NATIONAL TRANSPORTATION SAFETY BOARD
Office of Aviation Safety
Washington, D.C. 20594

10/16/2011

Group Chairman's Factual Report

Public Aircraft Status Group

DCA11MA075

A. ACCIDENT

Operator:	Omega Air
Location:	Point Mugu, California
Date:	May 18, 2011
Time:	1727 Pacific Daylight Time[1]
Airplane:	Boeing 707, Registration Number: N707AR

B. PUBLIC AIRCRAFT STATUS GROUP

NTSB:
William English, Major Investigations - Chairman
Robert Combs, General Counsel
David Lawrence, Operational Factors
Pocholo Cruz, Maintenance Records

FAA:
Carl Johnson, Flight Standards

U. S. Navy:
Kimball Thompson, Aviation Safety Directorate, Naval Safety Center
Greg Rucci, Aircraft Controlling Custodian Office, Naval Air Systems Command (NAVAIR)

Omega (includes Omega Inc., Omega Air Inc. (OAI) and Omega Aerial Refueling Services (OARS)):
Sammy Hanson, Designated Airworthiness Representative
Kevin O'Neill, Director of Quality Assurance, Omega Inc.

C. SUMMARY

On May 18, 2011, at about 1727 pm local time (0027 UTC), Omega Air flight 70, a Boeing 707 (N707AR), crashed on takeoff at the Point Mugu Naval Air Station, California The airplane

[1] All times are pacific daylight time (pdt) based on a 24-hour clock, unless otherwise noted.

impacted beyond the departure end of runway 21 and was destroyed by post-impact fire. All three flight crewmembers aboard escaped with minor injuries.

D. OBJECTIVE OF GROUP

NTSB general counsel guidance following a DoD contracted airplane accident in 2000 stated that investigators should confirm the categorization of public aircraft accidents with the FAA. Initial queries to the FAA and other stakeholders did not result in sufficient clarity for Board staff to categorize the operation and thereby appropriately analyze potential safety issues related to regulatory guidance and oversight. According to the FAA, this is typical due to the nature of public aircraft operations. A formal request was made to the FAA for a legal interpretation of the status of the Omega air refueling operations (request numbers 11-376(4) and 11-384, see section below). Public Aircraft are defined in 49 USC 40102 and 40125 (see next section, and attachments 1 and 2), and are, according to the FAA "generally exempt from the requirements of the Federal Aviation Regulations." The status of particular aircraft operations as public vs. civil was potentially unclear even prior to this accident. FAA material dating back to 1995 acknowledged that public aircraft status was possibly open to interpretation.

At the time of the accident, there was no equivalent to an air carrier operating certificate or similar documentation that would apply to a Public Aircraft operation. The group was formed in order to compile a complete inventory of the applicable statutes, regulations, contracts, guidance materials, and other documentation which could be used to determine the status of the operation. In addition, the principal entities affected by the status, namely Omega, FAA, and U.S. Navy, were requested to provide their input and rationale for the respective organization's understanding of the status of the operation, to include but not limited to any documents or discussions regarding the applicable sets of regulations, and oversight responsibility.

Law

Public Law 103-411, the Independent Safety Board Act Amendments of 1994, redefined "public aircraft." The statute, which became effective April 23, 1995, narrowed the definition of public aircraft with the intent that government-owned aircraft that operate for commercial purposes or engage in transport of passengers be subject to the regulations applicable to civil aircraft. In testimony supporting passage of the law, as recorded in the *Congressional Record: October 3, 1994*, Congressman Norman Mineta stated, in part:

> It is intended to require, for the first time, that the Federal Aviation Administration regulations apply to aircraft operated by government entities. This requirement does not apply to certain governmental functions, such as firefighting, search and rescue, and law enforcement. Rather, it is intended to apply to all operations in which government officials or other individuals are transported on government-owned aircraft. It is expected that if public use aircraft are required to adhere to the Federal Aviation regulations, the safety of these operations will be enhanced.

Also, in the *Congressional Record: October 6, 1994*, in regard to the purpose of the law, Senator Larry Pressler stated, in part:

Its purpose is to advance the safety of travel on public aircraft; that is, aircraft used exclusively in the service of federal, state, and local governments. Under current law, public use aircraft are not subject to Federal Aviation Act safety regulations to the extent imposed on civil aircraft.

My provision would amend the definition of public use aircraft to mandate that FAA safety regulations, directives and orders issued for civil aircraft be made applicable to all government-owned, nonmilitary aircraft engaged in passenger transport.

