



C-130 HERCULES

ONE AIRCRAFT, MANY CAPABILITIES

New Acquisition - Support - Sustainment

LOCKHEED MARTIN
We never forget who we're working for®

**WORKHORSE. RUGGED. RELIABLE. PROVEN.
DEPENDABLE. VERSATILE. TOUGH. IRREPLACEABLE.**

For the past six decades, many words have been used to describe the C-130 Hercules.

But they all translate to the same fact:
THERE IS ONLY ONE HERCULES.

The C-130 goes where other aircraft don't. It supports more missions than any other aircraft in the skies. It lands where other airlifters can't.

From the highest airstrip in the Himalayan Mountains to 21 full-stop landings on an aircraft carrier in the middle of the ocean...

From landscapes destroyed by forces of nature to delivering life-saving supplies to people in dire circumstances...

From critical forward operating bases to airfields damaged by natural disasters...

From transporting much-needed cargo to bringing loved ones home...

No matter the mission. No matter the task. The C-130 has done it, is doing it and will continue to do it — for decades to come.

C-130 HERCULES. ONE AIRCRAFT, MANY CAPABILITIES.



VARIANTS

There is no aircraft in aviation history — either developed or under development — that can match the flexibility, versatility and relevance of the C-130 Hercules. In continuous production longer than any other military aircraft, the C-130 has earned a reputation as a workhorse ready for any mission, anytime, anywhere. The C-130J Super Hercules offers superior performance and new capabilities, with the range and flexibility for every theater of operations and evolving requirements.

C-130J-30: COMBAT DELIVERY



LM-100J: COMMERCIAL



KC-130J: AERIAL REFUELING



SC-130J: AIRBORNE SURVEILLANCE



HC/MC-130J: SPECIAL MISSIONS



C-130XJ: EXPANDABLE



GENERAL CHARACTERISTICS



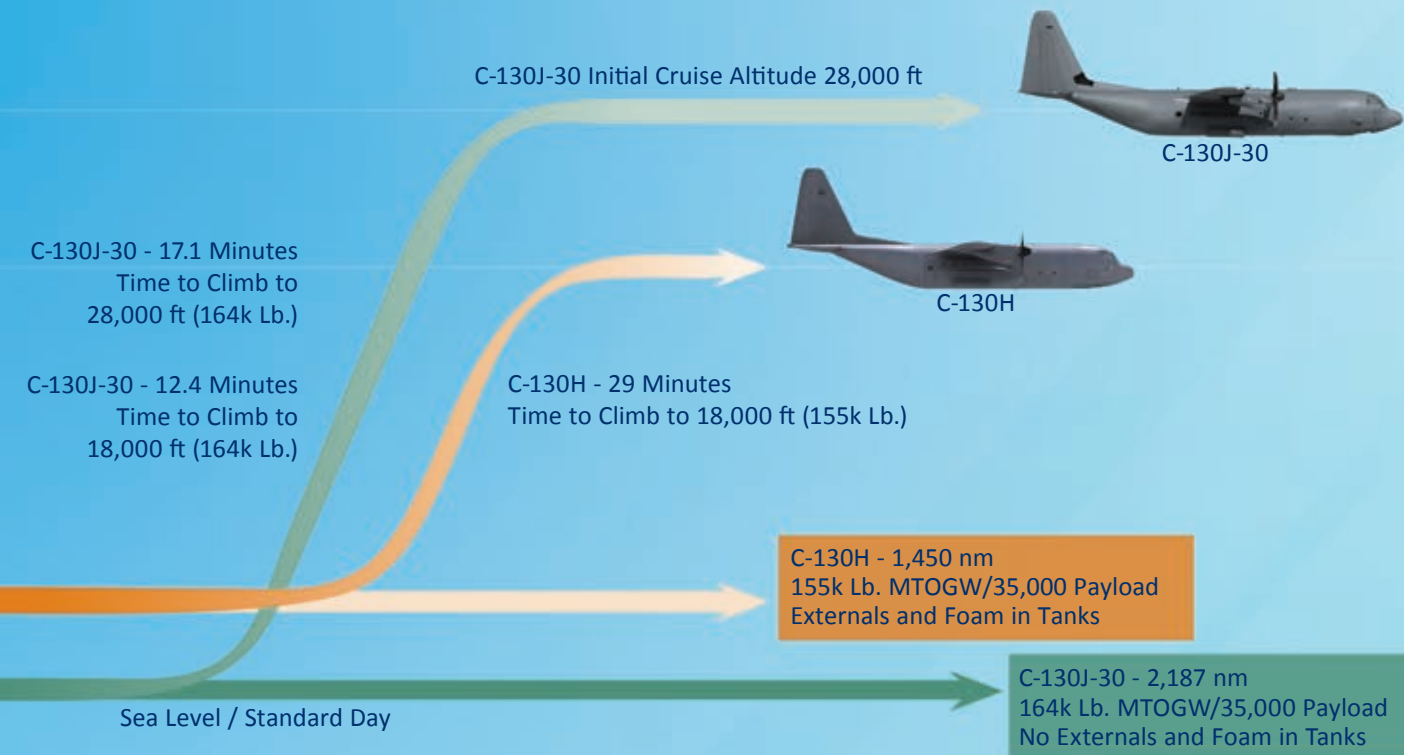
Length 112 ft 9 in/34.37 m
 Height 38 ft 10 in/11.83 m
 Wingspan 132 ft 7 in/40.38 m
 Power Plant Four Rolls-Royce AE 2100D3
 4,691 pshp turboprop engines,
 GE-Dowty Aerospace R391,
 6-blade propellers, all composite

