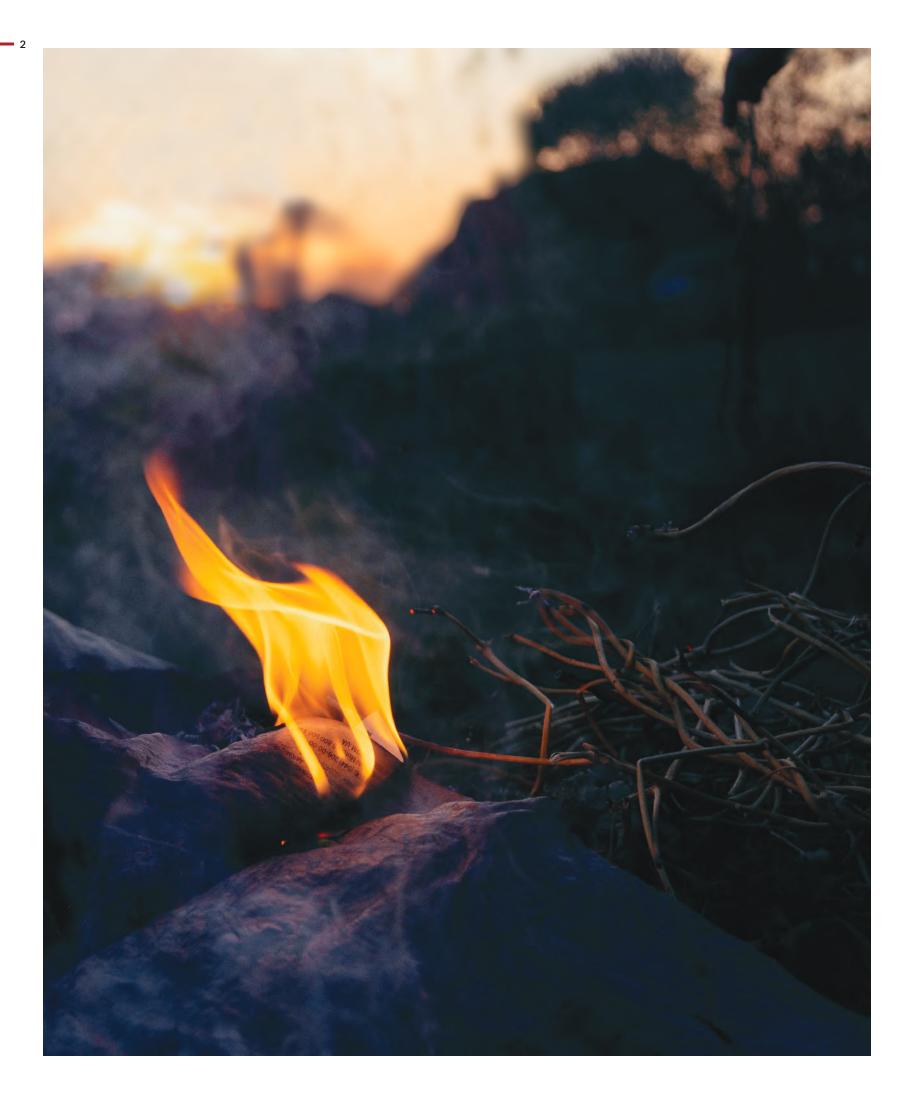
# AT-802F Initial Attack Firefighter

Strike Fast. Win Fast.





# **Every Megafire Begins as a Small Flame**

## The right response can keep it small.

The sooner a fire is attacked, the better is the chance of averting a large, costly wildfire. Mitigation, surveillance, and communication are essential parts of the process, yes. But winning the day requires a commitment to attack the fire in its initial stage before it can spread — and to do it with the right tool for the mission.

Longer and more intense wildfire seasons, expanding human development in the wildland-urban interface, and unhealthy forests

are fueling the destructive power of wildfires around the world. Response to these larger and more intense wildfires has become increasingly complex. And firefighting budgets can't keep pace. It's time to fight smarter.

There is a proven weapon in the firefighter's toolkit. One that is costeffective and versatile. One that can contain fires and keep them small until ground personnel and equipment arrive: the Air Tractor AT-802F single engine air tanker.