Title 49 of the U.S. Code, Transportation, Section 40102 Definitions, paragraph(a)(41) states that "public aircraft" means any of the following:

(A) Except with respect to an aircraft described in subparagraph (E), an aircraft used only for the United States Government, except as provided in section 40125(b).
(B) An aircraft owned by the Government and operated by any person for purposes related to crew training, equipment development, or demonstration, except as provided in section 40125(b).
(C) An aircraft owned and operated by the government of a State, the District of Columbia, or a territory or possession of the United States or a political subdivision of one of these governments, except as provided in section 40125(b).
(D) An aircraft exclusively leased for at least 90 continuous days by the government of a State, the District of Columbia, or a territory or possession of the United States or a political subdivision of one of these governments, except as provided in section 40125(b).
(E) An aircraft owned or operated by the armed forces or chartered to provide transportation or other commercial air service to the armed forces under the conditions specified by section 40125(c). In the preceding sentence, the term ''other commercial air service'' means an aircraft operation that (i) is within the United States territorial airspace; (ii) the Administrator of the Federal Aviation Administration determines is available for compensation or hire to the public, and (iii) must comply with all applicable civil aircraft rules under title 14, Code of Federal Regulations.

Paragraph (a)(16) states: *"civil aircraft" means an aircraft except a public aircraft.*

Title 49 of the U.S. Code, Transportation, Section 40125, Qualifications for public aircraft status, states in part:

(1) COMMERCIAL PURPOSES.—The term ''commercial purposes'' means the transportation of persons or property for compensation or hire, but does not include the operation of an aircraft by the armed forces for reimbursement when that reimbursement is required by any Federal statute, regulation, or directive, in effect on November 1, 1999, or by one government on behalf of another government under a cost reimbursement agreement if the government on whose behalf the operation is conducted certifies to the Administrator of the Federal Aviation Administration that the operation is necessary to respond to a significant and imminent threat to life or property (including

natural resources) and that no service by a private operator is reasonably available to meet the threat.
(2) Governmental function.—The term "governmental function" means an activity undertaken by a government, such as national defense, intelligence missions, firefighting, search and rescue, law enforcement (including transport of prisoners, detainees, and illegal aliens), aeronautical research, or biological or geological resource management.
(3) Qualified non-crewmember.—The term "qualified non-crewmember" means an individual, other than a member of the crew, aboard an aircraft—
(A) operated by the armed forces or an intelligence agency of the United States Government; or
(B) whose presence is required to perform, or is associated with the performance of, a governmental function.
(4) Armed forces.—The term "armed forces" has the meaning given such term by section 101 of title 10.
(b) Aircraft Owned by Governments.—An aircraft described in subparagraph (A), (B), (C), or (D) of section 40102(a)(41) does not qualify as a public aircraft under such section when the aircraft is used for commercial purposes or to carry an individual other than a crewmember or a qualified non-crewmember.
(c) Aircraft Owned or Operated by the Armed Forces.—
(1) In general.—Subject to paragraph (2), an aircraft described in section 40102(a)(41)(E) qualifies as a public aircraft if—
(A) the aircraft is operated in accordance with title 10;
(B) the aircraft is operated in the performance of a governmental function under title 14, 31, 32, or 50 and the aircraft is not used for commercial purposes; or
(C) the aircraft is chartered to provide transportation or other commercial air service to the armed forces and the Secretary of Defense (or the Secretary of the department in which the Coast Guard is operating) designates the operation of the aircraft as being required in the national interest.

FAA Documentation

FAA Advisory Circular 00.1-1 Government Aircraft Operations, dated April 19, 1995 (attachment 3) "provides guidance on whether particular government aircraft operations are public aircraft operations or civil aircraft operations." The AC further notes that public aircraft operations are "generally exempt from compliance with the Federal Aviation Regulations." (See also Title 49 United States Code (U.S.C.) Section 44701) Chapter 1, section 1(d) states that "the status of an aircraft as 'public aircraft' or 'civil aircraft' depends on its use in government service and the type of operation that the aircraft is conducting at the time."

FAA Advisory Circular 20-132 Public Aircraft, dated 12/21/1988 (attachment 4), which was in effect at the time of the accident, stated that "public aircraft status… does not permit operations outside the territorial limits of the United States without a valid U.S. airworthiness certificate." and that only "'state aircraft' (e.g. those used by U.S. military, customs or police) are excluded from this requirement."

FAA Order 8900.1, *Flight Standards Information Management System*, Vol. 3, Chp 14, "Public Aircraft" (attachment 5) provided guidance to FAA personnel regarding the distinction between public and civil aircraft operations:

> *The status of an aircraft as public aircraft or civil aircraft depends on the type of operation that the aircraft is conducting at the time. Rather than speaking of particular aircraft as public aircraft or civil aircraft, it is more precise to speak of particular operations as public aircraft or civil aircraft in nature.*

FAAO 8900.1 provided additional guidance to inspectors including definition of terms and examples.

In general, according to the FAA, public aircraft are exempt from those provisions in the Federal Aviation Regulations in which the wording applies to "civil aircraft" or operators thereof. Most airworthiness standards, and some operating restrictions, such as the prohibition on dropping objects from an airplane, do not apply to public aircraft. Regulations which apply to "all aircraft" or operators thereof, such as those pertaining to Air Traffic Control, careless and reckless operations, etc. do apply to public aircraft.

