ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of --	)	
	)	
T&G Aviation, Inc.	)	ASBCA No. 40428
	)	
Under Contract No. DAN 0000-C-00-9010-00)		

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OPINION BY ADMINISTRATIVE JUDGE LIPMAN

This is an appeal from a contracting officer's decision denying appellant's claim to recover costs incurred as a result of the loss of one of its aircraft and damage to a second aircraft from hostile fire on 8 December 1988 (the Incident) while on route from Dakar, Senegal, the location of the captioned contract with the United States Agency for International Development (AID or the Government), to Agadir, Morocco, where appellant was performing another contract with AID.

The record includes documentary evidence as well as the transcript of a six-day hearing. The parties also entered into two series of stipulations, one of which was submitted as part of appellant's Prehearing Statement (stip. 1) and the other included with the Government's Prehearing Statement (stip. 2).

We are to decide entitlement only.

FINDINGS OF FACT

The Contractor

1. In 1988, appellant, based in Chandler, Arizona, owned and operated Douglas DC-7 aircraft which were specially equipped for aerial spraying operations. It had substantial experience in aerial spraying for both fire and insect control. (Tr. 6/61-63)

The Geopolitical Situation

2. Morocco is located in northwest Africa along the Atlantic coast. To its west are the Canary Islands. To its south are the Western Sahara, Mauritania, and Senegal, in that order. To its east is Algeria. Part of Mauritania also lies to the east of the Western Sahara. (Ex. A-10)

3. The Western Sahara is a former Spanish colonial territory. In 1976, when Spain withdrew, it was claimed by Morocco and Mauritania and, when Mauritania withdrew its claim, it was occupied and annexed by Morocco. The occupation and annexation were opposed by the Polisario movement, which was seeking independence for the territory. The Polisario entered into an armed conflict with the Moroccan government.

4. In the 1980s, fighting between Morocco and the Polisario varied in location. To consolidate its gains, the Moroccan government constructed a series of earthen defensive walls known as "berms." New berms were built several times as the Moroccans pushed the Polisario southward. As each new berm was built to the south, the older northern ones would become irrelevant. The sixth berm was completed in mid-1988, and further references herein to the "berm" are to the sixth berm. The conflict intensified in the latter half of 1988 as the Polisario contested the construction of the sixth berm, and the Polisario occasionally and briefly penetrated the berm to attack the Moroccans. The Polisario possessed a surface to air missile (SAM) capability in 1988. (Exs. A-23, -25, -26, -29, G-26; tr. 1/224, 226, 232, 246, 268-69, 2/41-42, 5/28-33)

Aviation Matters—General Principles and Local Conditions

5. Pilots generally use aviation charts, published by Jeppeson or other organizations, to plot routes and to prepare flight plans worldwide. The charts show airlanes, also known as "airways," reporting points, navigational aids, airports, air traffic control frequencies, and identify the applicable flight information region (FIR). The Western Sahara is within the Canarys FIR. The charts also show certain geographical areas which are prohibited, restricted, and danger zones. The decision to designate an area in one of those categories is made by the government of the relevant territory. (Exs. A-15, -16, -17, -78; tr. 1/31-41, 44, 3/181, 199, 205-06)

6. The Federal Aviation Administration (FAA) Regulations, at 14 C.F.R. § 91.3(a) in effect at the time of the Incident provide that "[t]he pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft." At § 91.103, they further provide that "[e]ach pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight."

7. Under the publishing auspices of the International Civil Aviation Organization (ICAO), a government may issue a Notice to Airmen (NOTAM), which is a standard method for warning pilots of prohibitions, restrictions, or dangers. A NOTAM is generally issued by the government having responsibility for the airspace which is the subject of the notice; a NOTAM issued by another government is considered "irregular" and not as widely distributed. The Moroccan government would have been the issuing authority for a NOTAM concerning the Western Sahara. (Ex. A-68; Carnes post-hearing affidavit; tr. 1/44) However, there are systems other than that under ICAO under which NOTAMs may be issued by authorities other than governments (Coogan post-hearing affidavit).

8. The FAA publishes an International Flight Information Manual (IFIM) which, as it states, is "designed as a preflight and planning guide for use by United States non-scheduled operators, business and private aviators contemplating flights outside of the United States." The IFIM is intended to complement a bi-weekly publication, available by subscription, known as the International Notices to Airmen (INOTAM) which includes pertinent regulations, NOTAMs and State Department Advisories affecting air traffic control or safety matters. INOTAMS are available through subscription and at Flight Service Stations (FSS) which are operated by the FAA in the United States, or by telephone from any location. NOTAMs are generally available at airports and United States embassies worldwide. State Department Advisories do not receive the same circulation, but are also generally available at United States embassies. (Tr. 1/122, 146-48, 3/143-44, 146-47, 297-98; ex. 11 to Govt. Reply Br.; Carnes post-hearing affidavit; Coogan post-hearing affidavits)

9. The FAA also publishes an Airman's Information Manual. Section 300 of that manual, entitled "Flights Outside the United States and U.S. Territories," which was in effect before the Incident, included the following:

> d. All pilots should review the foreign airspace and entry restrictions published in the IFIM during the flight planning process. Foreign airspace penetration without official authorization can involve both danger to the aircraft and the imposition of severe penalties and inconvenience to both passengers and crew. A flight plan on file with [air traffic control] authorities does not necessarily constitute the prior permission required by certain other authorities. The possibility of fatal consequences cannot be ignored in some areas of the world.

> e. Current NOTAMs for foreign locations must also be reviewed. The publication [INOTAM], published biweekly, contains considerable information pertinent to foreign flight. Current foreign NOTAMs are also available from the U.S. International NOTAM Office in Washington, D.C., through any local FSS.

(Ex. G-20; tr. 3/99)

10. In January 1985 and in February 1985, civilian aircraft were shot down by the Polisario over the Western Sahara coast (ex. A-12).

11. An airway between Senegal and Morocco which flies inland over the Western Sahara is known as Red 975. That airway, above 25,000 feet, depending on the location, is known as Upper Red 975. The Jeppeson chart dated 15 February 1985 reflected that airway Red 975, in the Western Sahara, north of 26 degrees north latitude and extending west of the airway, was a prohibited zone from ground level to an unlimited altitude. The prohibition was designated "GM(P)-4," which signified that it had been imposed by the government of Morocco. The prohibited zone was canceled prior to 6 June 1986 and, following the cancellation, the charts indicated no danger zone in the Western Sahara. As of December 1988, the Jeppeson and other aviation charts did not reflect any prohibited, restricted, or danger zone along airway Red 975 between Senegal and Morocco. They also did not indicate the existence of the berm in the Western Sahara. (Exs. A-8, -11, -15, -17, -57, -78, G-18; tr. 1/43, 57-62, 65, 68-74, 151-52, 154, 170-71, 3/180, 217)

12. The IFIM dated April 1988 included the following:

> GENERAL
>
> This manual . . . contains foreign entry requirements . . . and pertinent regulations and restrictions. Information of a rapidly changing nature such as hours of operations, communication frequencies, danger area boundaries (including restricted and prohibited areas) are not included and the pilot assumes the responsibility for securing these data from other published sources (for example: charts, NOTAMs, en route supplements).
>
> INFORMATION SOURCES
>
> In accordance with [ICAO] guidelines, permanent and lasting aeronautical information is published by all member

> States (countries) in a document entitled Aeronautical Information Publication (AIP). . .The appropriate AIP(s) should be consulted during the planning of international flight operations. The sources for the information contained in this manual are each country's AIP, U.S. Public Health Service, International NOTAMs, and U.S. State Department Reports.

With regard to international NOTAM availability and distribution, the IFIM listed countries whose NOTAM offices exchanged information with the United States NOTAM office. Senegal and Morocco were on the list. The section of the IFIM containing information with respect to specific countries included the following regarding Morocco:

> AIRCRAFT ENTRY REQUIREMENTS
>
> 1. Overflight and landing clearances including technical stops in Morocco are required for foreign aircraft. Private aircraft must receive authorization from the [Moroccan Aviation Office].
>
> 2. Private flights are permitted, in principle, over and into the disputed Western Sahara Territories where a protracted military conflict is on-going. In early 1985, two private aircraft which failed to comply with Moroccan Civil Aviation directions were destroyed by Polisario missiles in the disputed Western Sahara region. All flights must first apply for authorization to the [Moroccan Aviation Office].

It also included the following regarding the Western Sahara:

> AIRCRAFT ENTRY REQUIREMENTS
>
> All aircraft must file flight plan with [Air Traffic Control].