## Fast Reaction Force

Rapidly attack wildfires while they're still small. Contain their spread. Reduce their heat until fire crews arrive to finish the job. That's the primary mission of the Air Tractor AT-802F.

It is a proven strategy for preventing greater wildfire devastation damage and substantially reducing fire suppression costs. And it's why the AT-802F is the world's first call for initial attack and direct response to wildfires.

Hundreds of 802's are in service around the world today, battling thousands of wildfires small and large each year. They arrive over the fire quickly to perform close, effective, precision drops to limit the fire's spread. No other aerial firefighting asset is as effective and cost-efficient in this role.





# A Born Firefighter

Designed from the wheels up for the important job it does, the AT-802F combines agility, reliability, and accuracy with versatility to operate where other firefighting aircraft can't. The Air Tractor AT-802F is built for battling fires not only as an initial attack firefighter, but also for extended attack supporting ground crews.

A powerful Pratt & Whitney PT6A-67AG turbine engine propels the AT-802F between the fire and the airfield at speeds approaching 175 knots (200 mph). Swift ferry flights and the ability to operate from remote airstrips, dirt roads, or small airports near the fire allow the AT-802F to arrive on scene while a fire is still in its early stages.

The AT-802F needs as little as 1,000 yards of runway, so it's easy to stage from small airports and temporary bases close to the fire line. The aircraft's high-volume, 3-inch loading system trims turnaround times. In just five minutes an AT-802F can take on a full 820-gallon load and get back to the fight.

The AT-802F delivers its payload low, slow, and precisely where it's needed to knock down brush and grass fires or suppress fires in heavier canopies. Its maneuvering agility, nimble climb rates and compact size make the AT-802F ideally suited for mountainous terrain, narrow flight corridors, and wildlandurban interface areas.

This kind of maneuverability also makes the AT-802F well suited to reinforce drops made by large, higher-flying air tankers, closing retardant gaps, attacking hot spots and making drops in areas where larger aircraft can't go.



# **Gen III FRDS**

# Key to AT-802F firefighting performance.

The Air Tractor Gen III Fire Response Delivery System is the world's most widely used single engine air tanker firegate. It is fully approved by the European Aviation Safety Agency, Federal Aviation Administration, and Transport Canada. It meets and exceeds the United States Interagency Airtanker Board (IAB) SEAT aircraft performance specifications.

Compared to its predecessor, the Gen III FRDS is 280 lbs. (127 kg.) lighter, which allows more useful payload. All-electric, low maintenance operation, 25% more flow rate, integrated water enhancer injection control, and optional integrated AFF tracking with ATU telemetry provide performance and tracking advantages unmatched by other SEAT firegate systems. The Gen III firegate is not only simpler and smarter, it's more reliable and as rugged as it's always been.

Drop loads of retardant, water, or water enhancers right on target in exactly the amount needed. Pre-set the coverage level and drop amount into the Pilot Interface then trigger the system over the drop zone. The Gen III firegate system responds instantly, automatically opening and closing the firegate doors with millisecond computer precision. Pilots can reliably make accurate drops, reduce their task load, and focus on flying the airplane.





When operating within 15 miles of a water source, the Fire Boss can make continuous scoops and drops on a fire for multiple hours – without needing to return to base.

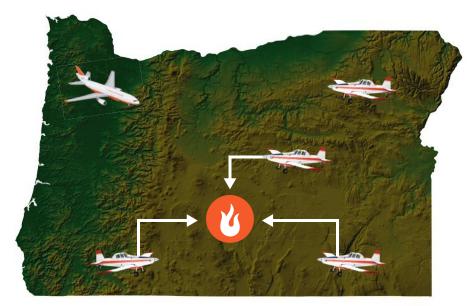
# AT-802F Flight Groups

## Keep fires small and costs down.

When organized as initial attack flight groups, AT-802F aircraft can quickly arrive over a fire to drop continuous loads of water, slow its growth, reduce its intensity, and remain on scene until it is extinguished. A flight of four landbased Air Tractor 802F air tankers can deliver 3,200 gallons, with the ability to knock down smaller fires with one load. Larger fires can be contained with four 802F aircraft when roads or natural breaks are utilized as containment lines.

