

**NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety  
Washington, D.C. 20594

November 9, 2011

**Group Chairman's Factual Report**

**MAINTENANCE**

**DCA11PA075**

## **A. ACCIDENT**

Operator: Omega Air, Inc.  
Location: Pt. Magu, California  
Date: May 18, 2011  
Time: 1727 pacific standard time<sup>1</sup>  
Airplane: Boeing 707-321B, Registration Number: N707AR, Serial #: 20029

## **B. MAINTENANCE GROUP**

Group Chairman: Pocholo Cruz  
National Transportation Safety Board  
Washington, DC

Member: Robert Drake  
Federal Aviation Administration – AVP-100  
Washington, DC

Member: Richard Anderson  
The Boeing Company  
Seattle, Washington

Member: Kevin O’Neill  
Omega Air, Inc.  
Dublin, Ireland

## **C. SUMMARY**

On May 18, 2011, at about 5:27 pm Pacific Daylight Time (PDT), a modified Boeing 707, registration N707AR, operated by Omega Aerial Refueling Services as flight 70, crashed on takeoff from runway 21 at the Point Mugu Naval Air Station, California (KNTD). The airplane impacted beyond the departure end of the runway and was destroyed by post-impact fire. The three flight crewmembers received minor injuries.

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<sup>1</sup> All times are Pacific Standard Time (PST) based on a 24-hour clock, unless otherwise noted. Actual time of accident is approximate.

## D. DETAILS OF THE INVESTIGATION

### 1.0 Waiver or Letter of Authorization

On June 21, 2001, Federal Aviation Administration (FAA) Washington Flight Standards District Office (FSDO) issued Omega Air, Inc., (700 North Fairfax Street, Suite 306, Alexandria, Virginia, 20036) a Part 91 ID Number (O27M679Z).

See Attachment 1 for further information.

### 2.0 Operations Specifications (OpSpecs)<sup>2</sup>

Omega Air, Inc. has a Part 91 Certificate, which included the standards, terms, conditions, and limitations contained in the FAA approved Operations Specifications (Parts D). According to Section D095 of the OpSpecs, Omega Air, Inc. was authorized to use an approved Minimum Equipment List (MEL)<sup>3</sup>.

At the time of the accident, there was one open MEL items in the airplane logbook. The MEL (DMI 21-5-16) was for Pressurization – Auto Mode being INOP.

See Attachment 2 and Attachment 4 Aircraft Flight Log 10774, Item 5 for further information.

### 3.0 Aircraft Information

The Boeing Airplane Company manufactured the airplane in 1969. Several operators (5) had owned the airplane prior to Omega Air, Inc. acquiring the airplane in July 29, 1994. The airplane had 47,856 total hours with 15,186 total cycles at the time of the accident. Since purchasing the airplane, Omega Air, Inc. had flown the airplane a total of 9,811 hours and 2,656 cycles.

According to the records, the airplane had flown 95 hours 56 minutes (34 cycles) of the 9,811 hours (2,655 cycles) on an experimental certificate of airworthiness. The airplane was equipped with four Pratt and Whitney JT3D-3B engines.

**Table 1 - Engine Information**

Position	Engine Serial Number	Date of Manufacture	Total Engine Time	Total Engine Cycle	Hours since last *ESV	Cycles since last *ESV	Last *ESV
1	645181	9/24/1965	57,932	17,790	1,026	284	2/2010
2	668448	8/16/1968	48,119	14,576	1,338	373	8/2008
3	668147	12/13/1967	51,182	20,462	5,474	1,522	10/2007
4	668804	4/23/1971	19,399	8,943	1,176	332	6/2007

\*Engine Shop Visit

<sup>2</sup> Operations Specifications contains the authorizations, limitations, and certain procedures under which each kind of operation, if applicable, is to be conducted by the certificate holder.

<sup>3</sup> The FAA approved Minimum Equipment List contains a list of equipment and instruments that may be inoperative on a specific aircraft for continuing flight beyond a terminal point.

#### **4.0 Maintenance and Inspection Programs**

Omega Air, Inc. contracted Boeing Commercial Airplanes Inc. to develop an Omega Air, Inc. exclusive Maintenance Planning Document (MPD – D6-81979) in July 1997 for Omega Air's Boeing 707 aircraft. The FAA approved the MPD on September 1999.

The Omega Air Inc. MPD lists Boeing recommended scheduled maintenance tasks and integrates the Structural Inspection Program (SIP) section into the program.

