pursuant to CAS 412 as well as its RPFPR estimates, albeit one that GD contends is more current and contemporaneously accurate. Appellant considers that it is not in violation of CAS 401 or CAS 412 because updating the pension fund value information in its RPFPRs does not connote that appellant is using a different estimating methodology.

We need not rely on any analysis of the consistency of appellant's estimating methodology and measurement methodologies. The more salient question is whether the estimating methodology violates CAS 412. We consider that it does for the reasons stated hereinafter.

Compliance with CAS 412

The government argues that appellant's RPFPR methodology using intra-year returns violates CAS 412-50(b)(4) which states, "actuarial assumptions shall reflect long-term trends so as to avoid distortions caused by short-term fluctuations." According to the government, GD improperly combined part-year rates of return for the initial part of the year with the purported proportionate share of the agreed long-term 8% annual rate of return to derive a "composite" or blended rate of return for the full year. The government considers that appellant's part-year fund returns and composite rates proposed by GD are "actuarial assumptions" as is the 8% per annum rate used to calculate pension costs for CAS 412 purposes. The government notes that the 8% rate of return has been used for decades by GD (as recommended by GD's actuaries) in the annual CAS 412 cost measurement process.

Appellant contends that CAS 412 does not proscribe GD's methodology because the intra-year rates/fund returns in its RPFPRs are "historical facts" and not "actuarial assumptions" and, therefore, it is not in violation of CAS 412-50(b)(4). Moreover, appellant argues that the part-year rates/fund returns are used because they represent GD's "best estimate" and, thus, must be used by appellant to comply with the "fundamental" requirement of CAS 412-40.

1. Intra-Year Rates/Fund Returns Are Actuarial Assumptions

GD argues that the mid-year values used in its RPFPRs are not “actuarial assumptions” as defined in CAS 412-30(a)(3) because the intra-year values are historical facts or actual experienced rates not “estimates.” Appellant notes that its annual valuation consists of two different “inputs.” One “input” consists of a “snapshot” of the “1 January” plan census level, plan benefit level and current market value of plan assets. It considers these to be “historical facts.” The second “input” distinguishes what GD considers qualify as “actuarial assumptions.” According to appellant, the latter include: mortality rates, an interest rate, salary increase rates, withdrawal rates, disability rates, retirement rates, spousal option rates, post retirement cash out option rates, social security benefit increase rates and expense increase rates. In its intra-year RPFPRs, GD uses the same “actuarial assumptions” used in the CAS 412 valuation as listed in the second “input” described above, but, unlike the CAS 412 valuation, it makes a different estimate of what the market value will be on, future CAS 412 “1 January” valuation dates. That estimate is based on using both the 8% rate used in the CAS 412 valuation as well as the “current market value” as of the time of the partial year RPFPR. Appellant continues to assume an 8% growth of the intra-year value for the balance of the year, as well as in subsequent years covered by the RPFPR. (App. mot. and resp. at 6-8) Appellant’s positions are primarily based on its view that the part-year values, as the most current, are more likely to be accurate than consistent use of the 8% rate.

The parties do not dispute that the assumed 8% return, used consistently by the parties over the years for the CAS 412 measurement and assignment of yearly costs, is an actuarial assumption. Appellant considers that the actual part-year value merely updates the year-end value. Accordingly, from GD’s perspective the “assumed” 8% would be inaccurate to the extent it would result in a value of the fund that differed from the known “historical” value of the fund at the particular point within the year when a RPFPR was prepared.

Appellant’s position is based on its opinion that a “fact” is not an assumption. Viewed in isolation, partial year fund value (and rate of return), as of a precise moment during the year, may be a fact. However, in context as an integral element of the estimation of pension costs, it is an actuarial assumption as defined by CAS 412-30(a)(3). We agree with the government that the resulting “composite” or “blended” rate used through the end of the first RPFPR year is effectively a substitute for the 8% rate. Both parties agree that rate is an “assumption” and both parties agree it is appropriately 3 Only “market value” is disputed in this appeal. The record contains no detailed information concerning, inter alia, the impact or materiality of the other alleged “historical facts” and we express no opinion concerning whether they may be considered “actuarial assumptions” in a specific case.
factored into the year-end measurement of pension cost. The substituted “composite” rate is equally an assumption.

GD’s use of part-year values of the fund as of certain dates and times during the year in its RPFPR methodology does not alter the basic purpose of the exercise, to estimate the pension plan’s anticipated CAS 412 year-end values for the years covered by the RPFPR. Use of part-year returns/rates assumes that they are viable predictors of future pension costs. As an essential component of appellant’s methodology, the intra-year fund value/rate falls squarely within the CAS 412-30(a)(3) definition of “actuarial assumption.” It is an integral part of its RPFPR “estimate of future conditions affecting pension cost.” It also assumes that the intra-year value is a relevant, even more accurate, predictor of both the future “earnings on pension plan assets” as well as the future “changes in value of pension plan assets” than use of the CAS 412 prior year-end value and the 8% rate which has stood the test of time.