In contrast to typical LAT and VLAT missions, initial response direct attack flight groups give fire agencies a better way to adjust the level of response to a fire's size and behavior. Two, three or four 802F aircraft can be dispatched based upon initial information and fire potential, allowing extreme flexibility. And if an aircraft or pilot in the flight group becomes unavailable, the remaining aircraft continue working.

AT-802F flight groups can also work from mobile retardant loading bases at any suitable landing area near a fire or fire complex. This forward-leaning, dynamic response strategy not only reduces ferry distance and increases the volume per flight hour, but also trims retardant delivery time and costs.



AT-802F land-based aircraft, strategically prepositioned at small regional airports in high fire danger regions, maximizes coverage and expedites a rapid response to fire starts. AT-802F aircraft can quickly arrive on scene to delay the fire spread and reduce fire intensity to help firefighters on the ground.



## **Attack From Land** or From Sea

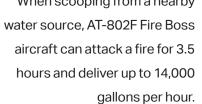
#### The 802F Fire Boss adds more value with versatility.

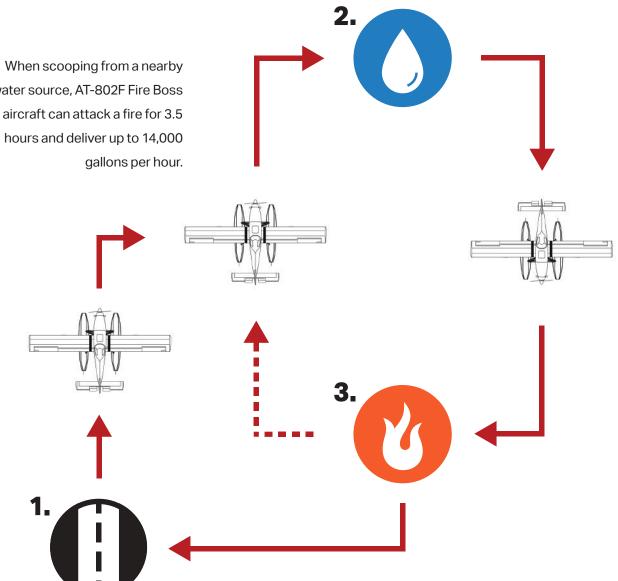
The 802F Fire Boss amphibious water scooper lands on nearby bodies of water, takes on 800 gallons of water in seconds, and is on its way to the fireline. When working a fire near a lake, river or reservoir, a single Fire Boss can deliver up to 14,000 gallons of water or retardant per hour for

extended attack or ground support. Then it can fly directly to attack another fire without returning to the base, as this aircraft has a range of more than 3 hours without refueling. It can do all this at a cost of about 30 cents per gallon dropped – just a fraction of the expense of large multi-engine air tankers.











The Air Tractor AT-802F is equally productive in the "off season," too. The same qualities that make the AT-802F a superior aerial fire fighter also make it ideally suited for forest restoration in the wake of wildfires. Its 800-gallon capacity, speed and maneuverability make quick work of hydromulch application or reseeding of steep slopes, rugged terrain, and utility rights-of-way for erosion control. And the AT-802F is perfect for other types of forestry protection duties, including aerial applications for timber fertilization, as well as controlling gypsy moth, spruce budworm and other pests.



## Air Tractor Support is Worldwide

#### Parts, expertise, and a promise.

Beyond the fire and smoke, every Air Tractor AT-802F at fire bases around the world is supported by a network of Air Tractor dealers helping keep these first responders ready for duty. For more than 30 years the AT-802F has been backed by one of the industry's most far-reaching and resourceful parts, service and sales networks.

This means you can count on Air Tractor support when and where you need it. Air Tractor dealers understand that readiness and uptime are crucial to firefighting effectiveness. So, around the clock and around the world – whether it's a replacement part expedited to your location, training for your maintenance technicians, aircraft repair or pilot transition training – your Air Tractor dealer stands ready to respond quickly to your needs.