A program covering airplane maintenance, inspection and overhaul procedures are in four time-scheduled checks (A, B, C and Structural Inspection) or equivalent was recommended. To avoid duplication, the larger checks also required accomplishment of the lesser checks, i.e., "C" check also includes accomplishment of "A" and "B" checks.

The industry had categorized airplane "minor" maintenance tasks using terminology such as Preflight, Transit, Through Service, Overnight Service, Turnaround, Station Check, Line Check, Daily Inspection, etc. Boeing had elected to use the terms "Preflight" and "Transit" document to designate those minor maintenance checks performed at time intervals less than the "A" check.

#### **4.1 Preflight Check**

The "Preflight" check, more comprehensive than the "Transit" check, was intended for use at a route conclusion and included all inspection items in the lesser "Transit" check. A "Preflight" check was performed before the first flight of the day, or when an aircraft remained on the ground for four hours or more.

#### **4.2 Transit Check**

The "Transit" check required minor maintenance/servicing, and was intended to assure continuous serviceability of a transiting aircraft. This check was planned for use at an enroute stop and was basically a "walk-around" inspection which required a check of the aircraft interior and exterior for obvious damage, leaks, proper operating equipment, security of attachment, required servicing, etc.

#### **4.3 "A" Check**

The "A" check was considered a primary inspection and was intended to disclose the general condition of the aircraft. The "A" check was done in conjunction with the above mentioned Preflight check and was accomplished every 90 hours. The Omega Air Inc. program consisted of an A and 2A Checks.

#### **4.4 "B" Check**

The "B" Check was considered to be an intermediate check and required an examination of an aircraft to determine its general condition for assuring sustained airworthiness and was accomplished every 450 hours. This check included selected operational checks and required the opening of specific access doors and panels. The "B" Check also required accomplishment of all items contained in the "A" Check. The Omega Air Inc. program consisted of a B and 2B Checks.

#### 4.5 “C” Check

The "C" check was considered a periodic check and involved a greater depth of inspection throughout the airplane to insure continued airworthiness and was accomplished in every 2 years. This task included selected Operational/Functional checks and required removal of access doors and panels to facilitate inspection. Performance of the "C" check also required accomplishment of items in the "A" and "B" checks. The Omega Air Inc. program consisted of a C, C2, C, C4, C, C2, C, C8 checks.

#### 4.6 Structural Inspections

The Omega Air Inc. structural inspection program consolidated the following documents:

- 707 MPD D6-7552 DEC 80
- Corrosion Prevention and Control Program (CPCP) D6-54928 REV E
- Aging Airframe Service Action Requirement, Model 707/720 D6-54996 REV E (Inspection Only)
- Supplemental Structural Inspection Program (SSID) D6-44860 REV P

The program was in accordance with FAA Advisory Circular AC 20-76 dated 21 October 1971, "Maintenance Inspection Notes for Boeing B-707/720 Series Aircraft."

Airworthiness Directives and Manufacturer Service Bulletin compliance were written into the program as applicable.

The following is a listing of the previous inspections accomplished on airplane N707AR. This information was retrieved from the airplane maintenance records:

**Table 2 - Maintenance Checks**

Check	Last Check Date	Location	Total Time	Total Cycles
Pre Flight Check	5/18/2011	KNTD	47,856	15,186
Transit Check	5/10/2011	KMYR	47,818	15,178
A	5/2/2011	KBQK	47,790	15,169
2A	5/2/2011	KBQK	47,790	15,169
B	5/2/2011	KBQK	47,790	15,169
2B	5/2/2011	KBQK	47,790	15,169
C	8/4/2009	KBQK	46,311	14,748
2C	8/4/2009	KBQK	46,311	14,748
C	8/4/2007	KVCV	44,923	14,357
4C	5/26/2005	KMIA	42,384	13,663
8C	1/10/1997	SND	38,144	12,555

Note:

KNTD – Pt. Magu, California  
KMYR – Miramar, Florida  
KBQK – Brunswick, Georgia (Stambaugh Aviation)  
KVCV – Victorville, California  
KMIA – Miami, Florida (Commercial Jet)  
SND – South End, United Kingdom

## 5.0 Supplemental Type Certificates (STC)<sup>4</sup>

Supplemental Type Certificates (STCs) supplied by air carrier, were reviewed. A total of 5 STCs were found in the maintenance records. Omega Air, Inc. installed the latter three STCs (Aerial Refueling System, Garmin GPS System and FMS/GPS System).