Early in 2011, the FAA began clarifying their policy and issues regarding public aircraft operations. A public presentation by FAA Flight Standards in January (attachment 6) noted that the statute was not clear and led to ambiguity and confusion. The presentation stated that public aircraft status was on a flight by flight basis, and the FAA would consider aircraft operations as civil, unless certain provisions could be shown that the flight was actually a public aircraft operation. The FAA noted that Advisory Circular 00.1-1 was in revision to assist operators and government agencies, and provided an email address asking for comments from government agencies. The text of the presentation was largely duplicated in a Federal Register notice of policy regarding civil aircraft which was released on March 23, 2011 (attachment 7), and an internal FAA memo. The Notice of Policy was published in the "Proposed Rules" section of the Federal Register, vice "Notices." After receiving comments (and after the N707AR accident), the FAA revised the presentation further clarifying the responsibilities of the government entities and contract operators (attachment 8). The presentation included additional specifics regarding what the FAA would like to see in a declaration after receiving requests from several Government entities.

FAA Order 8130.2G, *Airworthiness Certification of Aircraft and Related Products*, Chapter 1, Sec 1, paragraph 208 (attachment 9) stated:

> *a. Public aircraft are defined in 49 U.S.C. § 40102(a)(41).*
> *b. "Public Aircraft" is not a status that is granted by the FAA. There is no requirement to make a declaration in writing of this status, nor is there any responsibility to carry any proof of this status. The burden of proof is on the operator to establish to the FAA's satisfaction that an aircraft is a public aircraft if its status is questioned.*
> *c. A U.S.-registered public aircraft operating within the territorial limits of the United States is not required to have an airworthiness certificate. However, any U.S.-registered public aircraft engaged in international air navigation is required to have a valid C of A, in accordance with the International Civil Aviation Organization (ICAO) agreements.*

14 CFR Section 91.319, Aircraft having experimental certificates: Operating limitations, states that:

> *(a) No person may operate an aircraft that has an experimental certificate—*
> *(1) For other than the purpose for which the certificate was issued; or*
> *(2) Carrying persons or property for compensation or hire…*

FAA Interpretation

FAA published legal interpretations issued prior to the accident, dating from 1998 through February of 2011, (attachment 10), based on other operators or events, stated in part (or similar wording):

> *We caution all FAA employees that questions of public aircraft operation often turn on the facts of an individual flight and are made on a case-by-case basis. We also caution staff that the current agency guidance is outdated and should be consulted with caution; new guidance is in coordination at headquarters. As this memo indicates, there are myriad concepts and considerations involved in determining public aircraft operation status.*
>
> *We would like to caution everyone that the current FAA guidance concerning public aircraft operations is confusing, and in some instances does not reflect current agency policy or legal interpretation.*
>
> *In general, the FAA does not issue advisory interpretations regarding public aircraft operations. The nature of the public aircraft statute (49 USC Sections 40102(a)(41) and 40125) is to. define and describe application in terms of individual flights. The law is sensitive to who owns the aircraft, who operates it, the purpose of an individual operation, and the persons on board the aircraft during the flight. The variables are such that advisory opinions are often so broad as to be of no use and simply add confusion to a complex topic… We must point out that the public aircraft statute applies only to operations that occur in the airspace of the United States. Once an aircraft leaves U.S. airspace, the law no longer applies, and the aircraft will have a different status. It is no longer a public aircraft under the law, even if it departed a location within U.S. airspace with that legal status... Further, we do not routinely review aircraft operations conducted by any part of the U.S. Department of Defense (DoD) when they appear to be validly conducted under Title 10 of the United States Code. The public aircraft statute includes specific requirements for such operations in Section 40125 (c). Unless our input is requested, we rely on the DoD to comply with the statute as a day to day matter. The DoD is also fully aware that when aircraft leave U.S. airspace, they lose public aircraft status; DoD agencies have their own procedures for having those flights properly redesignated as part of their routine operations without any involvement of the FAA.*

In support of the N707AR investigation, NTSB staff formally requested an FAA legal interpretation of the public aircraft status of the accident flight, and the air refueling operations by Omega for the Navy (request numbers 11-376(4) and 11-384). The FAA interpretation (attachment 11), dated September 29, 2011 stated in part:

Based on the information available to us, we believe the flight to have been a public aircraft operation within the meaning of the statute, the positions of the parties, and Federal Aviation Administration (FAA) guidance material.
The applicable statutory provisions are 49 USC §40l25, Qualifications for Public Aircraft Status, and the definition of public aircraft found in 49 USC §40l02(a)(4l)….

The subject operation meets the basic tests as a public aircraft operation under the statute. The aircraft was being operated under contract with the Navy; both parties understood that a public aircraft operation with the Navy being responsible was intended; no persons were on board other than required crewmembers; and the purpose of the flight was governmental, since the air-to-air refueling was for Navy aircraft operations and is a military-only capability.