(Ex. 11, Gov't. Reply Br.)

13. INOTAMs dated as late as 17 November 1988 and 1 December 1988 included a Department of State Advisory, first issued in March 1985, as follows, in pertinent part:

> CANARY ISLAND
>
> With immediate effect and until further notice, because of incidents in the Western Sahara Region on January 21 and

> February 21, 1985 resulting in aircraft downings which were most likely caused by surface to air missile firings, it is strongly recommended that flights maintain a minimum altitude of 20,000 feet in that area of the Canarys Flight Information Region (FIR) over the land mass of the Western Sahara south of 26 degrees north latitude and for a distance of five nautical miles out to sea parallel to the Saharan coast . . . .

(Exs. A-56, G-12, -13)

14. Based upon the record and our evidentiary discussion below, we are unable to make a finding as to whether any of the pertinent NOTAMs, IFIMs, INOTAMs or State Department Advisories were physically available at the airport or at any other location in Dakar, Senegal.

15. A portion of airway Red 975 traversed the Western Sahara south of 26 degrees north latitude, which was covered by the State Department Advisory (ex. G-18). Both commercial and private aircraft flew over the Western Sahara when flying between Senegal and Morocco, and, prior to the Incident, no private or commercial aircraft flying on airway Red 975 or Upper Red 975 were ever attacked. Commercial carriers flew on the higher end of the airway at altitudes well above the reach of SAM missiles. (Stip. 1, nos. 4, 5; tr. 1/298-99, 5/102, 6/113-14)

The Senegal Contract

16. In December 1988, appellant and AID entered into the captioned contract (Senegal Contract) pursuant to which appellant was to conduct aerial insecticide spraying of swarms of locusts in Senegal. Under the contract, appellant was required to station two of its DC-7 aircraft at Dakar, Senegal, and to spray in areas designated by an AID official in conjunction with officials from the government of Senegal. (Ex. G-1)

17. AID entered into the Senegal Contract through the Office of Foreign Disaster Assistance (OFDA), as authorized by Section 491 of the Foreign Assistance Act of 1961, as amended, and the contract was signed by the contracting officer having cognizance over that program. It was signed by appellant and the Government on 6 December and 7 December 1988 respectively, confirming the parties' November 1988 letter agreement under which performance commenced in November 1988 and was to proceed through 7 December 1988. (Ex. G-1)

18. The Senegal Contract was fixed price and it established unit prices for mobilization of appellant's aircraft, flight hours and demobilization of the aircraft, with identical amounts for mobilization and demobilization. The contract described

mobilization as delivery of the aircraft to Dakar, Senegal, and described demobilization as departure of the aircraft from Senegal to the United States. It did not contain any instructions, directions or specifications, including flight routing or details, with respect to the mobilization and the demobilization of appellant's aircraft. (Ex. G-1)

19. Appellant mobilized the contract by flying the two DC-7 aircraft from Phoenix, Arizona to Dakar, Senegal. The Government was in no way involved in the determination of the route taken by the mobilization flight. The flight planning was done by the crew of the lead aircraft because the follow aircraft had only limited radio capability. Other than testimony regarding their general practice, there is no evidence as to the extent, if at all, the crew of the mobilization flight actually checked NOTAMs, IFIMs, State Department Advisories, or any other pertinent notices prior to making the mobilization flight. (Ex. G-31 at 79, 81, 106, 112-13; tr. 6/138-39, 145-46)

20. The AID Mission Director in Senegal was Ms. Sara Jane Littlefield. One of the technical members of the locust control team was Mr. James Bonner. (Tr. 6/13-14) At the beginning of performance of the Senegal Contract, AID officials in Senegal fully briefed appellant's employees with information, including that pertaining to safety, required to perform the contract (tr. 6/17, 37-42). Mr. Bonner, in an informal conversation with one or more of appellant's employees, mentioned that, in 1985, the Polisario had shot down two aircraft along the coast, north of Senegal and south of Morocco, and he advised against flying along the coast. He had learned of those events from press reports in 1985. (Tr. 6/18-20, 42-45, 58)

21. At no time during its performance of the Senegal Contract was appellant ever attacked while performing spraying operations (tr. 6/157).

The Morocco Contracts

22. Prior to the contracts at issue here, from November or December 1987 through January 1988 appellant performed a contract for AID to spray for locusts in Morocco using a small, one-seat aircraft called a Turbine Thrush (Thrush Contract) (tr. 2/136, 4/8). Under the Thrush Contract, appellant received a briefing from the Moroccan government desert locust coordinating group and the Moroccan military on areas to spray. AID was instructed by the United States Embassy in Morocco that, so as not to imply United States recognition of Moroccan sovereignty over the area and for security reasons, United States contracted aircraft were not to fly in the Western Sahara or within 15 kilometers of the Morocco/Algeria border. There were times when the Moroccan government desert locust coordinating group assigned appellant to fly inside the Western Sahara, but AID, because of the Embassy direction, did not permit such flights. (Stip. 1, no. 19; tr. 2/78)

23. In November 1988, AID and appellant entered into Contract ANE-0196-C-00-9010-00 (Morocco Contract) pursuant to which appellant was to conduct aerial insecticide spraying of swarms of locusts in Morocco from 10 November 1988 through 31 December 1988. The Morocco Contract was funded by AID's Bureau for Asia and the Near East (ANE) and it was signed by a different contracting officer than was the Senegal Contract. (Ex. G-2)

24. Under the Morocco Contract, appellant was required to station two of its DC-7 aircraft at Agadir, Morocco, but it also provided that appellant could voluntarily provide additional aircraft, with the agreement of the contracting officer, with no adjustment in contract price (ex. G-2).

25. Mr. Grantham piloted one of the DC-7 aircraft in the mobilization flight for the Morocco Contract. He also performed the flight planning, including the checking of pertinent NOTAMs, for that flight. (Tr. 6/63-65). It is not clear from the record which specific NOTAMs or other pertinent notices Mr. Grantham examined, or whether they included the March 1985 State Department Advisory included in the 1 December 1988 INOTAM, which referred to the January and February 1985 aircraft attacks. Had Mr. Grantham read that advisory, he would have relied less on that "four year old information" than on a contemporaneously approved routing by air traffic control. (Tr. 6/145-47)

26. The AID Mission Director in Morocco, the highest ranking AID official in that country, was Mr. Charles Johnson (tr. 2/15). Mr. Robert Hellyer, an agricultural development officer, was the AID Locust Control Project Chief based in Rabat; he was in charge of overseeing and coordinating AID's entire locust control project in Morocco (tr. 2/157-60, 165-66). Mr. Hellyer was not a contracting officer (tr. 2/251), and, in the absence of an allegation or evidence in the record to the contrary, we find that Mr. Johnson possessed no contracting authority in the Morocco or Senegal contracts. Mr. Ronald Stryker was AID's Deputy Agriculture Officer based in Rabat from 1985 to 1990 (ex. A-46). Mr. Jack Henderson was the AID Contracting Officer's Representative based at Agadir for the Morocco Contract (ex. A-50). The contracting officer for the Morocco Contract was Ms. Judith Johnson, who was based in Washington, D.C. At the inception of the Morocco Contract, the AID officials in Morocco did not conduct an orientation briefing session as had been done in Senegal (tr. 6/77, 123).

27. The Morocco Contract included the following clauses:

C.1 <u>Specifications/Work Statement</u>

. . .

(B) Specific Spraying Services

1. Specific areas to be sprayed will be designated by a USAID-appointed Operations Officer, in conjunction with officials from the Government of Morocco.

. . .

G.3 Relationships/Responsibilities

The Contractor shall work under direction of both [Government of Morocco] officials of the Ministry of Interior assigned to Locust Command Center and UDAID/Rabat Agricultural Officers, as specified below . . . .

G.4 Technical Directions

Performance of work hereunder shall be subject to the technical directions of the cognizant USAID Project Officer. As used here, "Technical Directions" are directions to the Contractor which fill in details, or otherwise complete the general scope of work.

. . .

H.2 Authority Over Flight Operations

The Contractor shall have complete authority to decide all matters directly connected with flight operations in accordance with operation and maintenance manuals of the Contractor as amended, revised or updated periodically including to declare the aircraft out of order, determine cargoes, routes, acceptable atmospheric conditions, adequate flight conditions, landing place(s) and whether or not the flight should take place.