**Table 3 - Supplemental Type Certificates**

<b>STC No:</b>	<b>Modification Description</b>	<b>Date Accomplished</b>
SA2699NM	B707 Quiet Nacelle Installation (Hushkit)	7/10/86
SA3500SW	Emergency Floor Lighting	11/21/86
ST00888LA	Aerial Refueling System	7/23/99
SA00155WI	Garmin GPS System	3/15/2000
ST09234SC	UNS-1C FMS / GPS System	3/20/2002

## 6.0 Airworthiness Directive (AD)<sup>5</sup> and Service Bulletin (SB) Summary

Omega Air, Inc. provided an AD summary for review. The AD summary contained the applicable Service Bulletins. A review of Airworthiness Directive status lists for the airplane, powerplants and appliances were conducted. All ADs applicable to this airplane were implemented. No discrepancies were found during the review of the listing.

See Attachment 3 for further information.

## 7.0 Aircraft Flight Logs

Aircraft Flight Logs were reviewed from March 17, 2011 thru May 17, 2011. There were no structural discrepancies noted in the flight logs reviewed.

See Attachment 4 for further information.

## 8.0 Weight and Balance Summary

Per the Omega Air, Inc. representatives, the airplanes were to be weighed every C Check or 2 years. The last actual weight and balance on the airplane was accomplished on August 9, 2009. The figures for last weight and balance are shown below:

Basic Empty Weight: 142,859 pounds  
Arm: 855.11 inches  
Moment: 122,159,909 lb-inches

See Attachment 5 for further information.

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<sup>4</sup> The FAA issues Supplement Type Certificates, which authorize a major change or alteration to an aircraft, engine or component that has been built under an approved Type Certificate.

<sup>5</sup> Airworthiness Directive (AD) is a regulatory notice sent out by the FAA informing the operator of an action that must be taken for the aircraft to maintain its airworthiness status.

## 9.0 Major Repairs and Alterations

According to the maintenance records, there were 26 structural major repairs accomplished on the accident airplane; however, there were no major repairs to the pylon area.

The major alteration listing revealed one major alteration (STC ST00888LA – Aerial Refueling System) on the accident airplane. There were no major alterations to the pylon area of the accident airplane.

See Attachment 6 for further information.

## 10.0 Time Limit Components

Time Limit Component status for the airplane and the four installed powerplants were reviewed. The compliance status was satisfactory. There were no discrepancies.

See Attachment 7 for further information.

## 11.0 Vendors

The Maintenance Records Group reviewed the Approved Vendor List provided by Omega Air, Inc's primary Maintenance Vendor; Seven Q Seven. All essential maintenance vendors were listed in the operator's Approved Maintenance Provider List. There were no discrepancies in the listing.

## 12.0 Method of Record Keeping

Omega Air, Inc. uses an Access database to manage the various aspects of the maintenance program and configuration of their aircraft. Data for components installed, logbooks, engine records, etc. were entered into the database on a daily basis. A computer file history was maintained so that all inspections and checks were monitored for time limitations. The computer files were backed up on a daily basis to prevent total loss of history files. All hard copies of the documents are verified and kept by Omega Air, Inc.

## 13.0 N707AR Nacelle Maintenance Program

The following information describes the maintenance program of the Structural Inspection of the airplane's nacelle area. As previously stated, all Omega Air Inc. MPD documents coincided with the Boeing MPD documents

**Table 4 - Omega Air, Inc. Nacelle Maintenance Program**

MPD No.	Description	Task	Frequency	Date Accomplished on Airplane
4-54-01	Nacelle strut interior and exterior A. Interior of strut B. Fireseal C. Engine mounts, thrust links	CHECK	C Check	8/4/2009