U.S. Navy Documentation

The Navy/Omega Contract, N00019-7-D-0009 and Work Statement N00019-06-R-0069 (attachments 12 and 13), stated in part:

The Commercial Air Services (CAS) program provides contractor owned and operated aircraft to United States Navy (USN) Fleet customers and other Department of Defense (DoD) agencies for tanking of USN and other US Government agencies, in support of Foreign Military Sales (FMS) cases, Government contractors and other CAS aircraft capable of in air refueling. This support is provided in a variety of venues, from basic training to large multinational exercises or small, single unit training exercises, and in a variety of locations including multiple Continental United States (CONUS) sites and foreign and/or remote operating bases outside CONUS (OCONUS)…

…C14. c. Each aircraft utilized under this contract must possess and maintain a Federal Aviation Administration (FAA) airworthiness certificate…

…C26. a. The contractor shall provide a commercial quality system which demonstrates a systems approach for managing quality, safety and contractor compliance with all contractual requirements. The contractor is accountable for all subcontractors and venders, and as such, shall require of them a quality system achieving control of the quality of the services and supplies which they provide. The Government may perform any necessary inspections, verifications and evaluations to ascertain the adequacy of the quality system. The Government reserves the right to disapprove the quality system or portions thereof when it fails to support or ensure contractor compliance with any or all contractual requirements.

Excerpts from FAR 52.246-4 Inspection of Services—Fixed-Price (Aug 1996)

(a) Definition. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may—

(1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and

(2) Reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may—

(1) By contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service; or

(2) Terminate the contract for default.

In support of Government inspections required in this contract, the Navy has been leveraging the processes identified and defined in the DoD Defense Contract Management Agency Instruction 8210.1, governing *Contractor's Flight And Ground Operations*. While this instruction technically does not apply to the Omega commercial air service contract, since Omega does not operate Government aircraft and the Government is not assuming some risk of loss or damage, the Navy has been leveraging DCMAI 8210.1, a multiservice instruction used to provide government oversight to contractors, along with other tools, as a means for providing government oversight for operations, safety and maintenance procedures of these commercial air service operations.

Select excerpts from the Instruction state:

6.1. Mishap Prevention Program. The contractor shall establish a written mishap prevention program for its flight and/or ground operations which includes the following applicable elements:

6.1.1. Designate an Aviation Safety Official and identify specific duties and responsibilities of the position.

6.1.2. Establish a contractor aviation safety council (AKA consolidated safety council) to promote a program of accident prevention in flight, ground, industrial, and explosive activities as they apply to flight and ground operations….

7.4.1. Contractor's Procedures. The GFR (Government Flight Representative) is responsible for surveillance of those contractor aircraft flight and ground operations involving Government aircraft and other aircraft for which the Government assumes at least some of the risk of loss or damage.

7.4.2. Contract Administration. Contract administration is performed to assure mission effectiveness, flight safety, and contractor compliance with FAR and DFARS clauses and other specific clauses which are cited in the contract.…

7.6.1. Delegating Administration Responsibility/Authority. Assignment of a contract to a CAS component listed in the Federal Directory of Contract Administration Services (CAS) Components, for administration automatically carries with it the authority to perform all of the normal functions listed in FAR 42.302(a) to the extent that those functions apply to the contract, including surveillance of flight and ground operations and safety requirements.

An April 2007 briefing paper (attachment 14) prepared by FAA Eastern Region Flight Standards District Office 27 (Dulles FSDO) stated that the airplane was "always operated in the experimental category" and that the reason for the inquiry was that FAA was approached by other operators asking how the Omega operation was accomplished "outside the continental United States as an experimental aircraft in Public Use."

In December of 2007, a meeting was convened with FAA, U.S. Navy, and Omega to discuss the regulatory environment and requirements for the aerial refueling operation. According to an FAA briefing presentation (attachment 15), the operation was considered "public use" (sic), yet there were open questions as to the nature of operations outside the U.S., and the proper way to handle the experimental nature of the airworthiness certificate. The briefing proposed some potential solutions, such as a special category of experimental certificate, an STC for the entire refueling modification, and education of FAA, industry, and military about the nature of public aircraft operations.

In July 2010, the Navy Tactical Airlift, Adversary and Support Aircraft Program Office (PMA-207) replied to a query from the United Kingdom Civil Aviation Authority (CAA) advising them that the Omega tankers, (attachment 16) when operating under a tasking order in U.K., were considered "Public Use Aircraft" and operate "in the same way as any other U.S. Navy aircraft." Board staff

contacted the U.S. State Department and the Department of Defense, who confirmed no declaration of "State Aircraft"[2] for a flight or flights by Omega were processed.

