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# NEW DEVELOPMENTS

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## P-3A Air Tankers

By David S. Reade

As of June, 1990, a new shape appeared in the skies over the smoking California forest fires. P-3A Orion Air Tankers joined other turboprop aircraft that are being used in the airborne fire-fighting business. These used, USN Maritime Patrol planes are superbly suited for their role as air tankers. Flying in slowly over burning forest fires, the fire-bomber version of the P-3A drops 3000 gallons of fire-retardant chemicals to douse the raging flames.

Orions have many qualities that make them excellent air tankers: a sturdy, heavy-duty airframe, high transit speed, exceptional handling qualities and good short-field performance. Their high cruising speed, coupled with large tank capacity, allows them to deliver about twice the retardant per hour than can be delivered with earlier conversions. Because they are so manoeuvrable, the Orion can operate in valleys that have heretofore been inaccessible, and their ability to take off



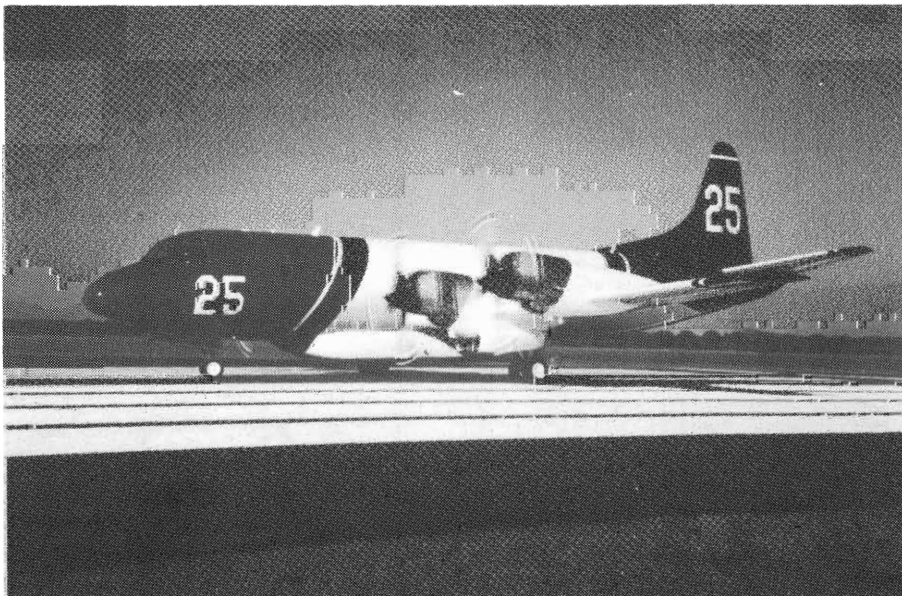
Two operational P-3A Air Tankers owned and operated by Aero Union under contract to the US Forest Service responded to many California fires during the summer of 1990. (Aero Union)

at their normal operating weight of 95,000 pounds in less than 2500 feet on a ninety-degree day permits operations from relatively short strips.

The two operational P-3A Air Tankers are owned and operated by

Aero Union. Under contract to the U.S. Forest Service, Aero Union provides these potent weapons against the wildfires which sometimes rage throughout California and neighboring states. Aero Union has ten P-3A airframes in its inventory. Besides the two operational aircraft, one Orion is currently undergoing modification into an Air Tanker. Work on other aircraft will depend upon performance results achieved with the P-3As now operational, and on U.S. Forest Service requirements.

"This is an evaluation year," said Bill Waldman, chief pilot for Orion Tankers. Aero Union receives ex-U.S. Navy Orions from the 836th MASDC (Military Air Storage/Deposit Center) Air Division at Davis-Monthan AFB, the desert "boneyard" in Arizona, through special arrangement by the Forest Service. As well as trading vintage aircraft to military air museums in exchange for the surplus airframes, and stripping out all unneeded equipment, Aero Union's engineering division designs, constructs and installs custom tanks. These tanks, which can hold up to 3000 gallons of Phoschek



Aero Union Corporation of Chico, California has modified the P-3A aircraft as an air tanker and named it the Aero Union Aerostar. The aircraft's retardent delivery system consists of a 3,000 gallon chemical tank with an eight-door, controllable high rate of discharge.

(M Peltzer)

fire-retardant powder mixed with water, have an ingenious eight-door system to control flow rate. The pilot simply selects the number of doors required to produce the desired coverage.

Aero Union Air Tankers responded to many of the 1990 season's fires throughout California. Air Tanker #25, operating in northern California from June to August, was dispatched against the Devil fire, raging near beautiful Shasta Lake, and the Kamaka fire, blazing near the Whiskeytown Lake reservoir in the Whiskeytown - Shasta - Trinity National Recreation Area. Other fires fought by the water-bombers includ-

ed the Long Valley fires east of Burney, and the Recer fire smoking near the edge of the Mendocino National Forest, west of Chico, California.

Staging out of southern California, Air Tanker #27 engaged in fighting the Ynes and Pendola fires in the Los Padres National Forest. Later, the P3-A worked the Stormy and Black wildfires in the Sequoia National Forest, west of Lake Isabella. Ignited by lightning, these fires eventually joined together to form one huge inferno. August found the Orion assisting other aircraft dropping on the Steamboat, "A" Rock and Savage fires, bordering the Yosemite National

park. But for #27, the Painted Caves fire of Santa Barbara was the most challenging. Engulfing 30,000 acres and destroying 600 homes, this fire became the most costly of the season. Aero Union has been in the airborne, fire-fighting tanker business for over thirty years. Having dropped on fires in the U.S. and Canada, confidence is high that more P3-A Air Tankers will soon take to the air. ➔

**About the Author**

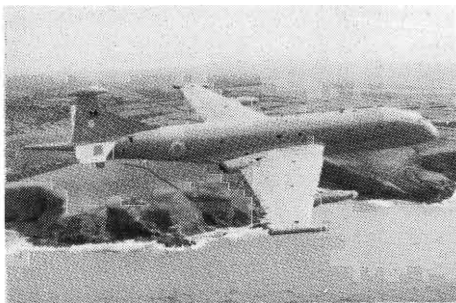
*D.S. Reade (P-3 Publications) is a new free-lance aviation journalist, engaged in writing a series of articles and finishing a book, dealing strictly with the Orion aircraft. It chronicles the Orion's increasing utilization in military, research and civilian applications.*

**THE PERISCOPE VIEW**

For each German U-boat, there were 25 British and US ships and 100 aircraft, and for every German submariner at sea there were 100 British and American anti-submariners.

*Source: Admiral Gorshkov, Father of Soviet Seapower.*

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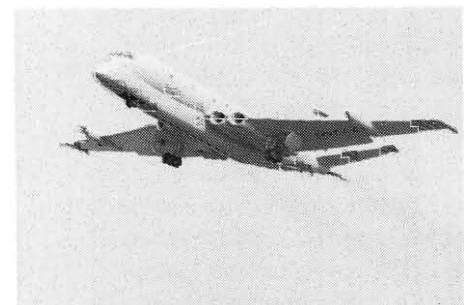


**BAE Nimrod . . . . . the mighty hunter.**

Commander's Comments by  
Major General I. Ueland, RNoAF  
Air Commander North Norway

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