	D. Rear mount support fittings			
4-54-03	Nacelles/pylons – front spar fitting, mid spar fittings, upper and lower diagonal brace fittings Note: Corrosion prevention	CHECK	2C Check	8/4/2009
6-54-01	Wing upper support struts (4 struts) Inspect support and wing skin for cracks and corrosion.	INSP	14,000 hours	March 1980**
6-54-02	Nacelle strut front spar fittings for cracks (4 struts) Inspect spars and bulkhead for cracks, distortion and loose or missing fasteners; skin doublers for cracks; and leak check of firewall.	INSP	14,000 hours	March 1980**
6-54-03	Thrust link terminal bolts (4 engines) Remove one bolt; inspect bolt hole and faying surfaces for condition. Note: May inspect at engine change provided at least 7,000 hours after last inspected.	INSP	14,000 hours	January 1997
6-54-04	Forward rear engine mount fittings. Inspect support bracket and attach bolts for cracks and condition. Inspect at attachments to rear engine mount bulkhead Note: May inspect at engine change provided at least 7,000 hours after last inspected.	INSP	14,000 hours	January 1997
6-54-05	Nacelle strut mid-spar fittings (4 struts). Inspect for cracks and defects Note: May inspect at engine change provided at least 7,000 hours after last inspected.	INSP	14,000 hours	8/4/2009
6-54-06	Forward and aft drag support fitting attached to wing lower surface (4 struts) Note: May inspect at engine change provided at least 7,000 hours after last inspected.	INSP	14,000 hours	8/4/2009
6-54-07	Nacelle strut lower spar fitting (4 struts). Inspect for cracks and defects Note: May inspect at engine change provided at least 7,000 hours after last inspected.	INSP	14,000 hours	8/4/2009
6-54-08	Nacelle strut front spar fittings for cracks (4 struts) Note: May inspect at engine change provided at least 7,000 hours after last inspected.	INSP	14,000 hours	8/4/2009
6-54-09	Nacelle strut-to-wing front spar bolts, holes and faying surfaces of fitting clevis (4 struts). Inspect for condition, defects and cracks Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-10	Nacelle strut-to-wing diagonal strut bolts, holes and faying surfaces (4 struts). Inspect for condition, cracks and defects Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-11	Nacelle strut-to-wing mid-spar bolts, holes and faying surfaces (4 struts). Inspect for condition, cracks and defects	INSP	21,000 hours	March 1980



	Note: May inspect at engine change provided at least 10,000 hours after last inspected.			
6-54-12	Nacelle strut diagonal brace end fittings (4 struts) Inspect brace end- fittings and their attachment to the brace for cracks, fasteners and condition. Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-13	Forward engine mount fittings for cracks and loose attach fasteners (4 total). Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 Hours	March 1980
6-54-14	Forward engine mount thrust link for cracks. Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-15	Forward engine mount thrust connection fitting and bolts for cracks (strut lower spar station 157) (4 total). Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-16	Rear engine mount fitting for cracks (4 total). Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-17	Rear engine mount fitting bolts (4 total). Support bracket attach bolts for cracks and condition Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
6-54-18	Rear engine support bracket for cracks (4 total). Note: May inspect at engine change provided at least 10,000 hours after last inspected.	INSP	21,000 hours	March 1980
654-400-01 (CPCP)	Close Visual Inspection on Power Plant Strut #1	INSP	2 Years	8/4/2009
654-400-02 (CPCP)	Close Visual Inspection on Power Plant Strut #2	INSP	2 Years	8/4/2009
654-400-03 (CPCP)	Close Visual Inspection on Power Plant Strut #3	INSP	2 Years	8/4/2009
654-400-04 (CPCP)	Close Visual Inspection on Power Plant Strut #4	INSP	2 Years	8/4/2009

\*\* MPD Tasks 6-54-01 and 6-54-02 were overdue by 132 hours (Pan Am D Check on March 1980 with 33,724 hours and 11,292 cycles).

#### 14.0 N707AR Engine Nacelle Maintenance Records Review

Both the inboard and outboard engine pylons were subject to a number of programs and Airworthiness Directives established to maintain continued airworthiness. Specific items include:

## 14.1 Service Bulletins

**Table 5 - Boeing Service Bulletins**

<b>Bulletin</b>	<b>Description</b>	<b>Last Done</b>
707-2958, Rev 1	Nacelle Front Spar Chord Modification	No Data*
707-3173, Rev 8	Inboard and Outboard Nacelle Strut Overwing Support Fitting Modification and Replacement	No Data*
707-3377, Rev 00	Installation of Nacelle Droop Stripes	No Data*
707-3183, Rev 5	Inboard Nacelle Strut Midspar fitting Inspection and Replacement (AD 77-09-03/ 88-24-10/ 92-19-15/ 93-11-02)	June 2003
707-A3514, Rev 00	Nacelle Strut Front Spar Fitting Inspection and Replacement (AD 2005-08-15)	2/10/2011
707-A3364, Rev 3	Nacelle Strut Diagonal Brace End Fitting Inspection and Modification (AD 79-14-04/ 80-14-14/ 82-24-03)	8/20/2010

\*These SBs are non-mandated items.