In early 2011, the U.S. Navy developed an internal briefing and language explaining the public aircraft concept as applied to contractor-provided services (attachment 17). The briefing stated in part:

> *Public Aircraft Operations occur, 1) when an aircraft is owned or leased by the Navy, and is supporting government operations (includes pre-accepted aircraft being developed on behalf of DoD when title to the aircraft vests with the Government), 2) when a government agency contracts for commercial aircraft services, and the government agency contracting for those commercial services requires the owner/operator of the aircraft to deviate from the FAA certification, in configuration, operating limitations, maintenance practices, FAA flight crew qualifications or operations.*

Subsequent to additional FAA guidance, the Navy added the following note to the briefing:

> *Note: A FAA experimental certificate cannot be used for compensation and hire. Any attempt to contract an aircraft operating exclusively under an FAA experimental certification automatically categorizes the operations as Public Aircraft Operations since that certificate does not convey to support Public Aircraft Operations.*

U.S. Navy Interpretation

U.S. Naval Air Systems Command (NAVAIR) representatives have been engaged with the FAA concerning the status of public vs. civil aircraft since entering into commercial air service agreements over 20 years ago. More recently, in 2007, a team from NAVAIR began formal discussions with the FAA as the FAA began to reexamine their interpretation of the law based on several mishaps unrelated to the Navy, but which raised questions to the legitimacy of the experimental certificates supporting Navy contracts issued from FAA Flight Standards District Offices (FSDOs). During subsequent meetings, Omega operations were discussed along with other companies the Navy has been employing through contract air service contracts.

Since 2007 Naval Air Systems Command has recognized that a contract with a FAA certificated air carrier, for other than transportation of persons and property, could be considered a public aircraft operation. NAVAIR further recognized that contracting aircraft engaged in public aircraft operations carried with it some level of responsibility. According to NAVAIR, attempts to open discussions with the contractors and implement change have been frustrated by a lack of consistency between FSDOs and FAA HQ. NAVAIR representatives attended the January 2011 FAA brief by AFS-1 and continue to work with FAA in support of the interim policy. NAVAIR

[2] Article 3 of the Chicago Convention on Civil Aeronautics ("ICAO treaty") states:

(a) This Convention shall be applicable only to civil aircraft, and shall not be applicable to state aircraft.

(b) Aircraft used in military, customs and police services shall be deemed to be state aircraft.

Although Omega 70 intended to proceed beyond the territorial limits of the U.S., the accident occurred within domestic U.S. territory, therefore the discussion on state aircraft for purposes of this factual report is limited to describing the intent of the involved parties to consider the operation as public vs. civil.

is very encouraged that this new FAA guidance will help better define requirements and responsibilities. An aspect of the new FAA guidance which was unclear at that meeting, and is still unresolved, is the actual implementation guidelines for this new FAA interpretation of the law. When the Navy became aware of the March 23, 2011 FAA policy notice on the Federal Registry, the Navy discussed the issue internally but took no immediate action, viewing the information as a proposal, and awaiting further clarification. After the mishap, the Navy and PMA207 became aware that there was an expectation of a declaration on behalf of the Navy documenting the Navy's assumption that Omega was conducting flight operations on behalf of the Navy in support of public aircraft operations and in response submitted letters to the FAA and the contractor.

The Navy understanding is that public aircraft operations may be conducted by government aircraft and crews, by commercial contractors, or by international operators. Because the mission that Omega has been accomplishing on behalf of the Navy has been deemed to have no civil application, the Navy considered Omega operations in support of the Navy contract to be, by default, a commercial operator conducting a public aircraft operation. During conversations with the FAA from 2007 to present, the FAA indicated that when Omega operated outside of the National Air Space (NAS), in support of the Navy contract, since the concept of public aircraft operations do not extend outside of the U.S., the aircraft could be considered a State Sponsored aircraft under ICAO regulations.

The Navy understanding is that responsibility for safety oversight may be expressed through provisions of the contract. A contract can impose conditions on the operator, even if Navy maintains ultimate oversight authority. The fact that the FAA experimental certificate does not convey to public aircraft operations is acknowledged by the Navy, but that does not make the certificate itself irrelevant. The existence of the FAA experimental certificate signifies that the aircraft meet certain FAA engineering, inspection and oversight standards. The Navy does not have an exclusive contract with Omega and recognizes the company can, and does, operate their aircraft under their civil certificate.

While Navy engineering is familiar with the Boeing 707 aircraft, the FAA possesses greater expertise and understanding of the aircraft. To supplement the FAA certificate, the Navy having identified a gap in FAA processes related to refueling, the Navy completed additional engineering analysis on the refueling systems and interfaces with Navy aircraft. The Navy continues to update this engineering data as needed to ensure operational safety. Similar to the acceptance of FAA engineering, the Navy accepts and leverages FAA pilot certificates and training and adds additional operational guidelines and requirements as deemed appropriate to ensure the public aspects of the refueling mission are adequately addressed through the contract with Omega. Based on the NAVAIR's administration and government oversight of the contract with Omega, which includes recurring reviews of the FAA Certificate of Airworthiness on Omega, NAVAIR determined that the contractor aircraft and aircrew meets basic engineering and operational standards required to support the NAVAIR Fleet contracts. In cases where engineering or operational gaps have been identified, NAVAIR has conducted additional analysis and set additional standards to cover the essential deltas from the FAA Type Certificates and pilot qualifications. The Navy relies on the FAA review of Omega airworthiness and augments the FAA procedures with additional engineering, safety, and operational oversight.