(Ex. G-2)

28. Swarms of locusts, which could cover an area of many square miles, descended to the ground each evening and did not resume flight until the dew dried from their wings the next morning (tr. 4/15-17, 6/71-72). During the night, the Moroccan Government sent out prospecting teams to locate the swarms while they were on the

ground; the Moroccan Government would not permit the prospecting teams to go into areas which were considered to be unsafe. Each morning, AID and Moroccan Government representatives provided appellant with the geographical coordinates of the locusts' positions reported by the prospecting teams. At times, the locusts were not at the reported location and the spray aircraft had to search for them. Locusts traveled with the wind and could be as much as 20 to 30 miles (once, as far as 70 miles) from their reported location. (Tr. 2/128-29, 189-90, 227-28, 230, 4/14-21, 6/71-75)

29. Due to the relative severity of the locust infestation, in the Morocco Contract, as distinguished from the earlier Thrush Contract, there was no geographical limitation placed upon the areas which appellant was to spray in the Western Sahara. The maps used to brief appellant's pilots did not show the berm or reflect any lines of demarcation or other flight restrictions. Appellant was given no other safety instructions regarding flight over the Western Sahara. The only safety briefing provided appellant by AID and Moroccan Government representatives was that it was unsafe to fly within 15 kilometers of the Algerian border. (Tr. 2/78-79, 190-91, 3/7-8, 4/22-25) The Moroccans had their own converted C-130 aircraft which they intended to use in areas where they would not send foreign aircraft (tr. 2/137-38).

30. During November and the first week of December 1988, AID instructed appellant to spray in the Western Sahara, north of 26 degrees north latitude, on six to eight separate occasions (stip. 1, no. 6). The general spray areas included the vicinity of the city of Smara, which is proximate to a section of the berm (exs. A-8, G-18; tr. 4/32, 82). In flying from Agadir, Morocco to the spray zones in the Western Sahara, appellant would reasonably have flown along airway Red 975 for a short portion of the flight. Although actual spraying was conducted from an altitude of only several hundred feet, the aircraft would have flown to the spraying site at altitudes ranging from 8,000 to 10,000 feet. (Tr. 1/76, 140-42, 167-68, 6/68-69, 80-82, 180)

31. At no time during its performance of the Morocco Contract was appellant or any spray aircraft ever attacked or subjected to any aggressive action while performing spraying operations (tr. 4/88-89, 6/157).

32. Because of the expectation that there would be additional locusts in the spring of 1989, the parties later entered into a contract for six weeks of additional spraying. However, the additional locusts failed to materialize and appellant made no flights under that contract. (Tr. 4/9)

Knowledge of the Polisario

33. Soon after the downing of the two private aircraft in 1985, articles regarding the Polisario appeared in periodicals (tr. 2/151, 6/43). Newspaper articles regarding the

conflict between Morocco and the Polisario appeared in the New York Times in August and September 1988. The August 1988 article reported that the Polisario possessed "anti-aircraft missiles." The September 1988 article was accompanied by a map which included an incomplete depiction of the berm (exs. A-8, G-26; tr. 1/102-05). Articles about the Polisario appeared daily in the French language Moroccan press (tr. 1/287-89), although, consistent with the Moroccan government's effort to downplay the conflict with the Polisario, reports included little detail and, at times, erroneous information (tr. 5/63-64). The Moroccans were reluctant to discuss the Polisario (tr. 4/42). The Morocco-Polisario conflict as well as the Polisario's SAM capability, while matters of public information, were not generally well known (ex. G-26; tr. 5/108-09).

34. Prior to the Incident, appellant's owners and employees knew of the existence of the conflict between Morocco and the Polisario as well as the fact that the Polisario had attacked private aircraft in 1985. During its performance of the Thrush Contract, some had seen tanks, armed Moroccan military jets, burned out weapons and other military debris, and had heard discussion about the Polisario. Prior to the Incident, some had varying knowledge of the berm, but none knew of its military significance. None knew that the Polisario possessed SAM missile capability or knew of specific battles fought between the Polisario and the Moroccan military. Appellant would not have knowingly conducted aerial spraying in areas of danger or ongoing military activity. (Tr. 2/176-77, 245-48, 4/36-39, 79-80, 129, 5/126, 133, 137, 6/76-77, 82-84, 107, 122-25, 147, 172, 175, 186)

35. Prior to the Incident, AID's Mr. Johnson visited the Agadir, Morocco airport several times to observe the locust spraying operation and was aware that appellant was being instructed to perform aerial spraying in the Western Sahara north of 26 degrees north latitude (tr. 2/79-82).

36. Colonel James Murphy was the United States Defense Attache to the United States Embassy in Morocco from June 1988 until 1991 and was the United States armed forces liaison to the Moroccan armed forces (tr. 5/13-15). Lt. Colonel John Wright was the United States Air Force Attache to the United States Embassy in Morocco from July 1987 until 1990 (tr. 1/211-13). Colonel Murphy and Lt. Colonel Wright reported to the Defense Intelligence Agency (DIA) in Washington, D.C. (tr. 1/216, 5/15).

37. Prior to the Incident, Colonel Murphy and Lt. Colonel Wright closely monitored the state of the conflict between Morocco and the Polisario. Before leaving the United States, Colonel Murphy was briefed by the DIA on the situation in the Western Sahara. In Morocco, Colonel Murphy and Lt. Colonel Wright were privy to detailed United States Government intelligence reports about the war and they also had regular discussions about the Polisario with senior Moroccan military personnel. (Tr. 1/211-216, 227-30, 241-43, 5/13-15, 25-28)

38. Prior to the Incident, Lt. Colonel Wright purchased a map which included the Western Sahara and on which he marked the location of the berm. He also annotated the map with the dates and locations of Polisario-Morocco battles along the berm, including Polisario attacks (a) on 7 October and 16 November 1988 south of 26 degrees north latitude and (b) on 11 October 1988 and 8 November 1988 north of 26 degrees north latitude. (Ex. A-8; tr. 1/218-20, 238-39, 5/30-31)

39. Prior to the Incident, Colonel Murphy and Lt. Colonel Wright knew that the Polisario had mobile SAM-6 surface to air missiles and anti-aircraft artillery. They also had unconfirmed reports that the Polisario had SAM-7 surface-to-air missiles. They knew that both types of missiles and the anti-aircraft artillery were capable of shooting down an aircraft flying at an altitude of 11,000 feet. (Tr. 1/233-35, 246, 5/47-50)

40. Prior to the Incident, the United States Ambassador to Morocco held executive committee meetings four days per week, and a "country team" meeting one day per week at the Embassy in Morocco. The attendees at the meetings were United States Government agency heads and the purpose of the meetings was to share information and to brief the ambassador. As Director of the AID Mission in Morocco, Mr. Johnson was required to attend, and did attend, all of the executive and country team meetings unless he was traveling, at which time one of his deputies attended. Appellant was not invited to, and did not, attend any of the executive committee or country team meetings. (Tr. 1/250-54, 259-60, 2/15, 22-25, 29, 5/36-40, 57, 91)

41. At the executive committee meetings prior to the Incident, Colonel Murphy and Lt. Colonel Wright occasionally gave briefings regarding the Polisario and the situation in the Western Sahara and they withheld no information during those briefings; the information was, at times, a couple of days old. As a visual aid to their briefings, they used a map displayed in the room which, like Lt. Colonel Wright's map, showed the location of the berm and the dates and locations of battles along the berm, and their briefings included those topics. Prior to the Incident, they advised the attendees of the intensification of the war, that the Polisario could, and had, penetrated the berm, and briefed them on the types and capabilities of the surface-to-air missiles possessed by the Polisario. As a result of attending the meetings, any attendee, including AID's Mr. Johnson, would know the location and significance of the berm, the state of the conflict, and the fact that the Polisario had mobile surface-to-air missiles. (Ex. A-8; Tr. 1/230-33, 250-58, 261, 264, 283, 306, 2/22-25, 35-36, 46-51, 57, 61-68, 5/15-16, 29-32, 37-38, 40-52, 78-79, 85, 87, 91, 105, 114) Colonel Murphy and Lt. Colonel Wright were confident that the information they were reporting was being conveyed by Mr. Johnson to the contractors and crews spraying for locusts because that was the purpose of briefing AID in those meetings (tr. 5/78-79).

