



LM-100J

ONE AIRCRAFT, MANY CAPABILITIES

LOCKHEED MARTIN



COMMERCIAL

GENERAL CHARACTERISTICS



| | | | |
|-------------|--|--------------------------------|----------------------|
| Length | 112 ft 9 in/34.37 m | Max take-off weight (2.5 g) | 164,000 lb/74,389 kg |
| Height | 38 ft 10 in/11.84 m | Payload (2.5 g)* | 45,800 lb/20,775 kg |
| Wingspan | 132 ft 7 in/40.41 m | Operating weight empty | 80,350 lb/36,446 kg |
| Power Plant | Four Rolls-Royce AE 2100D3 4,691 pshp turboprop engines, GE-Dowty Aerospace R391, 6-blade propellers, all composite | Zero fuel weight** | 126,000 lb/57,153 kg |
| | | Landing distance (135,000 lbs) | 3,100 ft/945 m |
| | | Range (40,000 lb payload) | 2,390 nm/4,425 km |
| | | Maximum cruise speed | 355 KTAS/660 km/hr |

*Higher payload allowable with wing relieving fuel

**Higher zero fuel weight allowable with wing relieving fuel

MULTI-MISSION AIRCRAFT CAPABILITIES

The LM-100J's operational flexibility enables it to support a variety of tasks. Multiple roll-on/roll-off configurations are available to expand the airplane's capabilities.

Typical roles include:

- Oversized cargo transport
- Mining logistics operations
- Medevac/air ambulance
- Aerial spray
- Aerial firefighting
- Humanitarian relief operations
- Oil and gas exploration
- Aerial delivery
- Passenger transport
- Austere field ops



Capabilities include:

- Unique oversized payload and airdrop capability
- Truck bed height loading ramp - no special handling equipment needed
- Worldwide access to austere locales and short runways
- Proven Arctic operations
- Reduced operating costs
- Adverse weather and night capable
- Provisions for commercial cargo system

INCREASED PERFORMANCE AND EFFICIENCIES

Rolls-Royce AE 2100D3 engines and six-bladed GE-Dowty Aerospace R391 composite propellers improve aircraft performance over legacy aircraft.

- Greater take-off thrust
- Increased maximum airspeed
- Carries greater payloads
- Operates out of shorter airfields
- Climbs faster and cruises at higher altitudes
- Operates at longer ranges
- Maintains power in high/hot day conditions



ADVANCED COCKPIT



- Color, digital moving map
- Ground Collision Avoidance System (GCAS)
- Traffic Collision and Avoidance System (TCAS)
- Night vision compatible Head-Up Display (HUD)
- Terrain Awareness and Warning System (TAWS)
- Computer monitored aircraft system
- Flight Management System (FMS)
- Inertial Navigation System (INS)
- Dual Global Positioning System (GPS) systems
- Low noise interphone system
- Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM)
- Multi-mode color radar
 - Ground map
 - Weather mode
 - Wind shear detection

THE AIRTANKER FOR THE 21ST CENTURY

The LM-100J builds on the proven military C-130 Hercules and the civil L-100 aircraft, which set the standard for rugged multi-mission aircraft. When equipped with the International Airtanker Board (IAB)-approved Retardant Delivery System (RDS), the LM-100J provides commercial market readiness with outstanding performance as a Large Airtanker while maintaining its full cargo capabilities.

RETARDANT DELIVERY PERFORMANCE

The LM-100J equipped with the selected RDS is:

- Able to carry up to 3,500 U.S. gallons of retardant
- Optimized for slow, low altitude retardant application because of its legacy performance
- An effective, efficient, and safe aircraft/RDS configuration available for fire suppression missions
- Capable of delivering a constant flow rate and consistent retardant coverage up to Coverage Level (CL) 12 by using computer-controlled tank doors



... AND FLEXIBILITY



The RDS consists of mission specific components that are easily installed or removed in less than two-and-a-half hours, maintaining the full multi-mission utility of the aircraft.

The LM-100J is also able to operate and internally transport the Modular Aerial Firefighting System II (MAFFS II) and other MAFFS support equipment. It can be loaded directly into the back cargo compartment without the use of special handling equipment.