When the aircraft are not flying on the Navy contract, the assumption is that the aircraft are operating as civil aircraft under the FAA certificate.

The Navy recognizes that the FAA is not responsible for the oversight of contracted services that constitute public aircraft operations. Logically, the government agency contracting those services may bear responsibility for those operations; however, the law does not specifically state what those responsibilities are. The statutes fail to cite any responsibility for aircraft providing public air services for aircraft that are not owned by DoD and is silent on requirements for airworthiness, governance, or oversight requirements, presuming DoD authority to self regulate. With the regulations and policy as currently written, the responsibilities (relating to airworthiness, safety oversight and operational oversight) of any government agency that is contracting public aircraft operations remains unclear. The contractual relationship with Omega is not exclusive use to the Navy, and the company can and does operate at times as a civil aircraft. There is no defined process for declaration of Public status, and no equivalent of AC 00.1-1 etc. in the DoD documentation. Nor is there DoD policy in general reflecting responsibilities or requirements governing the contracting of aircraft which constitute public aircraft operations. NAVAIR maintains that even with the new FAA guidance it is to the benefit of all parties if these concerns are addressed and unified FAA policy identified.

Omega Documentation

See previously referenced documentation: Navy contract, 2007 FAA meeting presentation, FAA Order 8130.2G, interviews with Omega principals attached to Ops Group report, etc. Flight clearance to perform the air refueling operation was received from the Navy in December of 2000. Contractor Performance Assessment Reports from that time through the accident were all rated "exceptional." (official use only portions of contract.)

On August 6, 2007, an entry was made in the N707AR logbook stating the airplane was a "Public Use Aircraft in accordance with Contract No. N00019-07-D-0009." On March 4, 2009, an airplane tech log entry was made stating N707AR was "Public Use Aircraft in accordance with the applicable contract." (attachment 18)

Omega Interpretation

Mr. Sammy Hanson, FAA Designated Airworthiness Representative (DAR) was provided by Omega to provide the group with the history, background, and interpretation of the development and certification of the modified airplanes. Mr. Hanson had been working on the program since inception and remains Omega's DAR, with a brief interval in the late 90's where he was not working with Omega. The original idea was to modify the airplane to serve a Navy contract air-to-air refueling (AAR) and possibly civilian applications as well. The original conversion of the airplane was performed in 1997. There was no provision to obtain an FAA Supplemental Type Certificate (STC) for the entire AAR refueling package, however the FAA did issue an STC for the airplane with certain components, permanently installed in the airplane, and with no ability to activate the equipment. This was called the "A kit" and the airplane could be flown as a certified transport category airplane with an STC. However, once the components which enabled refueling to take place, i.e. control panels, hoses and drogues and other critical components, the airplane was not able

to operate under the provisions of its type certificate and STC. (See Maintenance Records report) The Navy conducted qualification tests on the modified airplane in 1999 and accepted it as meeting the requirements for the proposed contract.

After the qualification, Omega asked the FAA how to go about using the airplane as modified to conduct the AAR activity for the Navy, since the airplane would have no valid type certificate or STC. Mr. Hanson said that he consulted with his FAA advisor, and it was concluded that Omega could obtain an Experimental – Market Survey airworthiness certificate[3] for the airplane. The Navy contract was obtained, with a provision that no passengers or cargo could be carried for hire. Omega understood that Air Refueling operations do not constitute the carriage of passengers or cargo for hire. Omega understood the FAA position at this time frame was that the AAR flights, since they could not be conducting a commercial operation on an Experimental Certificate, had to be under the provisions of the Public Aircraft statute. No declaration from the contracting government agency was needed at that time, and when Omega queried the FAA if there was a form to complete in order to declare the airplane a Public Aircraft, the Orlando Flight Standards District Office informed them there was no form and it was agreed that only a logbook entry needed to be made and kept with the airplane's legal documents (i.e. operating limitations, weight and balance, etc.). A one-time logbook entry was made, and in Omega's opinion, the airplane occasionally left Public Aircraft status after this. Omega kept the Navy contract number in the same package although there was no written requirement to do so.

Omega maintained the Experimental – Market Survey airworthiness certificate in order to operate overseas. Mr. Hanson stated that Omega's interpretation of FAA Order 8130.2 (version G at the time of the accident), was that in order to operate overseas as a Public Aircraft they must maintain a "valid airworthiness certificate" without specifying what kind of certificate, therefore, the Experimental certificate served to allow operations outside U.S. territory. Omega used a Boeing maintenance inspection document to keep the Experimental Certificate active. This certificate was why the FAA provided principal inspectors for Omega.