42. On 2 September 1988, the AID office in Rabat, Morocco received an unclassified cable from the United States Embassy in Mauritania which discussed the requirements of, and the difficulties to be encountered in connection with, the establishment of an assistance team in support of the locust control operations in Mauritania. The cable included the statement that continued conflicts in the Western Sahara, most recently on 18 August 1988, "make the airspace near disputed borders subject to surface to air missile attacks" and that "the potential hazard can essentially rule out aerial operations in certain areas." (Ex. A-27; tr. 2/69-71)

43. On 5 December 1988, the AID office in Rabat, Morocco received an unclassified cable from the United States Embassy in Mauritania which included the following as a negative consideration of a possible United States locust control operation in northern Mauritania:

> The eastern area of Western Sahara is a militarily contested zone, with possible Polisario-Moroccan conflicts at any time. The Polisario have surface to air missiles that would easily down a turbo-thrush or helicopter. Negotiations would have to take place between Mauritania, Morocco, the Polisario, and Algeria before any of the airspace could be considered safe.

(Ex. A-30; tr. 2/71-74)

44. Prior to the Incident, AID's Messers Hellyer, Stryker, and Henderson did not attend the executive committee or country team meetings and did not know the location or significance of the berm, of the 1988 battles along the berm, or of the Polisario's missile capability. Mr. Johnson did not relate to them the information he had learned regarding the Polisario or its missile capability, the berm, or the military conflict. (Exs. A-46, -50; tr. 2/27-29, 98-101, 165-70, 175-78, 201, 3/40)

45. Prior to the Incident, neither Mr. Johnson nor any other AID official associated with the Morocco Contract briefed or warned appellant regarding the Polisario or its missile capability, the berm, or the military conflict (ex. A-50; tr. 1/262-63, 278, 2/94-96, 130, 213-22). Mr. Johnson and other AID officials were of the opinion that their relationship with the Moroccan government was one of trust, that the Moroccans would take the steps necessary to ensure the safety of United States aircraft spraying locusts in the Western Sahara and would not suggest flights into areas where there was danger (tr. 2/95, 138-40, 214-17, 227, 260, 3/25-26, 55). Mr. Johnson further believed that, as a result of its experience in the region and its performance of the Thrush Contract, appellant knew of the military conflict and of the Polisario and its missile capability (tr. 2/95-98, 133-135, 151-52). AID officials did not specifically discuss with appellant the extent to

which the Moroccan government would be relied upon for safety and security; it believed that to be implicit in the nature of the contract (tr. 3/25-28, 55, 4/44, 6/128).

The Incident

46. In early December 1988, at the time of the completion of the Senegal Contract, it appeared to Mr. Grantham, appellant's owner, and to AID officials as well, that, due to the extent of the locust problem in Morocco, additional spraying work could be available in Morocco in the spring of 1989. Mr. Grantham, therefore, decided that, in lieu of demobilizing the two DC-7 aircraft based in Senegal back to the United States as described in the Senegal Contract, he would deploy the aircraft to Morocco (the Transfer Flight) for their possible later use there. (Tr. 2/147-48, 251, 3/43-44, 6/84-85, 88-89, 99) In a telephone conversation, Mr. Grantham so advised Mr. Hellyer, the head of the AID locust program in Morocco, and Mr. Hellyer advised Mr. Johnson, the AID director in Morocco, who believed that it was a wise business decision. Neither Mr. Hellyer nor Mr. Johnson requested appellant to make the Transfer Flight. There was no discussion regarding the taking of any contractual action with respect to the Morocco Contract prior to the Transfer Flight, but Mr. Grantham understood from his conversations with AID that it was anticipated that the aircraft would be added to the Morocco Contract. (Tr. 2/148, 252, 6/89, 153-54, 190)

47. Once appellant decided to make the Transfer Flight, the AID director in Senegal asked appellant, as a favor, to carry pumping equipment and approximately 15 tons of insecticide which the AID Senegal office was repaying to the AID Morocco office; appellant agreed to do so (stip. 1, no. 8; tr. 2/208, 5/142, 6/95, 119-20).

48. A short time prior to the Transfer Flight, Mr. Grantham, then in the United States, had telephone conversations with both Mr. Johnson and Mr. Hellyer. He neither advised, nor consulted with, anyone from AID regarding any aspect of the flight plan or any of the logistics concerning the Transfer Flight (stip. 2, nos. 6-8; tr. 2/148-49, 254-55). Neither Mr. Johnson nor Mr. Hellyer made any reference to the Polisario in any of the conversations with appellant regarding the Transfer Flight. Mr. Johnson believed that appellant, because of its experience in the region, was fully aware of the Polisario, that there was no heightened tension regarding the Polisario at the time, and that there was no reason to suspect that the Transfer Flight would be in any danger. (Tr. 2/149-53) Likewise, Mr. Hellyer felt that he had no reason to believe, and it never entered his mind, that the Transfer Flight would be fired upon by the Polisario (tr. 2/254-56).

49. On 7 December 1988, the AID office in Morocco sent a cable, approved by Mr. Johnson, to AID headquarters in the United States. The subject of the cable was "U.S. Expert Forecasts Severe Locust Plague in Morocco," and its summary, after

informing of an expert forecast that a "massive locust invasion of Morocco is imminent" and of the need for additional AID funding and spraying, stated:

> Immediate action is being taken to redeploy two additional DC-7 aircraft now located in Senegal to Morocco under USAID contract.

(Ex. A-31)

Use of the word "redeploy" in the cable was incorrect, because AID was not redeploying the aircraft (tr. 2/113-14, 3/45-46).

50. The Transfer Flight was the first time that appellant's DC-7 pilots had flown between Senegal and Morocco (tr. 5/138-39). The pilot of the lead aircraft was Mr. Joel Blackmer, who was highly thought of as a professional, conservative pilot by his colleagues; the co-pilot was Mr. Ben Rossini (tr. 4/64, 119, 6/116). Mr. Rossini performed the flight planning which consisted of joint flight plans for both aircraft, as the follow aircraft had only limited radio capability (ex. G-31, pp. 81, 90). The pilot of the follow aircraft was Mr. Jack Loughran. Mr. Loughran suggested that the Transfer Flight take a route over water; he made the suggestion for "maintenance purposes," as he preferred to be flying along the coast rather than inland in the event that the aircraft went down due to a mechanical problem (ex. G-31 at 91-92, 103).

51. Mr. Grantham, who had represented appellant in discussions with AID regarding bringing the aircraft to Morocco, spoke from Arizona by telephone with Messrs. Blackmer and Rossini every two or three days and he advised them of the planned transfer of the aircraft (tr. 6/100-04). In a telephone conversation on the day before the Transfer Flight, they discussed the route the flight should take. The crew advised that they had filed flight planning for three different routes and had been assigned airway Red 975, the inland route from Dakar to Agadir over the Western Sahara. Mr. Grantham testified that he advised them that he did not see a problem with that route, that he was familiar with the Western Sahara north of 26 degrees north latitude because appellant had been spraying there, and that the only safety warning appellant had received was to remain clear of the Algerian border. (Tr. 6/105-07) Mr. Grantham also testified that, at the time of the conversation, he was not aware of the existence of the berm or of the recent Polisario military activity in the Western Sahara (tr. 6/83-84, 124-25, 172). He further testified that, had he been aware of such information, he would have conveyed it to the crew of the Transfer Flight and would have advised them to route the flight through the Canary Islands (tr. 6/110).

52. The flight plan reflected that the Transfer Flight approach Agadir, Morocco over the Western Sahara north of 26 degrees north latitude at an altitude of 11,000 feet.

(Stip. 1, nos. 9, 10; ex. A-19) That altitude was selected because appellant's DC-7 aircraft were neither pressurized nor carried oxygen tanks for the pilots and, therefore, could not fly at a substantially higher altitude (ex. G-31, p. 102; tr. 4/91, 6/167). The flight plan contained a technical error because, while it indicated an altitude of 11,000 feet, it specified that the aircraft would be flying in airway Upper Red 975, which is identical to airway Red 975, but at an altitude of over 20,000 feet (exs. A-15, -16, 17; tr. 3/126). That technical error could have been corrected in the flight clearance (tr. 1/30-31, 3/126-29), but the record does not reflect whether the Senegal air traffic controllers discovered or corrected the error.

53. An alternative route to airway Red 975, permitting the Transfer Flight to avoid the Western Sahara, was an established airway heading northwest over the Atlantic Ocean from Dakar to the Canary Islands followed by the use of another established airway heading east from the Canary Islands to Agadir, Morocco; that route is substantially longer than the flight on airway Red 975. The Government offered expert testimony advocating another route north along the Atlantic coast which would have taken 15 minutes longer than the flight on airway Red 975 and would have avoided the Western Sahara (ex. G-18; tr. 3/91-94, 166-67, 183, 186). However, that route was not an established airway, did not have radar or air traffic control reporting points and we find, based upon expert testimony offered by appellant, that that coastal route would not have been a safe alternative to airway Red 975 (ex. G-18; tr. 1/45-47, 52-54, 65-67, 132-35).

