



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Point Mugu, California	Accident Number:	DCA11PA075
Date & Time:	May 18, 2011, 17:27 Local	Registration:	N707AR
Aircraft:	Boeing 707-321B	Aircraft Damage:	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	Injuries:	3 Minor
Flight Conducted Under:	Public aircraft		

Analysis

The NTSB's full report is available at http://www.nts.gov/investigations/reports_aviation.html. The Aircraft Accident Brief number is NTSB/AAB-13/01.

On May 18, 2011, about 1727 Pacific daylight time,[1] a modified Boeing 707, registration N707AR, operating as Omega Aerial Refueling Services (Omega) flight 70 crashed on takeoff from runway 21 at Point Mugu Naval Air Station, California (KNTD). The airplane collided with a marsh area to the left side beyond the departure end of the runway and was substantially damaged by postimpact fire. The three flight crewmembers sustained minor injuries. The flight was conducted under the provisions of a contract between Omega and the US Naval Air Systems Command (NAVAIR) to provide aerial refueling of Navy F/A-18s in offshore warning area airspace. According to the Federal Aviation Administration (FAA), Omega, and the US Navy, the airplane was operating as a nonmilitary public aircraft under the provisions of 49 United States Code Sections 40102 and 40125.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of a midspar fitting, which was susceptible to fatigue cracking and should have been replaced with a newer, more fatigue-resistant version of the fitting as required by an airworthiness directive. Also causal was an erroneous maintenance entry made by a previous aircraft owner, which incorrectly reflected that the newer fitting had been installed.

Findings

Aircraft	Attach fittings (nac/pylon) - Fatigue/wear/corrosion
Aircraft	Attach fittings (nac/pylon) - Design
Aircraft	Attach fittings (nac/pylon) - Not serviced/maintained
Aircraft	Attach fittings (nac/pylon) - Related records

Factual Information

History of Flight

Takeoff	Sys/Comp malf/fail (non-power) (Defining event)
Takeoff	Runway excursion

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Pilot Information

Certificate:	Airline transport; Commercial	Age:	41
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	February 14, 2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5117 hours (Total, all aircraft), 2730 hours (Total, this make and model)		

Co-pilot Information

Certificate:	Commercial	Age:	45
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4052 hours (Total, all aircraft), 2101 hours (Total, this make and model)		

Flight engineer Information

Certificate:	Flight engineer	Age:	
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 9000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N707AR
Model/Series:	707-321B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	20029
Landing Gear Type:	Retractable - Tricycle	Seats:	192
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	4 Turbo fan
Airframe Total Time:		Engine Manufacturer:	P & W
ELT:		Engine Model/Series:	JT3D-3B
Registered Owner:	OMEGA AIR INC	Rated Power:	18000 Lbs thrust
Operator:	Omega Aerial Refueling Services, Inc.	Operating Certificate(s) Held:	Other operator of large aircraft

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KNTD	Distance from Accident Site:	
Observation Time:	17:30 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	24 knots / 34 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.75 inches Hg	Temperature/Dew Point:	15°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pt Mugu, CA (NTD)	Type of Flight Plan Filed:	IFR
Destination:	Pt Mugu, CA (NTD)	Type of Clearance:	IFR
Departure Time:	17:27 Local	Type of Airspace:	

Airport Information

Airport:	Naval Base Ventura County KNTD	Runway Surface Type:	Asphalt
Airport Elevation:	13 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	11000 ft / 200 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	3 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	34.106109,-119.130836(est)

Administrative Information

Investigator In Charge (IIC):	English, William
Additional Participating Persons:	Frank Motter; FAA FSDO; Van Nuys, CA Richard Anderson; Boeing Commercial Airplanes; Renton, WA Bob Bao; Pratt & Whitney; East Hartford, CT Robert Proano; Omega Aerial Refueling Services, Inc.; Arlington, VA Roger Hewlett; Omega Air, Inc.; San Antonio, TX
Original Publish Date:	February 26, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=79141

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).