

U.S. Centennial of Flight Commission - Aerial Firefighting

After the close of World War II, advances made in military aircraft technology during the war were quickly pressed into peacetime service to fight one of the oldest and most feared natural phenomena—wildfires. Until the 1950s, once a wildfire had spread across bone-dry forests or parched grasslands, there wasn't much that firefighters could do except watch it burn and try to rein in its swath of destruction. That unbalanced playing field was somewhat leveled with the introduction of the air tanker.

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Ingenious (but ultimately impractical) early experiments in California focused on dumping water or fire-retardants onto forest fires from wooden beer kegs mounted in single engine airplanes, or even using a common garden hose to spray water from above into the inferno. In the early 1950s, public safety officials in California recognized the potential for aerial firefighting and teamed up with the U.S. Forest Service to develop a practical air tanker to combat forest fires.

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By the mid-1950s, surplus World War II Stearman PT-17 and N3N military biplanes had been modified for use as air tankers and the development effort was shifted to larger military aircraft that could carry greater loads of fire retardant chemicals or water. The decision to retrofit existing military aircraft was a wise one based on several factors: surplus aircraft were readily available and relatively inexpensive; originally constructed to transport bombs or cargo over long distances, they were ideally suited to haul the heavy loads of fire retardant chemicals or water required for efficient aerial firefighting; designed for maneuverability and speed, they could withstand extreme stresses on their airframes; and they were sturdily built, which allowed for the installation of heavy water or retardant storage tanks.

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Soon, a wide variety of World War II-era aircraft could be spotted in aerial firefighting efforts over the forests of the western United States—Boeing B-17 Flying Fortresses, Grumman PB5Y Corsairs, Douglas C-47 Skytrains, Douglas DC-3 Super Cubs, and Fairchild C-119 Flying Boxcars were some of the early recruits in the aerial firefighting ranks. Later in the century,

more modern military aircraft, such as Lockheed P-3 Orions and C-130 Hercules, formed the backbone of the air tanker fleet.

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