54. The flight plan was filed at the Dakar, Senegal airport by Mr. Rossini, the co-pilot of the lead aircraft, accompanied by Mr. Loughran (ex. G-31 at 57). There were two air traffic controllers at the airport—one was asleep and the other did not appear to care whether appellant filed a flight plan. At the time of the filing, there were no NOTAMs, IFIMs, Airman's Information Manuals or any other reference books on the counter, the location they are usually found. There is no evidence that, prior to the Transfer Flight, appellant's flight crew made any further effort to obtain those references or other information regarding its flight, including conditions in the Western Sahara, from any other source, including (a) the FAA, (b) the United States Embassy or any other United States Government officials in Senegal or associated with the Senegal Contract, and (c) the United States Embassy or any other United States Government officials in Morocco or associated with the Morocco Contract. The crew of the lead aircraft did not tell Mr. Loughran of any attempt to obtain such information, and Mr. Loughran was aware of no attempt by any member of the crews of either aircraft to seek those references or make any further effort to obtain additional information about the flight route. (Ex. G-31 at 71, 73, 99, 103-12, 115; tr. 2/149, 206-07, 5/164, 171, 174) Since the lead aircraft crew did not tell Mr. Loughran of any attempt to obtain additional information, we infer, and find, that the flight crew of the lead aircraft made no such attempt. Lacking the pertinent IFIM, the Transfer Flight crew did not contact the Moroccan aviation office for permission to enter Morocco. There is evidence that they relied on AID officials to do so

because of their existing relationship with the Moroccan authorities in connection with performance of the Morocco Contract. (Ex. G-31 at 107)

55. Had inquiry regarding a route been made of Colonel Murphy's office in Morocco, he would have recommended that the Transfer Flight be made over water and not along airway Red 975, in part because of the Polisario, but also because of the low altitude selected by appellant (tr. 5/94-95).

56. On the same day as the Transfer Flight, a pilot for another private carrier conducting spraying operations for AID in Africa intended to file a flight plan for "the overland route" from Dakar, Senegal to Agadir, Morocco. During discussions with Dakar flight operations personnel, someone in the room interpreted the French being spoken as referring to "some possible, but unspecified, danger which existed along the overland route." As a result, the pilot filed a flight plan for a route over water. However, he did not speak with any of appellant's personnel about either his flight plan or the information he received, and there is no evidence as to whether any of appellant's personnel received similar warnings. (Ex. A-49)

57. On 8 December 1988, the Transfer Flight, consisting of the two DC-7 aircraft based in Senegal, departed from Dakar, Senegal bound for Agadir, Morocco (stip. 1, no. 7). They flew approximately one and one-half miles apart in what is known as "patrol" or "route" formation, and, to an observer on the ground, would have resembled aircraft that the Moroccan government had in its inventory (tr. 3/162-64, 5/77, 96, 104-05). At the time of the attack, the aircraft were following their flight plan on airway Red 975 at an altitude of 11,000 feet. During the Transfer Flight, both aircraft were attacked and hit by SAM-7 surface-to-air missiles fired by the Polisario. The lead aircraft (N284) lost one of its engines and part of a wing and crashed, killing all five persons on board. The aircraft and all of its contents were destroyed. The second aircraft (N90804) lost an engine and suffered other damage, but it was able to land at Sidi Ifni, on the Moroccan coast. (Stip. 1, nos. 14, 15; ex. G-18)

58. The attack occurred about 30 miles north of 26 degrees north latitude, approximately 60 miles from the closest area designated for spraying by the Government under the Morocco Contract (stip. 1, no. 11; ex. G-18; tr. 2/265, 3/97, 4/82, 105). However, appellant, while spraying, could have come closer to the point of attack since, as we found above, it followed locusts on the move and its only stated restriction was to avoid flying within 15 kilometers of the Algerian border.

The Aftermath

59. Following the Incident, the Polisario admitted that it was responsible for the missile attack. It expressed regret and claimed that the attack had been made in error

because it had believed that appellant's DC-7s were Moroccan military C-130 aircraft. (Ex. G-25)

60. Colonel Murphy and Lt. Colonel Wright prepared a 10 December 1988 cable as an "information report" in response to questions about the Incident. Based, in part, upon interviews with appellant's owners and surviving crew members, the report concluded that: (a) the pilots were not aware of any specific danger to aircraft flying in the area; (b) that Mr. Blackmer, the pilot of the lead aircraft, had felt that the inland airway to Morocco was the safer route; (c) the crew had made no snap judgments during the planning or execution of the Transfer Flight; and, (d) the decision on the route was based on the "best information available" which, unfortunately, was "inaccurate." (Ex. A-34; tr. 1/236, 249-50, 266, 5/20, 71-75)

61. Following the Incident, the Government attempted to indicate clearly on a map a line of demarcation in the Morocco Contract beyond which appellant was not to conduct spraying operations (tr. 2/117-19, 209-10).

62. At a press conference following the Incident, the AID Deputy Administrator announced that he had authorized that the Senegal Contract be extended to include the Transfer Flight to continue the availability of insurance coverage for the families of the crew. The contracting officer for the Senegal Contract later concluded that there was no need to consider amending the contract to provide for an extension because the Transfer Flight could be considered demobilization under the Senegal Contract, as the spray services had ended just the day before the flight. (Tr. 5/166-67) On 20 December 1988, the contracting officer sent appellant a letter which, in addition to offering condolences and expressing appreciation for service, included the following:

> This letter also clarifies some confusion which may have arisen recently regarding the status of T&G under the subject contract. . . . Inasmuch as T&G had completed the furnishing of flight hours on December 7, 1988 and the downing of the aircraft took place on December 8, 1988 enroute from Senegal, it seems clear that T&G was thus in the final phase of contract performance in compliance with its terms and conditions. Since, in my opinion, T&G was performing demobilization under . . . the contract, no extension or other amendment of the contract is necessary. I also understand that as the two aircraft were being demobilized, pesticides were being carried from Senegal to Morocco on behalf, and at the request, of A.I.D.

> Since T&G was performing under the contract, the clauses of the contract entitled "Workers' Compensation and War-Hazard Insurance Overseas" (FAR 52.228-4) and "Insurance-Workers' Compensation, Private Automobiles, Marine, and Air Cargo" (AIDAR 752.228-70, Alternate 71) would apply to the personnel. In addition, I understand that T&G had medical evacuation insurance . . . which may cover some or all of the costs of returning the remains. T&G bore all risk of loss of, or damage to, the aircraft. Thus, any insurance coverage T&G might have had would apply to the loss of the aircraft.

(Ex. A-3)

63. Following the Incident, an INOTAM dated January 1989 included a Department of State Advisory which included the following, in pertinent part:

> WESTERN SAHARA/CANARY ISLANDS
>
> With immediate effect and until further notice, because of incidents in the Western Sahara Region on January 21 and February 21, 1985, and December 8, 1988 resulting in aircraft downings which were most likely caused by surface to air missile firings, it is strongly recommended that flights by U.S. operators maintain a minimum altitude of 20,000 feet over the land mass of the Western Sahara . . . .

(Ex. A-13)

64. Following the Incident, the FAA and the United States mission to the ICAO conducted an ongoing effort to have the air traffic services in the area (*e.g.*, Morocco) promulgate the issuance of a NOTAM warning aviators of the threat posed by SAM missiles in the Western Sahara for aircraft flying under 20,000 feet. The record does not reflect a positive result for their efforts. (Exs. A-57, -60 to -68)

65. On 11 September 1989, appellant, by its then counsel, submitted a certified claim, in the amount of $1,499,709, to the contracting officer under the Senegal Contract for loss and damage of the two aircraft, lost profits, legal fees and consultant costs, and G&A and profit. The claim stated that appellant did not have any war-risk coverage and that the property losses it sustained were uncompensated. (Ex. A-4)

66. On 17 November 1989, the contracting officer issued a decision denying appellant's claim. Appellant made timely appeal.