Appellant’s RPFPR methodology, *inter alia*, deviates from the parties’ established CAS 412 practice. GD uses the fund’s actual market value (and implicit rate of return) rather than the 8% rate as of the time during the year when it prepares its RPFPRs. Regardless of how GD projects the year-end value of the pension plan, the components integral to the methodology used remain estimates of the year-end value because the actual value remains unknown until year end. The parties’ consistent CAS 412 practice has been to develop an expected year-end actuarial value and compare it to the actual year-end market value of the pension fund assets. That fixed and established yearly procedure consistently assumes that the plan’s value will increase at an 8% rate year-to-year with various adjustments not in dispute.

As a consequence of appellant’s RPFPR methodology, the expected year-end value of the fund for CAS 412 purposes will differ from the expected year-end value developed for RPFPR purposes, except as a result of highly improbable mathematical coincidence. This difference can, as alleged by the government, result in radical differences in the estimation of GD’s pension costs. Although quantum is not before us for decision, the contracting officer’s final decision estimates that the differences during the 2004-2009 period in dispute result in increased costs to the government totaling approximately $55 million. The differences computed during the initial partial year are carried forward and affect all subsequent years covered by the RPFPRs, although GD reverts to the accepted 8% rate during those later years.

Appellant’s belief in the purported greater accuracy of using part-year rates does not make those rates any the less assumptions affecting pension fund valuations years into the future. They merely substitute shorter term market value fluctuations into the prediction of those valuations. Rather than assuming that the CAS 412, 8% appreciation rate will more accurately reflect those values, the substitution of part-year results of fund
activity assumes that the RPFPR “composite” rates are more likely to be accurate. That assumption falls within the CAS 412-30(a)(3) definition of “actuarial assumption.”

Although an “actuarial assumption” is defined in CAS 412-30(a)(3), appellant also maintains that usages of “actuarial assumptions” in the definitions of other terms in CAS 412-30(a)(4) and CAS 412-30(a)(5) impliedly modify the CAS 412-30(a)(3) definition. GD suggests that an “actuarial assumption” not only must satisfy CAS 412-30(a)(3) but appellant’s interpretation of the meaning of CAS 412-30(a)(4) and CAS 412-30(a)(5).

As we understand the logic, appellant contends that its use of historical part-year values and rates are not actuarial assumptions because its “projected market value” is never used in the yearly actuarial valuation and never compared to the “actual experience” of a cost period to determine the “actuarial gain and loss” for that cost period. Presumably, a principal point of appellant’s RPFPR methodology is to project what the likely CAS 412 year-end fund values will be in order to estimate assignable pension costs and market values in the years covered by the RPFPR. In any event and simply put, “actuarial assumption” is defined solely in CAS 412-30(a)(3). Usage of the terms in other definitions and in numerous contexts throughout the standard does not alter the definition. We consider that appellant’s contentions in this regard represent further manifestations of its view that the requirements of CAS 412 pertain solely to actual cost measurement and not to its “projection” of those costs into the future for RPFPR purposes.

We conclude that the intra-year values (and implicit rates of return) used in appellant’s RPFPR methodology constitute “actuarial assumptions.”

2. Appellant’s Use of Short-Term Actuarial Assumptions Violates CAS 412-50(b)(4)

Appellant does not contend that the part-year fund values reflect “long-term” trends. Although the meaning of “short” or “long-term trends” within the context of the CAS pension-related provisions is imprecise, we consider that partial year trends are clearly “short-term.” In fact, appellant’s estimating methodology for the RPFPRs could be as short as days if its logic is applied rigorously, albeit such extremes are not present with respect to the particular RPFPRs in dispute here.

Moreover, the record establishes that use of the “composite” rates based on part-year fund returns, has in fact caused “distortions.” In the most extreme case, the 15 October 2008 RPFPR composite rate was derived from blending the minus 33% short term decline in fund value with the long-term 8% for the remainder of the year.
3. CAS 412-40(b)(2) Does Not Implicitly Authorize Appellant to Use an Estimating Methodology Violating CAS 412-50(b)(4)

Assuming arguendo that its intra-year fund returns qualify as "actuarial assumptions," GD argues that its methodology for calculating them complies with CAS 412 because they "represent the contractor’s best estimates of anticipated experience under the plan, taking into account past experience and reasonable expectations" as required by CAS 412-40(b)(2). For this reason, appellant concludes that only its method "square[s] with the overall purpose of CAS." Rumsfeld v. United Technologies Corp., 315 F.3d 1361, 1372 (Fed. Cir. 2003). Appellant also asserts that even if intra-year rates/returns qualify as "actuarial assumptions," GD’s method of calculating them complies with CAS 412 because the "best" estimate of future market value would take into account (not ignore) current market value. Thus GD asserts that its method complies with CAS 412’s "fundamental requirement" and the government’s method does not.