No records could be found concerning incorporation of Service Bulletins 707-2958 or 707-3173. Due to the modification provisions, both of these bulletins would be considered ‘major’ repairs and have an associated FAA Form 337<sup>6</sup>. The records search did not find these forms.

Although no data could be found concerning service bulletin 707-3377, wreckage inspection of the #1 and #2 pylons noted that the ‘droop stripes’ were present.

Service Bulletin 707-3183 has been mandated since revision 1 in 1977 (via AD 77-09-03). The bulletin calls for an initial inspection of both inboard and outboard mid spar fittings on engines number 2 and number 3 followed by repetitive close visual inspections of varying flight cycle numbers based on airplane configuration. Terminating action is to follow the service bulletin instruction for mid spar fitting replacement with an improved design that incorporates larger radius in critical areas. The bulletin also includes instructions to enlarge the pylon access cover over the fitting for better access (both inspection and cleaning). Inspection of the historical records for the accident airplane notes that, in 1983, the owner/operator at that time cited that the bulletin was completed with a ‘C’ designator in the paperwork. At that time, the airplane had accumulated 33,741 hours; the bulletin threshold for initial inspection was 12,000 hours.

Current FAR regulations do not require current owners/operators of aircraft physically verify every previously complied with Airworthiness Directives once owner/operator purchases the aircraft from the seller. The seller, however; is required to provide the new owner/operators a listing of the current status of applicable airworthiness directives, including the date and methods of compliance, and, if the airworthiness directive involves recurring action, the time and date when the next action is required (14 CFR 91.417). The next airplane AD status recorded is as of May 11, 1984 at which time the airplane had

<sup>6</sup> The FAA Form 337 serves two main purposes; one is to provide aircraft owners and operators with a record of major repairs or alterations indicating details and approval, and the other are to provide the FAA with a copy of the form for inclusion in the aircraft records at the FAA Aircraft Registration Branch, Oklahoma City, Oklahoma.

accumulated 34,477 hours and 11,487 cycles. There is no reference to the 3183 service bulletin or the applicable AD in effect at that time (77-09-03).

The next airplane AD status recorded is as of June 7, 1988. The hours and cycles were not recorded (although estimated to be 35,422 hrs / 11,783 cycles) and there is no reference to the 3183 service bulletin or the applicable AD in effect at that time (77-09-03).

The next AD status recorded is as of October 20, 1989 as which time the airplane had accumulated 36,712 hours and 12,181 cycles. The operator at that time indicates that the AD (88-24-10 effective date December 21, 1988) was accomplished but did not include a notation under the heading of “accomplished time (calendar time)”.

In July 1994, Omega Air, Inc. acquired the airplane. At that time, the airplane had accumulated 38,038 hours and 12,530 cycles. As the airplane had been modified with a ‘Hushkit’ (STC SA2699NM), AD 93-11-02 required that the Service Bulletin 707-3183 visual inspections:

(a) Perform a close visual inspection of the midspar fittings to detect cracks in accordance with Boeing Service Bulletin 707-3183, Revision 4, dated July 8, 1992, unless accomplished previously in accordance with Boeing Service Bulletin 707-3183, Revision 2, dated January 28, 1988, at the time specified in paragraph (a)(1), (a)(2), (a)(3), or (a)(4), of this AD, as applicable.

(1) For Model 707-300B/C series airplanes modified by installation of a "hush kit" in accordance with Supplemental Type Certificate (STC) SA2699NM, at the later of the times specified in paragraph (a)(1)(i) or (a)(1)(ii) of this AD:

(i) Prior to the accumulation of 12,000 flight hours; or

(ii) Within 650 flight hours or 250 flight cycles after October 8, 1992 (the effective date of AD 92-19-15, Amendment 39-8373), whichever occurs first.

Omega Air, Inc. records show that close visual inspections per AD 93-11-02 were accomplished on October 11, 1996 with nil defects found. Omega Air Inc’s records also show that the AD was accomplished again on April 30, 2001, and a final time on April 26, 2003 (again, no defects noted). Per verbal discussion with Omega’s Director of Quality, the records were reviewed in 2003 and, based on the 1983 paperwork citing that the 707-3183 bulletin had been completed (as noted above); the service bulletin inspections were terminated. Omega Air, Inc. (as well as the previous owners) interpreted the ‘C or Complete’ as indication that the improved fittings had been installed (the improved fittings were available in 1975) by Pan American World Airways.