Reasonableness of the Parties' Actions and Omissions

67. Each of the parties presented evidence, including expert testimony, as to the reasonableness of the actions and omissions of the Government with respect to communication of information, or the lack thereof, regarding the Polisario, and its relationship to the Incident. Based upon our findings above and our assessment from observing the expert and other testimony, we find that AID's Mr. Johnson unreasonably failed to communicate, or to have other AID officials communicate, to appellant information he received regarding the berm, the Polisario, and its SAM capability during performance of the Morocco Contract. (Tr. 4/38-39, 43, 48, 63, 5/68-70, 78-79, 112 6/129-31) However, we have no basis upon which to find that Mr. Johnson or any other Government official should have anticipated the flight plan of the Transfer Flight or have made any connection between their knowledge of the berm, the Polisario, or its SAM capability and the Transfer Flight.

68. Each of the parties presented evidence, including expert testimony, as to the reasonableness of the actions and omissions of appellant's Transfer Flight crew in preparation, and selection, of the flight plan for the Transfer Flight. Based upon our findings above and our assessment from observing the expert and other testimony, we find (a) that appellant's Transfer Flight crew did not adequately seek or research the pertinent FAA and State Department notices and relied too heavily upon obtaining flight clearance from the Senegal air traffic control and upon its own information, (b) that the pertinent FAA and State Department notices contained sufficient information to have alerted pilots to a potential missile threat in the Western Sahara, and (c) that a pilot having knowledge of the pertinent FAA and State Department notices would not have reasonably made the Transfer Flight pursuant to appellant's flight plan. (Tr. 1/291, 3/150-53, 159, 261, 4/44, 71-73, 95-97, 126)

DECISION

In this appeal, appellant seeks compensation for loss and damage to its aircraft due to missile attack (the Incident) while flying over the Western Sahara during a flight from Senegal, the location of the captioned contract, to Morocco, the site of another contract appellant was performing for AID. Appellant has the burden of proof.

While the action before us is contractual and relates solely to property damage, we are ever mindful that the Incident resulted in the death of five people. Our analysis of the rights and obligations of the parties, however, must be based on those legal principles which would be applicable even in the absence of such tragic results.

I. Evidentiary Matters

A. Exhibits 1 through 8 to the Government's Opening Brief

At the conclusion of the hearing, the presiding judge closed the evidentiary record except for one limited area, discussed immediately below. Nevertheless, the Government has attached to its opening brief numerous exhibits, consisting primarily of copies of newspaper articles, without even attempting to justify their inclusion into the record as newly discovered evidence. Exhibits 1 through 8 attached to the brief are not admitted into evidence.

B. Supplements to the Record Regarding NOTAMs

Shortly prior to the conclusion of the hearing, appellant's counsel filed a "Notice to Board Regarding Non-Existence of NOTAM and Objection to Description of Advisories as 'NOTAM'," (Notice to Board) in which he contended that he had discovered that, contrary to the previous assumption by both parties, (a) Exhibits A-12 and A-13 were not Notices to Airmen (NOTAMs) but rather were State Department Advisories, having a different degree of import, and (b) there was no such thing as an "International Notice to Airmen." The Notice to Board also contained argument regarding different types of aviation notices and the extent of their availability. The presiding judge permitted the parties to supplement the record on those matters following the hearing. Both parties have done so—appellant offering an affidavit of Mr. John Carnes attached to its opening brief, and the Government offering affidavits of Mr. Bernard Coogan along with both its opening brief (exhibit 9) and reply brief (exhibit 12).

Appellant has objected to the Coogan affidavits on the ground that their subject matter transcends the limited issues regarding which the presiding judge permitted the record to remain open. We do not agree. The Coogan affidavits contain his opinion on matters relevant to those raised in appellant's Notice to Board and they, as well as appellant's Carnes affidavit, are admitted into evidence.

C. The Graf Letter

Following the submission of opening briefs, the Government requested permission to include as rebuttal evidence a 1989 letter from a Colonel M. J. Graf to Government counsel regarding his opinion of appellant's pilots. Appellant objected and the presiding judge, by order of 2 July 1999, ruled that it would not be admitted since it did not meet the test of newly discovered evidence and, in any event, was hearsay. We affirm that ruling.

D. The Rossini Record

In an action before the United States District Court for the District of Arizona under the Federal Tort Claims Act (FTCA), *Suzen Rossini, et al. v. United States,* CIV-91-1590-PHX-SC (RCB), survivors of the decedent crew members sought damages in tort from the United States on the ground that AID and its employees failed to properly warn the decedents of the threat posed by the Polisario. After hearing testimony, on 4 October 1994 the District Court dismissed the suit and entered judgment for the United States. It concluded that it lacked subject matter jurisdiction under the FTCA under that statute's "foreign country exception," as no negligent act or omission occurred in the United States. The district court decision was later affirmed, in an unpublished decision, by the United States Court of Appeals for the Ninth Circuit (No. 94-17124).

In this appeal, the Government has not contended that, in light of the *Rossini* decision, we simply apply *res judicata*, presumably because appellant was not a party in *Rossini* and the underlying claim here alleges acts and omissions by AID officials outside of the United States, which were, therefore, not encompassed within *Rossini*. We also note that, due to the diligent and effective discovery efforts of appellant's counsel, the record in this appeal is considerably different from that in *Rossini*, especially with regard to the nature and extent of AID knowledge of the Polisario prior to the Incident.

In view of the foregoing, the presiding judge ruled that, for the most part, the record in *Rossini* would not be admitted into evidence in this appeal. The ruling excepted the testimony of Mr. Jack Loughran in *Rossini* (ex. G-31), which the presiding judge took into evidence in its entirety. Appellant objects to its admission on the grounds that Mr. Loughran's testimony was "distorted," and therefore "unreliable," due to the limitation of the evidence under the FTCA. We do not agree.

The parties were unable to locate Mr. Loughran to obtain his testimony in this proceeding. However, as the pilot of the surviving aircraft, he testified in *Rossini,* under oath and subject to cross examination, as to events occurring prior to and during the Incident, including the nature and extent of his communication with Mr. Blackmer, the lead pilot, during flight planning and Mr. Loughran's own observations at the time the flight plan was filed at the Dakar, Senegal airport. While appellant was not a party in *Rossini* and it is likely that Mr. Loughran would have faced wider questioning by appellant had he appeared at the hearing in this appeal, we have no reason to question the reliability of the sworn testimony he provided in *Rossini*. We find the testimony to be probative and affirm the ruling of the presiding judge admitting it into evidence.

At the hearing, appellant offered into evidence two pages of the *Rossini* transcript (ex. A-77), primarily consisting of statements between opposing counsel regarding the

correct description of prior testimony by appellant's Mr. Grantham regarding the location of spraying under the Morocco Contract, as compared to the location of the crash site of the aircraft downed in the Incident. Appellant's stated purpose for the evidence is to distinguish *Rossini* from this appeal. Appellant contends that the transcript excerpts demonstrate that, due to the nature of the issues under the FTCA, in *Rossini* there was suppression of testimony about locust spraying under the Morocco Contract in areas of the Western Sahara north of 26 degrees north latitude prior to the Incident. It also describes the transcript excerpt as a "counterweight" to the *Rossini* Loughran testimony. The Government objected to the admission of the exhibit and the Board deferred ruling upon its admission until this decision (tr. 6/217).

As discussed above, we are fully aware of the differences between the issues and the records in this appeal and *Rossini* and we have made no inferences from the nature of the evidence either presented in, or absent from, that trial. Mr. Loughran's *Rossini* testimony, which we have taken into evidence, relates to preparations for the Transfer Flight and events during the Incident. We are unable to discern how a discussion between counsel in *Rossini* regarding Mr. Grantham's prior testimony about the location of spraying under the Morocco Contract bears any relationship, let alone serves as a "counterweight," to Mr. Loughran's *Rossini* testimony. We see nothing in ex. A-77 probative to the issues in this appeal, and it is not admitted into evidence.

E. Coogan Expert Testimony

The Government provided the expert testimony on aviation matters by Mr. Bernard Coogan and, at the hearing, appellant offered no objection to his qualification as an expert. In its post-hearing brief, appellant contends that, because Mr. Coogan "gave verifiably wrong answers to basic questions about simple aviation matters and critical questions in this appeal," he be disqualified as an aviation expert and that we make no findings of fact in the Government's favor based on his testimony. During his testimony, Mr. Coogan acknowledged that he did not claim any expertise as an air traffic controller. Citing that acknowledgment, appellant points to every transcript page of Mr. Coogan's testimony where the words "air traffic control" were uttered and contends that his "entire factual and opinion testimony was concerned with air traffic control matters" (app. reply br. at 80).