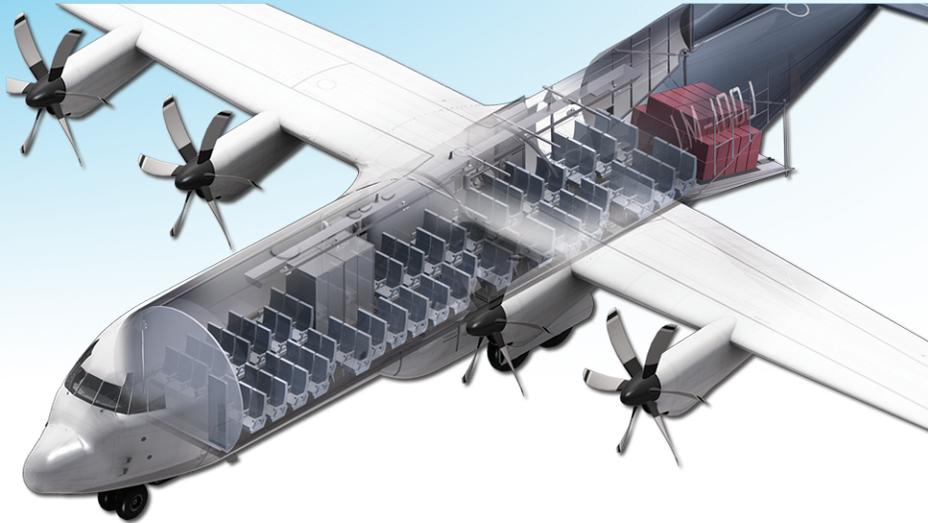


PASSENGER SEATING SYSTEMS

Lockheed Martin works with specific suppliers to provide passenger palletized systems for the LM-100J.

These roll-on/roll-off systems can be utilized in various configurations, standard or customized, for multiple types of missions. The pallets can hold up to 15 passengers with economy class seating or as few as four passengers with business class seating; configurations can include galleys or lavatories or a combination of seating with galleys or lavatories.

The pallets follow the regulations for carrying passengers while utilizing FAA-certified equipment for seats, lavatory equipment and galley equipment.



SEARCH AND RESCUE ROLL-ON/ROLL-OFF

Roll-On/Roll-Off Capability provides rapid response as a Search and Rescue (SAR) asset.

- Palletized mission system and a reconfigurable sensor pod install without any structural modifications to the existing airframe
- Open system architecture enables adding additional pod sensors enhancing capability and meeting future needs
- Each mission pallet accommodates up to six operator consoles with an optional enclosed operator module accommodates up to five operators



ONE AIRCRAFT, MANY CAPABILITIES

HUMANITARIAN



The C-130 Hercules has long been regarded as an unmatched resource when it comes to supporting humanitarian and natural disasters. A number of reasons illustrate just why this is the case, most notably the C-130's ability to land in austere areas after natural disasters strike and a cargo hold that can be outfitted to support everything from delivering vital supplies to functioning as a flying hospital. Legacy L-100s have supported humanitarian and natural disasters and the LM-100J will carry on — and expand — these capabilities.

MEDEVAC



Airborne Emergency Room

- Critically wounded are treated by medical teams
- Includes supplies and equipment such as oxygen lines
- Space for up to 50 litters with attendants

Roll-on/roll-off modular and palletized systems available.

Specially-designed medical modules provide controlled patient care environment.

Medical pallets facilitate quick change passengers/patients from ground to aircraft and back to ground.

MEDICAL PALLETS



Lockheed Martin works with specific suppliers to provide medevac pallets for the LM-100J, the pallets follow regulations for carrying passengers/patients utilizing FAA-certified equipment.

- Litter Stacking Pallet Systems provide roll-on/roll-off capability to transport non-critical patients. Utilizing standard litter and stretcher systems, the pallet can easily configure the LM-100J for different medical or humanitarian missions.
- Critical Care Pallet System provides medical technicians the capability to care for a patient in critical condition. Provisions provide for connecting and holding handheld medical supplies, oxygen and port connections and electrical outlets.

MEDICAL MODULES



Lockheed Martin works with specific suppliers to provide roll-on/roll-off modules for the LM-100J aircraft.

The modular design allows for a roll-on/roll-off capability. The modules are fully independent, taking only power from the aircraft and can be operated on the ground with the addition of external power. The medical team, which is now separated from the aircrew, can function in a controlled environment much like a hospital setting. Temperature and vibration control along with medical-grade lighting are just a few of the features of the medical modules.

Aeromedical Biocontainment Modules (ABCM) are used for the management of patients with contagious diseases such as Ebola and other global medical threats.

Universal Patient Modules (UPM) are a versatile platform with plug-n-play features which provide for varying levels of acuity and numbers of patients.

UNMATCHED CAPABILITY AND VERSATILITY

ARCTIC SUPPORT



The LM-100J travels as far south as Antarctica and as far north as the Greenland ice cap. Equipped with Teflon™-coated skis, the aircraft effortlessly lands on the cold terrain, making the Hercules the largest ski aircraft in the world.

AERIAL SPRAY



Aerial spray systems provide the LM-100J with the capability to aerially apply insecticides, herbicides, pesticides, decontamination agents and chemical dispersants for oil spills. Systems available are self-contained roll-on/roll-off systems with minimal permanent modification of the aircraft.

AIR DROP



In an aerial delivery role, the LM-100J can airdrop loads of up to 48,000 lbs (21,772 kg) or use its high-flotation landing gear to land and deliver cargo on rough, dirt strips.

Types of airdrops: Low-velocity, high-velocity and personnel (static line and free fall)

Methods of airdrops: Extraction, gravity and door bundle

CARGO DELIVERY



Aft Ramp and Door

- Oversize cargo
- Utility helicopters
- Six-wheeled vehicles
- Standard palletized cargo

Rapidly Reconfigurable to Accommodate

- Palletized equipment
- Floor-loaded material
- Airdrop platforms
- Vehicles and personnel
- Passengers
- Bulk fuel transport
- Gravel kits

WE'RE ENGINEERING A BETTER TOMORROW

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