



Today's discussion is from
"This Day in History"

"Lessons Learned" serve as brief summaries of powerful learning opportunities. You can use these summaries as a foundation and launch point for further dialogue and discussion. Apply these lessons learned to yourself, your crew, and your unit.

First Air Tanker Drop – 1955, Mendocino N.F. California

Summary: The first "air drop" was made on the Mendenhall Fire, **August 12, 1955**, on the Mendocino National Forest. The first operational air tanker was developed in Willows, by the Willows Flying Service in 1955, at the request of the Fire Control Officer for the Mendocino National Forest. A Boeing Stearman 75 "Caydet" Agricultural Aircraft was modified with a 170 gallon tank at the Willows airport. This Aircraft, N75081, became the first registered free fall air tanker in the history of aviation.

In 1956, seven agricultural aircraft were modified and formed the first operational air tanker squadron in the United States. Piloted by local aviators, this squadron operated out of the Willows Airport fighting wildfires throughout California. Initially, plain water was used as the fire suppressant. However, it was soon discovered that most of the water evaporated before reaching the fire, so the practice was adopted of adding chemicals to the water to inhibit evaporation. Borate was one of the first chemicals used, hence the derivation of the term "borate bomber."

In 1959, heavy air tankers, capable of carrying 2,000 gallons of fire retardant, were providing an effective tool in controlling wildfires. Today, the use of SEATs (Single Engine Air Tankers) and Large Air Tankers have become a staple for wildland fire suppression.

Lessons Learned Discussion Points

Air Tankers are a valuable asset in the control of wildland fires, but these aircraft can pose serious threats to the safety of air and ground personnel.

A gallon of water weighs 8.35 lbs and retardant approximately 9lbs. SEATs can be dropping up to 800 gallons and Type 1 tankers up to 3000 gallons. Ground personnel can be injured by being dropped on.

- ✓ Have all participants in this safety briefing refer to the IRPG, pg 62 (lower half).
- ✓ Discuss as a group how to avoid getting dropped on.
- ✓ Discuss what you will do if you cannot avoid getting dropped on.
- ✓ It is not enough just to know where the aircraft are. An understanding of aircraft capabilities, effective use and tactics will help crews be able to keep clear of the drops.
- ✓ Discuss IRPG pages 66-67 to become more familiar with air tankers.



•This Lessons Learned is dedicated to the first Air Tanker pilots: Vance Nolta, Floyd (Speed) Nolta, Harold Henderson, Dale Nolta, Ray Varney, Frank Prentice, L.H. McCurley, Warren Bullock; Fire Control Officer Joe Ely, and the first Air Attack Lee Sherwood.

A commemorative plaque to the "Birth of the Air Tanker Program" can be found at the Willows Airport.

References

- *Incident Response Pocket Guide*
- [First Airtanker website](http://www.earlyaviators.com/enolta7.htm) <http://www.earlyaviators.com/enolta7.htm>

"This Day in History" is a collaborative project between "6 Minutes for Safety" and the [Wildland Fire Lessons Learned Center](#).