

2012 Airtanker/Firefighting Aircraft Fact Sheet

DC-10 Very Large Airtankers

Two DC-10 Very Large Airtankers (VLATs) are on a “call when needed” contract for wildfire suppression and Large Fire Support with the U.S. Forest Service.

These very large airtankers can carry approximately 10,800 gallons of retardant (compared to the approximately 2,000 gallons that P2Vs and CV-580s can carry and the 3,000 gallons that a BAe-146 can carry).



The DC-10s are owned by 10 Tanker Air Carrier of Adelanto, California.

The DC-10s cost a daily availability rate of about \$50,000 plus an hourly flight rate of about \$22,000.

For additional information:

10 Tanker Air Carrier

P.O. Box 607

Adelanto, CA 92301

(760) 246-8288

Website: www.10tanker.com

10 Tanker Fact Sheet: www.10tanker.com/wp-content/uploads/2011/08/10-Tanker-Flyer-sm.pdf

BAe-146

Tanker 40 (T-40) is a BAe-146. It is owned by Neptune Aviation Services, Inc. of Missoula, Montana.

The BAe-146 was originally manufactured by BAe Systems (British Aerospace). This aircraft, which is considered a prototype next generation airtanker, is turbine powered; can carry approximately 3,000 gallons of retardant; and has a cruising speed in excess of 330 knots. It is comparable in size to the P2Vs in the existing commercial Large Airtanker fleet, so it can be used at existing Airtanker bases.



T-40 has been brought into service to fly wildfire suppression missions from May 26 to October 5, 2012 through Neptune Aviation Services, Inc.'s Exclusive Use contract with the U.S. Forest Service.

T-40 is the first of the “next generation” Large Airtankers (LAT) to be granted interim approval by the Interagency Airtanker Board (IAB) and to be brought into service through an existing Exclusive Use contract.

In September 2011, the IAB granted interim approval to Neptune Aviation Services, Inc. for Operational Field Evaluation of T-40 through Dec 15, 2012. Using the BAe-146 to drop retardant on wildfires provides an opportunity to gain field experience needed to make any necessary improvements in design and to bring the system into compliance with IAB criteria prior to consideration for full approval.

In 2012, the BAe-146 LAT costs a daily availability rate of about \$28,000 plus an hourly flight rate of about \$9,500 without government provided fuel.

For additional information:

Neptune Aviation Services, Inc.

1 Corporate Way

Missoula, MT 59808

Phone: (406) 542-0606

Website: www.neptuneaviation.com

P2V

Neptune Aviation Services of Missoula, Mont. and Minden Air Corporation of Minden, Nev. operate eight Lockheed P2V aircraft. The P2Vs in the current large airtanker fleet are piston powered with jet assist for takeoff, dispensing, and landing; have a cruise speed of 185 knots when fully loaded; and can carry about 2,082 gallons of retardant.



Neptune operates seven of the P2Vs and Minden operates one of the eight P2Vs that are currently on Exclusive Use contracts. In 2012, P2Vs cost an average daily availability rate of about \$10,000 plus an average hourly flight rate of about \$5,800 per hour.

For additional information:

Neptune Aviation Services, Inc.

1 Corporate Way

Missoula, MT 59808

Phone: 406-542-0606

Website: www.neptuneaviation.com

Minden Air Corporation

2311 P51 Court

Minden, NV 89423

Phone: 775-782-4462

Website: www.mindenair.net

CV-580s

CV-580s provide similar operational capacity to P2Vs as both can fly in all types of terrain; are turbine powered; can carry 2,000 gallons of retardant; have a cruise speed of 260 knots when fully loaded with retardant; and can operate from any primary or reload tanker base.



CV-580s are available through agreements with the State of Alaska and the Canadian Interagency Forest Fire Centre.

The CV-580s from Canada are deployed to the U.S. by invoking an international agreement that allows the two countries to share wildfire suppression resources.

The daily availability rate for the Alaska CV-580 airtanker is about \$10,000 per day with an hourly flight rate of \$4,500 per hour plus fuel costs.

The daily availability rate for the Canadian CV-580s is about \$9,000 per day and \$4,000 per hour plus fuel costs. These airtankers are owned by Conair Group Inc. of Abbotsford, British Columbia.

For additional information:

Conair Group, Inc.
1510 Tower Street
Abbotsford, BC V2T 6H5
Canada
Phone: (604) 557-2584
Website: www.conair.ca

Canadair CL-215

The CL-215 is a multi-engine, high-wing, water scooping aircraft designed to operate well at low speed and in gust-loading circumstances. It has a tank capacity of 1,400 gallons of water only. Its cruise airspeed is 140 knots and is manufactured by Canadair/Bombardier and owned by Conair Group, Inc.