The Navy contract stipulates “The aircraft must be maintained in accordance with a FAA approved Maintenance and Inspection Program. All avionics systems must be installed and maintained in accordance with the manufacturer’s specification as delineated in 14 CFR Part 43.” 14 CFR Part 91 regulations were kept up to date to maintain the aircraft’s Experimental Certificate of Airworthiness (C of A).

**14.2 Supplemental Structural Inspections (SSID – AD 85-12-01)**

The SSID program for Omega Air Inc. lists 12 separate inspections of the pylon structure. This list is derived from the Omega Maintenance Planning Document (D6-81979).

Many of the inspections are not applicable to the accident airplane due to its line number or have an airplane cycle threshold for initial inspection of 19,000 cycles. As the accident airplane had 15,186 cycles at the time of the accident, these inspections had not been carried out. Below is a list of applicable tasks conducted by Omega Air, Inc.:

**Table 6 - SSID Tasks**

<b>Task Number</b>	<b>Description</b>	<b>Last Accomplished</b>
54-A30-04	Overwing Support Fitting Fuse Pins	2/21/2011
54-A35-01	Diagonal Brace Attachments, Lower Spar Fitting and Aft Drag Support Fitting, Inboard & Outboard Nacelles	9/8/2010
54-A35-02	Inboard Nacelle Mid Spar Fittings	8/4/2009
54-A35-03B	Nacelle Front Spar Chord, Inboard & Outboard	2/21/2011
54-A35-04	Nacelle Front Spar Fitting Lugs	4/2/2001

Task 54-A30-04, 54-A35-01, and 54-A35-04 involve on-wing ultrasonic inspection of the affected component. 54-A35-02 and 54-A35-03B involve close visual inspection. Omega Air, Inc. paperwork indicates that no defects were noted at the last inspection.

**14.3 Corrosion Prevention and Control Program (CPCP – AD 90-25-07)**

The CPCP program has a detailed visual inspection of all four struts (pylons) on a 2-year cycle. This exam consists of a detailed visual inspection specifically looking for evidence of corrosion. The list of applicable tasks that Omega has been conducting:

**Table 7 - CPCP Tasks**

<b>Task</b>	<b>Description</b>	<b>Last Done</b>
i54-400-01 1 of 4	No 1 Power Plant Strut	8/4/2009
i54-400-01 2 of 4	No 2 Power Plant Strut	8/4/2009
i54-400-01 3 of 4	No 3 Power Plant Strut	8/4/2009
i54-400-01 4 of 4	No 4 Power Plant Strut	8/4/2009

These inspection tasks are general to the pylon structure but pay specific attention to the wing/support attach fittings. No findings were noted.

See Attachment 3 and 8 for further information.

## 15.0 Flight Data Recorder Maintenance Program

The following shows the maintenance program for the flight data recorders.

**Table 8 - Omega Air, Inc. Flight Data Recorder Maintenance Program**

MPD No.	Description	Task	Frequency	Date Accomplished on Airplane
2-06-08	Flight Data Recorder	Check	Preflight	5/18/2011
04-34-02 (B)	Flight Data Recorder	Check	C check	8/4/2009

## 16.0 Experimental Certificate of Airworthiness (C of A)

According to FAA Order 8130.2G dated 8/31/2010, Chapter 2. General Policies and Procedures, Section 1. Airworthiness Certificates, 208 Public Aircraft (2-8) (c). “A US registered public aircraft operating within the territorial limits of the United States is not required to have an airworthiness certificate. However, any US registered public aircraft engaged in international air navigation required to have a valid Certificate of Airworthiness (C of A), in accordance with the International Civil Aviation Organization (ICAO) agreements.”

To abide by this Order, Omega Air, Inc. had to hire a Designated Airworthiness Representative (DAR) familiar with the B707 to provide a special airworthiness certificate. Omega Air Inc. provides the DAR with the information in the attachments. The DAR inspects the aircraft and then fills out the Application for US Airworthiness Certificate (FAA Form 8130-6) for a Special Airworthiness Certificate – Experimental – Market Surveys. The aircraft will be used to market contract air to air refueling services at air shows and demonstrations to Allied Air Forces Worldwide as well as Crew Training and Checking. At times Special Airworthiness Certificate – Experimental – Research & Development Certificates are issued.

According to the most recent C of A paperwork, the aircraft had only flown 95 hours 56 minutes and 34 cycles on the experimental certificate since Omega Air Inc. purchased the aircraft.

See Attachment 9 for further information.

Submitted by:

Pocholo Cruz  
Aerospace Engineer