Mr. Hanson stated that nothing has changed since then. Omega never used the Experimental certificate for anything other than to demonstrate compliance with the 8130.2G paragraph for operating outside the U.S., but they considered all flights were "Public Aircraft" whether in the U.S. or not. No form or other guidance to obtain a declaration from the Navy had ever been provided or requested.

In 2004, the Navy hosted a meeting with Omega, FAA, and other similar contractors to discuss who had responsibility over the airplanes. From Omega's standpoint, nothing changed. Discussions with another operator indicated that the concept of maintaining an Experimental – Market Survey certificate served for non-U.S. flights. The meeting concluded with the Navy still having some concern with who had oversight responsibility. The Navy later that year acknowledged that they had appropriate oversight of OARS operations.

Further meetings including the FAA in November of 2007 and March of 2008 discussed similar issues, surrounding a proposal that the U.S. Air Force (USAF) enter a similar arrangement.

[3] According to the FAA, Experimental-Market Survey certificates are "to conduct market surveys, sales demonstrations, and customer crew training for U.S. manufacturers of aircraft or engines."

Although not specifically meant for Omega's operation, the conclusion was that there was no other method to perform the AAR, so Omega was given guidance to continue unchanged. The FAA exercised appropriate oversight through Omega and the DAR keeping the Dulles FSDO informed on all the Experimental 90-day checks, and provided any other documentation as requested. Omega stated that they demonstrated on-going compliance with the terms of the Navy contract by maintaining the FAA Experimental Airworthiness certificate on the airplane(s) (attachment 19). Maintenance and repairs are conducted under FAA or Boeing approval or methods. Omega stated that they meet with an FAA principal inspector and operate in accordance with 14 CFR Part 91 as applicable.

Omega provided a description of the on-going operational and airworthiness oversight maintained by the Navy (attachment 20) including but not limited to:

> *Omega and the US Navy approved OARS Refuelling procedures and submitted the procedures for inclusion in Allied Tactical Publication 56B (ATP56B). This is the approved refuelling procedures document for Allied Nations, NATO, USAF, US Navy, USMC and US Army. This document is constantly reviewed and updated.*
>
> *Omega has two members on the ARSAG panel which also includes US Navy personnel. The Aerial Refuelling Service Advisory Group is a DOD approved organization for reviewing Air to Air Refuelling procedures and determining change, standardisation of equipment and operations. Omega and US Navy are represented on the ARSAG panels which meet regularly during the year and have an annual review. Omega and USN implement change as applicable.*
>
> *Omega operations personnel are in daily pre-mission contact with US Navy personnel. All missions are briefed by Navy operations to Omega operations including the mission crew in accordance with each Tasking Order issued. Omega operations confirm maintenance status of mission aircraft to USN daily or pre-mission. Omega complies with all Navy reporting procedures for Non Mission Capable (NMC) aircraft. Post-mission, Omega submits Aircraft Technical Logs to US Navy detailing, flight times, fuel data, defects and rectification of maintenance items.*
>
> *The Navy ensures aircraft airworthiness oversight by contractual commitment which requires Omega to possess and maintain an FAA airworthiness Certificate at all times. This certificate is renewed by FAA/DAR every 90 days on each contracted aircraft. Each renewal requires the DAR to visit the aircraft, and access aircraft serviceability and maintenance status. Status of inspections items such as FAA Airworthiness Directives (AD) is also supplied by Omega to the DAR (every 90 days) for his review. Omega is obliged to inform the Navy any non-compliance that would prevent the issuance of the certificate.*
>
> *To ensure continuing compliance with the requirements of the above certificate Omega maintains the aircraft to an FAA/OEM Approved Maintenance Program using FAA certified (A&P) mechanics and FAA approved 145 repair facilities.*
>
> *Any and all modifications made to Omega Tankers are approved by NAVAIR engineers. On completion of each MOD, NAVAIR inspect the aircraft and also review the data for compliance.*

Omega performance is reviewed throughout the year by the Navy and a performance report is issued by them annually.

Each year NAVAIR Commercial Air Services hold a Program Management Review at selected Navy locations. These meetings are sponsored by a Flag Officer and hosted by the Program Manager to review the oversight delta between FAA airworthiness oversight and Navy requirements.

Omega stated that they viewed the March 23, 2011 FAA policy notice as a proposal, opening public comment, and believed the Navy confirmed they had the same viewpoint. Following the accident and discussions with the FAA and Navy, Omega obtained a declaration of Public Use (dated July 21, 2011) from the Navy and provided it to the FAA (attachment 21), and a further clarification letter on September 7 (attachment 22). In communications with the FAA and the Navy during the early parts of 2011, there was no discussion of information that led Omega to believe that the March 23 policy was other than a proposal. As noted above, Omega believed the inclusion of the Notice in the "proposed rules" section of the Federal Register indicated it was not a requirement.