### **Standard Equipment**

- > Pratt & Whitney PT6A-67AG 1350 SHP turboprop engine
- > 5-blade constant speed reversing Hartzell propeller
- > Engine ram air induction
- > 3-inch dual bottom loading valves
- > 820-gallon fiberglass hopper, heatcured Derakane<sup>™</sup> resin
- > 18-gallon foam tank
- Computer-controlled rotaryactuated firegate doors to provide a constant flow rate for drops
- > Pilot interface to select gallons to drop, coverage level, and ground speed adjustment
- > Accelerometer for automatic adjustment for fire doors

- > 274 square inch vent door
- > Streamlined fiberglass fairings for firegate
- > Pump shut-off valve
- > 3-color polyurethane paint finish
- > 11.0-12 low-pressure tires with
- dual 4-piston brakes
- > Electrically operated high lift flaps
- > 300-amp starter-generator
- > 308-gallon fuel tanks
- > LED position and strobe lights
- > 600-watt retractable landing lights
- > LED nose mounted taxi lights
- Attitude gyro
- > Turn windows

- > Air-conditioned cockpit
- > Cabin heater
- > Windshield washer and wiper
- > Fuel flowmeter
- > AmSafe Aviation inflatable restraint system
- > Stainless steel 1/4 turn fasteners
- > Hoerner wingtips
- > Outside air temperature gauge
- > Fire extinguisher
- > Fuel filter warning light
- > 16,000 pound FAA certificated gross weight

**Estimated Performance** 

Cruise speed empty, 66 gph @ 8,000 ft. (2.438 m)	187 mph (162 kts)	Stall speed @ 16,000 lb. (7.257 kg) flaps down	91 mph (79 kts)	Landing distance (empty)	800 ft. (244 m)
Cruise speed empty, 88 gph @ 8,000 ft. (2.438 m)	200 mph (175 kts)	Stall speed as usually landed	69 mph (59 kts)	Rate of climb @ 16,000 lb. (7.257 kg) 1220 SHP	850 fpm (259 mpm)
Working speed (typical)	120 - 125 mph (104 - 108 kts)	Take-off distance @ 16,000 lb. (7.257 kg)	2,000 ft. (610 m)	Range, economy cruise (66 gph), empty	800 mi. (1.287 km)
Stall speed @ 16,000 lb.	105 mph				

## **Specifications**

(91 kts)

(7.257 kg)

flaps up

Engine Type	PT6A-67AG	Empty Wt. (1-seat)	7,050 lb. (3.197 kg)	Fuel capacity	308 U.S. gal. (1.166 L)
Engine SHP & RPM	1350 @ 1700	Empty Wt. (2-seat)	7,210 lb. (3.270 kg)	Wingspan	59.25 ft. (18,04 m)
Propeller (Hartzell)	HC-B5MA-3D/ M11691NS	Useful Load (1-seat)	8,950 lb. (4.059 kg)	Wing area	401 sq. ft. (37,29 m2)
Propeller diameter	118.0 in.	Useful Load (2-seat)	8,790 lb. (3.987 kg)	Main wheel tire size	11.0-12
FAA Cert. Gross Wt.	16,000 lb. (7.257 kg)	Hopper capacity	820 US gal. (3.104 L)	Tail wheel tire size	6.25 x 6
FAA Cert. Gross Land. Wt.	16,000 lb. (7.257 kg)	Gel / Foam tank capacity	18.0 U.S. gal. (68 L)		

## **Optional Equipment**

- > Optional 1700 SHP PT6A-67F turboprop engine
- > Two-seat configuration
- > Smoker
- > Vertical speed indicator
- > Electric turn coordinator
- > ACK E-04 emergency locator transmitter

- > Artex ELT 1000
- > Garmin Avionics Suite > Audio Panel
- >GPS/NAV/COM
- > Transponder with blind encoder
- > Ferry fuel system (international)
- > 380-gallon fuel tanks
- > White paint scheme in lieu of yellow

- > Lightning safe features
- > Amphibious float preparations
- > Fuel control manual override
- > Engine fire detection system
- > Heated pitot (802A single seat)
- > Kawak throttle quadrant in lieu of standard quadrant



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