Initially, we observe that, by failing to object in a timely manner, appellant waived its objection. Further, appellant's emphasis on air traffic control matters is misplaced. In light of the issues in this appeal, an important area of expert opinion testimony concerns the reasonable actions of a pilot having knowledge of, or being ignorant of, certain items of information. Mr. Coogan, in addition to others who testified at the hearing, possesses requisite expertise to provide opinion testimony on that issue as well as other pertinent aviation matters. In our fact-finding based upon the testimony of both parties' expert

witnesses, we have carefully considered the nature and extent of their expertise based upon an assessment of their experience as well as testimony in this proceeding. Appellant has presented us with no valid basis upon which to disqualify Mr. Coogan, and we have assessed his testimony based upon the standards applied to all experts.

Mr. Coogan's testimony contained hearsay, to which appellant made timely objection, consisting of (a) information told to him by someone at an FAA flight service station regarding the extent of flight information (*e.g.*, NOTAMs, IFIMs) available at the airport in Dakar, Senegal, and (b) information told to him by Mr. Jack Loughran, the pilot of the follow aircraft, during Mr. Coogan's preparation for his testimony in the *Rossini* trial.

Rule 703 of the Federal Rules of Evidence provides that "the facts or data upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing" and that the facts or data need not be admissible "[i]f of a type reasonably relied upon by experts in the particular field." Here, we conclude that the interviews conducted by Mr. Coogan were sources of information reasonably relied upon by experts. However, they are hearsay, and Rule 703 is not a vehicle to circumvent the other rules of evidence. *See Matter of James Wilson Associates*, 965 F.2d 160, 172-73 (7th Cir. 1992). Where an expert's opinions are based on information or data which is hearsay, such information and data is admissible to explain the basis of the opinions, but are not admissible to prove substantive facts. *Wilson v. Merrell Dow Pharmaceuticals, Inc.*, 893 F.2d 1149, 1153 (10th Cir. 1990); *Reflectone, Inc.*, ASBCA No. 42363, 98-2 BCA ¶ 29,869. We, therefore, admit the hearsay evidence relied upon by Mr. Coogan for that limited purpose.

F. 1988 International Flight Information Manual (IFIM)

During the course of the proceeding including the hearing, the evidence included 1989 IFIMs which contained flight information regarding Morocco and a reference to the 1985 downing of civilian aircraft. Although discussed at the hearing, left unresolved was the question of whether a similar IFIM existed in 1988, prior to the Incident, as neither party was able to produce such a document despite reference in the *Rossini* record to its existence.

In exhibit 11 to its reply brief, the Government has included an IFIM dated April 1988, which it has offered into evidence, and Government counsel explained that, although it had been in Government files, he first discovered the document during the briefing process. Appellant, although contending that the 1988 IFIM does not meet the test of being newly discovered evidence to justify its admission, in the interest of not having "a tainted judgment on the merits," has consented to its admission for the purpose

of demonstrating the IFIM's existence and text. We admit the April 1988 IFIM into evidence.

G. Murphy Expert Testimony

In its pre-hearing submission received by the Government, appellant named Colonel James Murphy, the United States Defense Attache to the United States Embassy in Morocco and liaison to the Moroccan military, as a potential expert witness. He was also a fact witness and a portion of his fact testimony concerned his post-Incident report responding to questions about the Incident. Over the Government's objection, the presiding judge permitted Colonel Murphy to present opinion testimony on the cause of the Incident. In doing so, the presiding judge noted that, while Colonel Murphy had not been qualified as an expert in accident reconstruction or the like, he did bring expertise to his task of preparing the report. We affirm the ruling of the presiding judge and, as we have done with other witnesses who were permitted to provide opinion testimony, we have carefully considered the nature and extent of Colonel Murphy's expertise based upon an assessment of his experience as well as his testimony in this proceeding.

H. Bonner Testimony

Ms. Sara Jane Littlefield, the AID Mission Director in Senegal, is deceased and was not deposed. At the hearing, Mr. James Bonner, a technical member of the AID locust control team in Senegal, testified as to a statement made by Ms. Littlefield when she learned of the Incident. The presiding judge, considering the possibility that the statement could come within the "excited utterance" exception to the hearsay rule, permitted Mr. Bonner, over appellant's objection, to testify as to what Ms. Littlefield said. Upon review, we consider that portion of Mr. Bonner's testimony to be inadmissible hearsay, and we have not relied upon it in our findings above or decision below.

II. The Merits

Appellant claims that the Government is liable to compensate it for its destroyed and damaged aircraft because (a) AID failed to pass along to appellant information the agency possessed about the Polisario and its conflict with Morocco in the Western Sahara and (b) appellant's lack of knowledge of that information was the proximate cause of the Incident.

In order to recover in this appeal before the Board, appellant must establish a remedy either under the contract or as a result of breach of contract. The legal theories upon which appellant has couched its claim are that the Government breached (a) the implied warranty of design specifications, (b) the duty to disclose superior knowledge,

and (c) the implied duty of cooperation. We will first examine each of appellant's legal theories before discussing the causation leading to the Incident.

Implied Warranty of Design Specifications

Appellant initially contends that the Senegal Contract and the Morocco Contract provisions calling for Government representatives to designate the specific areas to be sprayed constituted design specifications. It maintains that, by designating areas of the Western Sahara other than the Algerian border for spraying, the Government was impliedly warranting and "guaranteeing" that those designated areas were safe for flight operations, and, that the Government is liable to appellant on that guarantee. Recognizing that the allegedly breached specification was in the Morocco Contract while the Transfer Flight was made under the Senegal Contract, appellant further contends that the Transfer Flight was actually a "joint project" of the AID missions in both Senegal and Morocco and that, "[f]or the purpose of the Transfer Flight," the applicable design specifications of the Morocco Contract, including the areas designated as safe for air operations, must be incorporated into the Senegal Contract (app. br. at 126, emphasis omitted). We disagree.

Design specifications are those which detail the materials and manner or method in which the contract is to be performed and from which the contractor may not deviate. Performance specifications generally set forth an objective or standard to be achieved, and it is left to the contractor to select the method or means of reaching the required end result. *J.L. Simmons Co. v. United States*, 412 F.2d 1360 (Ct. Cl. 1969) Here, both the Senegal Contract and the Morocco Contract gave appellant complete authority to decide its manner of mobilization and demobilization, and on all matters directly connected with flight operations, including aircraft maintenance, the determination of flight cargoes, routes, the adequacy of weather conditions and the decision as to whether the flight should take place. Appellant also was relied upon for the determination of how to conduct the spraying. There can be little doubt but that the specifications were performance type specifications. The fact that appellant, during performance, was to follow AID technical directions, not included in the contract document itself, as to performance details and the specific areas to be sprayed is insufficient to render the specification a design type and to trigger its implied warranty. Government liability, if any, stemming from its designation of areas to spray, must be based on another legal theory.

We also have difficulty with appellant's effort to use the Transfer Flight to create a legal nexus between the two contracts. Our findings reflect that the Senegal and Morocco contracts were totally independent, with different contracting officers from different agency units, and with different agency teams providing technical support.

There is also no factual ground for appellant's assertion that the Transfer Flight was a "joint project." We have found that Mr. Grantham, appellant's president, in the hope of securing additional spraying work in Morocco the following spring, decided, at the conclusion of the Senegal Contract, to move the two DC-7 aircraft from Senegal to Morocco rather than to demobilize them back to Arizona. At the time of the Transfer Flight, appellant had no contract with the Government for the use of the two aircraft in Morocco. The fact that Mr. Johnson and Mr. Hellyer agreed with appellant's assessment of the potential for future business did not create a contract. Moreover, we have found that neither Mr. Johnson nor Mr. Hellyer, the two AID officials with whom appellant discussed the Transfer Flight, possessed contracting authority in either the Morocco or Senegal contracts and could not, therefore, have entered into a contractual relationship. A Government representative must have actual authority to contract in order to bind the Government, even where the contract is alleged to have been implied in fact. *City of El Centro v. United States*, 922 F.2d 816 (Fed. Cir. 1990), *cert. denied*, 501 U.S. 1230 (1991) Furthermore, it is undisputed that no AID official had anything to do with any of the details of the Transfer Flight, except to request appellant, as a favor, to carry insecticide and pumping equipment from Senegal to Morocco. We have found that reference to "redeployment" of the aircraft in the summary of an AID cable was in error and, in any event, would be an insufficient basis upon which to conclude that the AID mission in Morocco was contractually involved in their transfer.