Accident Investigation Authority

An additional question requiring clarification regarded the accident investigation authority over a public aircraft operated for military service (regardless of the eventual determination of the Omega 70 flight). Title 49 U.S.C. Section 1131(a)1, stated that the NTSB shall:

"investigate…and establish the facts, circumstances, and cause or probable cause of -… an aircraft accident involving a public aircraft as defined by section 40102(a)(37)(1) of this title other than an aircraft operated by the Armed Forces or by an intelligence agency of the United States"

Department of Defense Instruction 6055.07, of Oct 3 2000, Accident Investigation, Reporting and Record Keeping (Incorporating Change 1, April 24, 2008) (attachment 23) defines the mishap investigation procedures for the military services. "DoD aircraft" are defined as:

"…aircraft owned or leased by the DoD Components (including their Reserve Components) that are: Operated and exclusively controlled or directed by a DoD Component.…

Does not include aircraft that are:
Leased, on bailment, or loaned (except, as specified above) to contractors, commercial airlines, other Government agencies, or foreign governments, when the lessee has assumed risk of loss.
Civil aircraft owned by civil operators and accomplishing contract air missions for a DoD Component."

U.S. Navy Air Safety considers that consistent with the Department of Defense Instruction 6055.07, the Navy maintains that the NTSB and FAA are best postured to retain authority over future mishap investigations involving commercial air services that operate under both civil and public aircraft operational guidelines. While agencies within DoD maintain mishap investigation policy and

possess accident response personnel and resources, this is not true of all government agencies who contract air services that constitute public aircraft operations. Navy Air Safety Center stated that they are always prepared to assist all investigations, but maintains that assigning the NTSB/FAA lead on such investigations for these types of accidents provides the best and most consistent and capable response in these circumstances.

FAA Order 8020.11C, (attachment 24) Chapter 6, Military Accident or Incident Investigations, provides for FAA Participation in military accident investigations when an FAA function is involved.

> *b. The military commander-in-charge of the investigation is responsible for making a determination on FAA involvement and will include this determination in the FAA notification.*
> *Despite an initial negative determination, the senior member of an aircraft safety investigation board or the director of a military safety center may later make a determination on FAA involvement and advise FAA.*
> *c. An FAA function will be considered to be involved when an FAA employee or designee; an FAA facility, procedure, directive, or publication; an FAA-certificated civilian airman; or an FAA certificated joint use airport possibly is associated with an accident or incident (termed "mishap" by the military services). FAA may have an interest when the aircraft or equipment is common to both civil and military aviation or when there are environmental factors of common interest.*
> *d. In a military mishap in which a mutual interest exists but no FAA function is or may be involved, FAA may request to participate in the investigation.*

Title 49 USC Sec. 1132 states that:

> *(a) General Authority.--(1) The National Transportation Safety Board shall investigate--*
> *(A) each accident involving civil aircraft; and*
> *(B) with the participation of appropriate military authorities, each accident involving both military and civil aircraft…*
> *(c) Participation of Secretary.--The Board shall provide for the participation of the Secretary of Transportation in the investigation of an aircraft accident under this chapter when participation is necessary to carry out the duties and powers of the Secretary. However, the Secretary may not participate in establishing probable cause.*
> *(d) Accidents Involving Only Military Aircraft.--If an accident involves only military aircraft and a duty of the Secretary is or may be involved, the military authorities shall provide for the participation of the Secretary. In any other accident involving only military aircraft, the military authorities shall give the Board or Secretary information the military authorities decide would contribute to the promotion of air safety.*

The NTSB published a Public Aircraft Safety Study in October of 2001 (attachment 25), which noted that "Aircraft used by the Department of Defense are also public aircraft, but this study considered only nonmilitary, nonintelligence [agency] aircraft."

The 2003 Memorandum of Understanding (unsigned) between the NTSB and Department of Defense (attachment 26) states that the NTSB will:

> *"Have primary Federal responsibility [for] the investigation [of] aviation accidents involving: civilian aircraft; Federal, State, and certain nonmilitary public use aircraft; and accidents of military aircraft colliding with or operations resulting in [an] accident involving civilian or public use aircraft."*

Air Force Instruction 91-206(I) (also identified under other services numbers, attachment 27), *"Participation in a Military or Civil Aircraft Accident Safety Investigation"* dated 8 July 2004, describes the respective roles and responsibilities of the DoD services and NTSB in conducting accident investigations for aviation safety purposes (sometimes termed "safety investigation' in DoD publications.) The instruction does not address contract aircraft.

The NTSB and U.S. Navy entered an Interagency Agreement in February of 1994 (attachment 28) providing for NTSB to lead accident investigations at Navy request in such cases that "the Navy has certain aircraft, that while they are of civil aircraft manufacture, fall under the public aircraft exclusion…" There is no discussion of contract aircraft.

----------No more follows----------