Supertanker Services, Inc.

Why a Supertanker?
Why Evergreen?
Safety
Capabilities
Markets
FAQs
Image Gallery
Contact Us

FREQUENTLY ASKED QUESTIONS

Will the Evergreen Supertanker replace the existing aerial firefighting fleet?
The Supertanker is just another tool in the aerial firefighting toolbox. It is not intended to replace helicopters or all the air tankers fighting fires today.

How much does the Evergreen Supertanker drop?
The Supertanker has 24,000 gallons of tank space onboard. This represents more than seven times the drop capability of the largest current aerial firefighting aircraft in use today, the P3. The Evergreen Supertanker also has the capability of performing segmented drops in quantities greater than or equal to the P3.

Does the manufacturer of the 747, Boeing, support this program?
Boeing has worked with Evergreen to support the preliminary engineering studies and certification components of the 747 Supertanker program. Based on those preliminary studies, Boeing supports the concept and capability of the 747 to perform aerial applications.

How safe is the Evergreen Supertanker?
Evergreen is working with the FAA to assure that the Supertanker is maintained under the strictest federal aviation regulations. This will help bring about the highest standards of safety, maintenance and training to the aerial firefighting industry. In addition, to ensure an elevated level of safety, the Evergreen Supertanker is outfitted with a flight data recorder able to monitor airframe loads.

Also, the Supertanker, even with 24,000 gallons of retardant, is still 150,000 lbs below its maximum takeoff weight capacity. This provides an enhanced safety margin. Current airtankers takeoff at allowable maximum certified takeoff weight, leaving no margin for error. The weight of a fully loaded Supertanker aircraft is still below the maximum landing weight. This means there will never be a mission where pilots will have to dump the entire load, even if the aircraft is full, before landing.

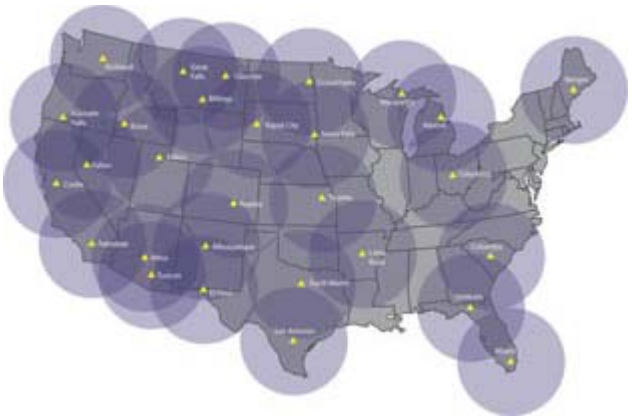
How can a plane the size of a Boeing 747 fly low enough to be an effective firefighting tool?
Current firefighting aircraft use a gravity drop system. Quite simply, this means they have tanks with doors that open and discharge the aircraft's contents. This type of system requires an aircraft to fly very low, around 200 ft. It is very dangerous work; especially since the majority of air tankers used in the U.S. are vintage World War II era aircraft designed for high altitude bombing missions.

Evergreen's Supertanker utilizes a new type of pressurized system allowing the aircraft to fight fire from higher altitudes. Depending on mission requirements, the Supertanker's versatile application system can disperse retardant under high pressure, for an overwhelming response, or drop retardant equivalent to the speed of falling rain. The system was designed to allow the Evergreen Supertanker to fly at a very safe altitude, 400 to 800 ft, and within its design envelope. Also, the Evergreen Supertanker's tank system allows segmented drops. This means that the aircraft can drop its 24,000 gallons at multiple intervals while in flight.

What is the Evergreen Supertanker's drop speed over the fire?
At no time in flight will the Evergreen Supertanker operate outside the Boeing 747's normal operating parameters. The drop speed is approximately 140 knots. This provides a 30% cushion over the Boeing

747's stall speed. During a retardant drop, the Evergreen Supertanker is configured as if it were approaching for a landing and is well within all the typical speed parameters that a Boeing 747 would normally be in when approaching an airport for a landing.

What airports will Evergreen operate the Supertanker out of?
Evergreen will operate the aircraft from any major airport with sufficient ramp space to load the aircraft. These include civilian bases, joint use civilian/military bases and accessible military bases. Generally, the runway requirements for the Evergreen Supertanker are 8000 ft, of which 80% of U.S. airports meet or exceed this requirement.



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How does the Evergreen Supertanker's application system enhance safety?
The Supertanker's retardant delivery system (patent pending) allows retardant to exit the aircraft through a calibrated method, causing the aircraft to always remain well within its defined G-load limitations. The Evergreen Supertanker will never experience a sudden surge to the airframe when the load is dumped, unlike the current air tanker fleet.

Are there any other markets for the Evergreen Supertanker? Can it operate globally?
Evergreen is studying other applications for the Supertanker. Oil spill containment, chemical decontamination and weather modification are all potential markets for this aircraft. Because the aircraft is pressurized, the Evergreen Supertanker has the capability of any long-range Boeing 747 passenger aircraft. This allows the aircraft to deploy to any international location.

How much will the Supertanker cost?
The Evergreen Supertanker is currently in the development phase. As a result, the engineering and fabrication efforts continue to incur costs, which ultimately influence the price. Pricing will be available in the near future when the development efforts near completion and the majority of costs have been realized.

Cost savings, however, created by the Supertanker are enormous. In 2002, according to NIFC, a total of 6,937,584 acres were destroyed. Evergreen studied seven catastrophic fires that destroyed 1,475,486 acres in 2002. The Evergreen Supertanker could have potentially saved the U.S. government over $107,800,000 in suppression and rehabilitation costs related to these fires alone. Savings to the timber industry for the seven fires studied would likely exceed $418,325,000.

> Protecting Valuable Resources with an Advanced Multi-Mission Ai

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