CAS 412-40(b)(2) states in pertinent part, "[e]ach actuarial assumption used to measure pension cost shall be separately identified and shall represent the contractor’s best estimates of anticipated experience under the plan, taking into account past experience and reasonable expectations." As emphasized above, appellant has not recognized that use of part-year fund values (and a corresponding part-year investment return rate implicit in such values) in developing a blended or composite rate is an "actuarial assumption." Its contention is that part-year values are instead "facts." We have rejected this contention above.

Moreover, and perhaps as a consequence of GD’s convictions concerning the accuracy of such objective "facts," there is nothing establishing that appellant has tested the inclusion of part-year values in its methodology to assess whether their use in fact more accurately "take[s] into account past experience and reasonable expectations." We agree with the government that, at least on the present record, appellant’s RPFPR estimates ostensibly ignore the experience of the plan over decades of market fluctuations, cycles and short-term gyrations. As the government emphasizes, the purpose of the estimates is to project costs of a long-term plan years into the future. The estimating methodology accordingly should attempt to be consistent with that long-term perspective and purpose. The actual rates used in appellant’s methodology are clearly demonstrative of the "short-term" fluctuations and "distortions" CAS 412 was intended to avoid. Those rates ranged from a high of 14% for one part year period to an extreme low of negative 33% during 2008 or an enormous spread of 47 percentage points.

The primacy of the 8% assumption is reflected in its decades long use under CAS 412. Appellant does not allege that rate has resulted in material inaccuracies in the CAS 412 valuation even though the year-end valuation was often determined a few months after GD continued to assume radically different rates in its RPFPRs. If appellant
considers that the 8% rate fails to best predict pension costs, that concern should be (and could have been) addressed during the year-end CAS 412 negotiations with the government. There is simply no convincing proof that use of a different assumed rate for estimating purposes better reflects actual future pension liabilities than the agreed 8% rate used for decades.

**FAR Cost or Pricing Data Requirements**

Appellant argues that FAR mandates the use of “accurate, complete and current” cost and pricing data to provide “reasonable projections” of future costs in its RPFPRs (FAR 2.101, 42.1701(b)). According to appellant, the government’s interpretation of CAS 412 prohibits the use of the most “current” data and thus contravenes, and is in conflict with, the FAR’s methodology for estimating future costs.

There is no conflict between the CAS and FAR cost or pricing data requirements. Although the FAR does require submission of “accurate, complete and current” cost or pricing data for consideration, it does not dictate the relative importance of submitted data or how that data will be used in cost estimation, negotiation and pricing. Appellant assumes that the most current data is also the most accurate and complete data. That may or may not be the case. Appellant’s assumption is particularly problematic here because the RPFPRs specifically (and pension cost estimation generally) are intended to make projections a number of years into the future. Moreover, the government maintains that the relevant “current” (as well as most accurate) data is that required for use in the CAS 412 measurement methodology. Assuming without deciding that appellant is required to disclose the up-to-the-minute return and status of its pension funds in connection with each RPFPR submission, there is no proof that data will provide a more precise basis for predicting the allowable pension costs ultimately payable by the government.

From the government’s perspective, the long standing CAS 412 year-end data (or “historical facts”) and 8% rate are assumed to be more predictive of long-term fund values than the shorter term part-year fluctuations. The fact that the fund’s value fluctuates minute-by-minute does not mean that the estimate requires repeated revision to reflect these continual changes in the “historical value” of the fund’s assets and rate of return. Currency does not necessarily increase accuracy over the life of the pension plan or the period covered by the RPFPR. That conviction is reflected in the prohibition against just such short-term trends in CAS 412-50(b)(4).
In conclusion, we grant the government’s Motion for Summary Judgment and deny appellant’s cross-motion. The appeal is denied.

Dated: 21 June 2011

ROBERT T. PEACOCK  
Administrative Judge  
Armed Services Board  
of Contract Appeals

I concur  

MARK N. STEMPLER  
Administrative Judge  
Acting Chairman  
Armed Services Board  
of Contract Appeals

I concur  

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 No. 56744, Appeal of General Dynamics Corporation, rendered in conformance with the Board's Charter.

Dated:

CATHERINE A. STANTON  
Recorder, Armed Services  
Board of Contract Appeals