Appellant points to the manner of formation of the Senegal Contract in an effort to demonstrate that, in an "emergency situation," AID will take action prior to actual contract execution. We observe, initially, that the facts do not reflect the alleged emergency situation in Morocco. Moreover, appellant fails to take note of the fact that, although execution of the definitized Senegal Contract followed performance, performance was preceded by execution of a letter agreement. In short, other than AID's decision immediately following the Incident to consider the Transfer Flight as demobilization under the Senegal Contract, appellant has failed to demonstrate that it had any contractual arrangement with AID regarding the Transfer Flight such as to warrant its characterization as a "joint project," let alone to somehow incorporate the Morocco Contract specification into the Senegal Contract.

We are, therefore, unable to conclude that the Government was liable for events on the Transfer Flight based upon an implied warranty of specifications under the Morocco Contract.

Duty to Disclose Superior Knowledge

Appellant claims recovery on the theory that AID failed in its duty to disclose its superior knowledge, gained in its briefings at the executive and country team meetings at

the United States Embassy, regarding the existence of the berm, the activities of the Polisario, and the Polisario's SAM capability.

Where the Government possesses information vital to performance of a contract, the bidders neither knew nor should have known the information, and the Government was aware or should have been aware of the bidders' ignorance, the Government is liable for damage caused by its failure to disclose the information. *Helene Curtis Indus., Inc. v. United States*, 312 F.2d 774, 778 (Ct. Cl. 1963); *J.A. Jones Constr. Co. v. United States*, 390 F.2d 886 (Ct. Cl. 1968); *GAF Corp. v. United States*, 932 F.2d 947 (Fed. Cir. 1991), *cert. denied*, 502 U.S. 1071 (1992). However, this doctrine applies to Government superior knowledge prior to award which it did not make available to the contractor for use in preparing its bid and which, as a result, caused the contractor to later incur increased costs of performance. It does not provide the basis of recovery in this appeal.

Implied Duty of Cooperation

A contractor is entitled to recover damages caused by the Government's failure to cooperate in its performance, and the duty to cooperate includes the provision of necessary or essential information. *SEB Engineering, Inc.*, ASBCA No. 39728, 94-2 BCA ¶ 26,810. The determination of whether the Government has failed to fulfill its duty depends upon an assessment of the reasonableness of the Government's actions based on the particular context. *PBI Electric Corp. v. United States*, 17 Cl. Ct. 128 (1989).

Appellant contends that AID breached its implied duty to cooperate in contract performance by failing to provide appellant information about the Polisario which AID knew or should have known that appellant reasonably required to perform successfully.

The implied duty to cooperate by providing information is usually applied where a contractor requests information necessary to perform and the Government either does not provide that information or does so in an untimely manner. *See, e.g., Hardie-Tynes Mfg. Co.*, ASBCA No. 20582, 76-2 BCA ¶ 11,972; *Signal Contracting, Inc.*, ASBCA No. 44963, 93-2 BCA ¶ 25,877 aff'd, 17 F.3d 1442 (1994) (table). Here there is no evidence that appellant made any request for information.

It may be argued, however, that the implied duty to cooperate is applicable to a situation where, during performance, the Government is reasonably aware of the contractor's need for information in its possession, even in the absence of a contractor request for the information, yet does not convey it to the contractor. Our record reflects that AID's Mr. Johnson attended meetings at which he received information about the Polisario, its missile capability, the berm, and recent military conflicts to which appellant was not privy, and that the information was not passed along to even Mr. Hellyer, the head of the AID locust control program in Morocco, let alone to appellant. It is also

apparent from our record that, because AID obtained the information during special briefings, it should reasonably have known that appellant did not possess the information. While the Government argues that appellant had no need for the information, we believe that the existence of recent military conflict as close to contract performance as our findings indicate could be quite valuable in helping to achieve successful performance. However, the analysis does not end there.

Appellant sprayed for locusts in the Western Sahara under the Morocco Contract. The Government's duty to cooperate in the performance of the Morocco Contract arose under the Morocco Contract. There were no planes shot down while spraying under the Morocco Contract or, for that matter, while spraying under the Senegal Contract. As we discuss in more detail below, appellant's damages were sustained in the Transfer Flight under entirely different circumstances than existed during aerial spraying, and we have found no basis upon which to conclude that AID's Mr. Johnson or any other AID official should have anticipated the flight plan of the Transfer Flight or have made any connection between their knowledge of the Polisario and the Transfer Flight. In short, appellant has failed to show that it sustained its damage as a result of a Government failure to cooperate by providing information.

Causation

The basis of appellant's claim is that: (a) AID's failure to provide it with the information about the berm, the Polisario and its missile capability during performance of the Senegal Contract, together with AID's limited warning to appellant to avoid proximity to the Algerian border, constituted a warranty that the Western Sahara north of 26 degrees north latitude was safe for flight operations; (b) the warranty led appellant to choose the Red 975 airway route for the Transfer Flight; and, (c) the route selected for the Transfer Flight, in turn, led to the Incident. On the basis of our findings, we are unable to conclude that the events cited by appellant were the proximate cause of the Incident. Rather, the record reflects another cause.

The FAA regulations have the force and effect of law. *Associated Aviation Underwriters v. United States*, 462 F. Supp. 674 (N.D. Tex. 1979), citing *United States v. Schultetus*, 277 F.2d 322, 327 (5th Cir.), *cert. denied*, 364 U.S. 828 (1960). A pilot must have studied, must know, and is legally required to abide by the provisions of the Airman's Information Manual and FAA advisory circulars. *Associated Aviation Underwriters, supra.*; *Insurance Company of North America v. United States*, 527 F. Supp. 962, 969 (E.D. Ark. 1981); *see Dyer v. United States*, 832 F.2d 1062 (9th Cir. 1987). The pilot is primarily responsible for the safe operation of the aircraft and has the final authority as to its operation; air traffic control personnel generally cannot assume that responsibility. *Associated Aviation Underwriters, supra.*

We have found: that, under FAA regulations, the pilot in command of an aircraft bears direct responsibility for operation of the aircraft; that, prior to the Incident, the FAA had published (a) the Airman's Information Manual advising pilots planning international flights to check the IFIM and current NOTAMs, and warning not to rely on a flight plan filed with air traffic control, (b) an IFIM advising of the Polisario's 1985 destruction of civilian aircraft in the Western Sahara, and (c) a State Department Advisory, citing the 1985 attacks, and "strongly recommending" that flights over the Western Sahara south of 26 degrees north latitude maintain an altitude of 20,000 feet; that the crew preparing and filing the flight plan apparently did not have, or seek, the documents in either (a), (b) or (c), above, before making the Transfer Flight; and, that the Transfer Flight was made at an altitude of 11,000 feet and that a portion of the flight traversed the Western Sahara south of 26 degrees north latitude.

Appellant points to the fact that the Transfer Flight was shot down north of 26 degrees north latitude, an area outside that referenced in the State Department Advisory. It contends that, as it turned out, the State Department Advisory was too limited in scope and left a void in information affecting aviation safety, and that, in any event, the State Department Advisory was based on nearly four-year old information and of limited value especially in Africa, which is subject to frequently changing conditions. Appellant further argues that the title of the State Department Advisory, "Canary Island," was inadequate to constitute a warning about the Western Sahara, as evidenced by the post-Incident change of the title to "Western Sahara/Canary Islands."

We do not agree. In view of the nature of the danger involved, appellant is attempting to advance distinctions which are too fine both geographically and chronologically. Once again, a portion of the Transfer Flight in fact did traverse the Western Sahara south of 26 degrees north latitude, and the Incident occurred only 30 miles to the north of that parallel. Further, although the 1988 advisory was based on 1985 events, its recent reissuance should have reasonably deterred a pilot from discounting its applicability. We are also unable to conclude that the "Canary Island" title of the State Department Advisory was inadequate to alert pilots planning to fly in the Western Sahara since, as we found, that territory is in the Canarys Flight Information Region. In any event, the State Department Advisory is not the only document containing a warning and we have found that the pertinent aviation notices contained sufficient information to have alerted pilots to a potential missile threat in the Western Sahara, which includes the site of the Incident.

We conclude that the Incident was proximately caused by appellant's Transfer Flight pilots either failing to obtain and read the pertinent aviation notices or by their failing to adhere to their restrictions.

CONCLUSION

Appellant has failed to meet its burden of proof that the Government bears responsibility for its damages. The appeal is denied.

Dated: 10 October 2000

RONALD JAY LIPMAN
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. 40428, Appeal of T&G Aviation, Inc., rendered in conformance with the Board's Charter.

Dated:

EDWARD S. ADAMKEWICZ
Recorder, Armed Services
Board of Contract Appeals