The CL-215 is a Canadian aircraft built specifically for fire suppression and is known in the U.S. as a “Superscooper.” The CL-215 is an amphibious aircraft, which can operate on land and water. The CL-215 was first built in 1969 and was later replaced by the Bombardier 415 in 1994. These piston aircraft scoop water from lakes and reservoirs which can be dropped as regular water or be mixed with foam suppressant. The daily availability rate for the CL-215 is about \$9,100 per day with an hourly flight rate of about \$7,500 per hour.

For additional information:

Aero-Flite, Inc.
4530 Flightline Drive
Kingman, AZ 86401
Phone: (928) 757-1002
Website: www.aerofliteinc.com

Next Generation Airtankers

The U.S. Forest Service has awarded Exclusive Use contracts to four companies to provide a total of seven “next generation” airtankers for wildfire suppression. These contracts are the result of a comprehensive effort by the Forest Service to replace and modernize its large airtanker fleet.

The contracts were awarded in June 2012 to Neptune Aviation Services, Inc. of Missoula, Mont.; Minden Air Corporation of Minden, Nev.; Aero Air, LLC of Hillsboro, Ore.; and Aero Flite, Inc. of Kingman, Ariz.

Under the contracts, the four companies will provide three next generation airtankers in 2012 and four next generation airtankers in 2013 as follows:

- Neptune Aviation Services, Inc. will provide two Bae-146s in 2012;
- Minden Air Corporation will provide one Bae-146 in 2012 and one Bae-146 in 2013;
- Aero Air, LLC will provide two MD87s in 2013; and
- Aero-Flite, Inc. of Kingman, Arizona will provide one Avro RJ85 in 2013.

The contracts allow these companies to provide additional next generation airtankers in 2013, 2014, and 2015 contingent on funding and other circumstances. The contracts are for a base period of five years, with five one-year options for contracts awarded for 2012 and four one-year options for contracts

awarded for 2013. Due to the filing of protests over the contract awards, next generation airtankers will not be brought into service during the summer of 2012.

All of the next generation airtankers are turbine powered; can carry over 3,000 gallons of retardant; and have a cruise speed of at least 300 knots when fully loaded.

The Bae-146 was originally manufactured by Bae Systems (British Aerospace). It has a cruising speed in excess of 330 knots. The tank system on the Neptune Aviation Services, Inc. prototype (T-40) carries 2,800 gallons of retardant internally. The production version will be capable of carrying more than 3,000 gallons. For more information about this aircraft, contact Neptune Aviation Services, Inc. at (406) 542-0606.

The internal tank system on the Minden BAe-146 aircraft will be constant flow and carry more than 3,100 gallons of retardant. For more information about this aircraft, contact Minden Air Corporation at (775) 782-4462.

The MD87 is a newer variant of the twin jet engine Douglas DC-9 with a shorter length. The constant flow tank design is projected to carry 4,000 gallons of retardant internally and use a parallel door system. Cruise speeds will be greater than 360 knots. For more information about this aircraft, contact Aero Air LLC at (503) 640-3711.

The Avro RJ85 is a newer variant of the BAe-146. It has more efficient engines and improved avionics. The 3,100 gallon external tank system is based on the constant flow design currently in use on the Q400. For more information about this aircraft, contact Aero-Flite, Inc. at (928) 757-1002.

Modular Airborne Firefighting Systems (MAFFS)

The U.S. Forest Service currently owns 8 operational MAFFS. MAFFS are portable fire retardant delivery systems that can be inserted into military C-130 aircraft to convert them into Airtankers when needed.

Military C-130s equipped with slide-in MAFFS units can drop up to 3,000 gallons of fire retardant or water on wildfires. They can discharge the entire load over an area one-quarter of a mile long by 60 feet wide in under five seconds or make variable drops. Once the load is discharged, the MAFFS can be refilled in less than 12 minutes.



The MAFFS program is a joint effort between the U.S. Forest Service and Department of Defense (DoD). The Forest Service owns the MAFFS equipment and supplies the retardant, while the DoD provides the C-130 aircraft, pilots, and maintenance and support personnel to fly the missions.

MAFFS are important because they provide a “surge” capacity that can be used to boost wildfire suppression efforts when commercial airtankers are fully committed or not readily available.

Four military installations provide C-130s to fly MAFFS missions - the 153rd Airlift Wing, Wyoming Air National Guard, Cheyenne; the 145th Airlift Wing, North Carolina Air National Guard, Charlotte; the 146th Airlift Wing, California Air National Guard, Port Hueneme; and the 302nd Airlift Wing, Air Force Reserve, Peterson Air Force Base, Colorado Springs. The U.S. Forest Service reimburses the military for all costs associated with MAFFS per the Economy Act.