



## MD-87 large airtanker

Type 1 LAT airtanker  
 Primary role: Firebombing  
 Crew of two pilots  
 Internal, constant flow firebombing system  
 11,350 litre retardant capacity  
 Drop speed approximately 260 km/h  
 Typical cruise speed 700 km/h (loaded)  
 Typical cruise altitude 12,500 ft (loaded)  
 Typical runway required 1800+m  
 39.8m length, 32.9m wingspan  
 57,000kg Typical takeoff weight  
 2x Pratt & Whitney JT8D turbo fan engines  
 Fuel consumption 4,200 litres/h of Jet-A1  
 Aviation radios, fire agency radios & Satellite tracking

The MD-87 LAT is a modification of a McDonnell Douglas MD-87 airliner. The MD-87 is a derivative of the Douglas DC-9, and it has subsequently been developed into the Boeing 717. In its original configuration the MD-87 aircraft was used by airlines around the world as a short haul mid-size airliner.

Erickson Aero Tanker have designed and certified a modification to the MD-87 to integrate an 3,000 US gallon firebombing system. A 11,350 litre load of fire retardant solution can be carried in a tank mounted within the aircraft fuselage. A computer controlled firebombing system delivers a constant flow of fire retardant to the target area.

The MD-87 airtanker has been used by fire agencies in North America and now Australia. It is primarily used for line building with fire retardant on larger fires. Increasingly the MD-87 is used in other airtanker roles including supporting direct attack on smaller fires. The MD-87 airtanker typically operates with a 'lead plane' that supervises the airtankers and directs where the load is to be placed. The lead plane is usually a twin turbine aircraft such as a Rockwell Turbo Commander or Beechcraft Kingair.

The MD-87 can operate from many airports found across Australia. With a full retardant load on a 45 degree Celsius day the aircraft requires a runway length in excess of 1,800m. Suitable airports would also require specialised fire retardant mixing and loading equipment.

The MD-87 airtanker operates alongside other fire fighting aircraft to support fire fighting crews on the ground. Carried on board the aircraft are sophisticated communication and tracking equipment that keep the aircraft in constant contact with other aircraft and the fire agency crews managing fires on the ground.

NAFC, on behalf of the Australian Government, has contracted two MD-87 Airtankers for the 2019-20 fire season. Aircraft in the national aerial fire fighting fleet are available for use across all states and territories of Australia.