Max take-off weight (2.5g) . . . 164,000 lb/74,389 kg
 Payload (2.5 g)* 41,333 lb/18,748 kg
 Operating weight empty 87,667 lb/39,765 kg
 Zero fuel weight** 129,000 lb/58,513 kg
 Landing distance (135,000 lbs.) 3,100 ft
 Range (40,000 lb. payload, 2.25g) 2,450 nm
 Maximum cruise speed 355 KTAS/660 km/hr

*Higher payload allowable with wing relieving fuel
 **Higher zero fuel weight allowable with wing relieving fuel

SUPERIOR CLIMB PERFORMANCE

A faster climb allows the C-130J-30 to get to safe altitudes more quickly to avoid hostile threats. The higher climb cruise ceiling allows the C-130J-30 to operate on more fuel-efficient routes.



C-130J-30 compared to C-130H

- 29% more takeoff thrust
- 15% lower fuel consumption
- 19% more thrust at cruise

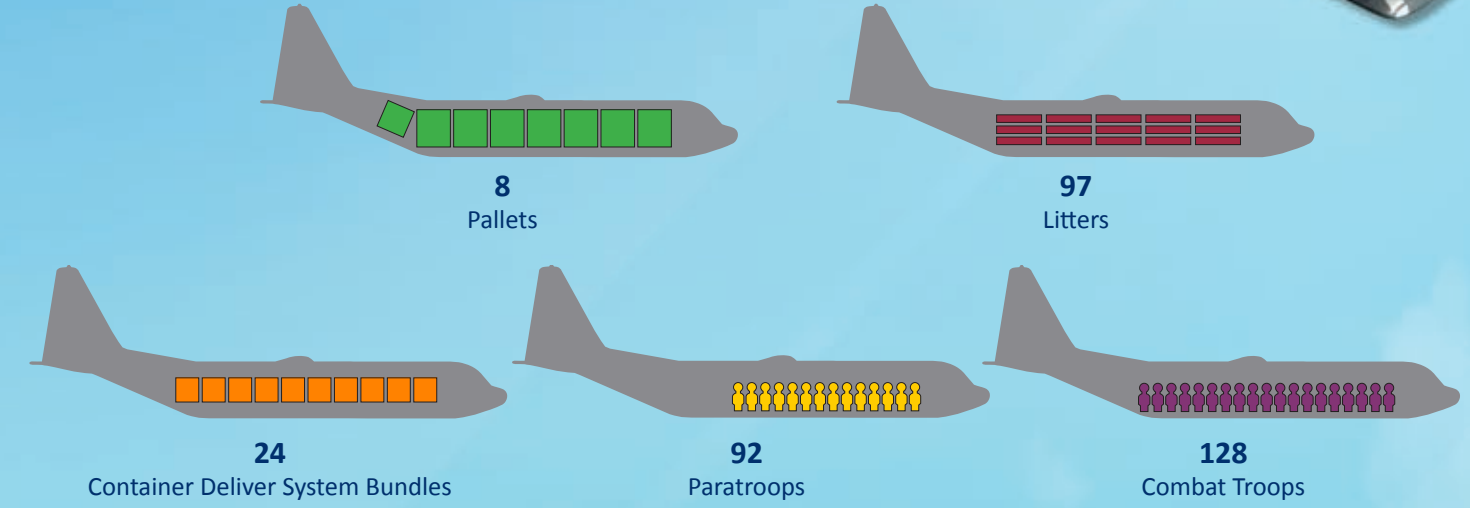
Improved mission performance benefits include:

- 40% faster climb
- 16% higher cruise ceiling
- 30 knots faster maximum speed
- Shorter takeoff roll



CARGO CAPABILITY

The C-130J-30 is a stretched version of the C-130J adding 15 feet to the fuselage and increasing usable space (two more pallets of equipment) in the cargo compartment.



ENHANCED CARGO HANDLING SYSTEM (ECHS)



The Enhanced Cargo Handling System (ECHS) provides increased levels of safety, greater air drop precision, and faster cargo bay reconfiguration times. Cargo pallets and ground handling equipment remain common.

Primary Components

- Electrically-actuated locks and vertical restraints
- Flip-to-stow roller conveyors
- Under floor variable speed winch
- Loadmaster console with Multi-function Control Display Unit (MCDU)
- Cargo ramp and door opening at 250 knots
- Cargo door dual uplocks and actuators
- Integral container delivery system center rails
- Recessed tow plate

GENERAL CHARACTERISTICS



Length	97 ft 9 in/29.81 m	Max take-off weight (2.5g)	164,000 lb/74,389 kg
Height	38 ft 10 in/11.81 m	Payload (2.5 g)*	41,224 lb/18,699 kg
Wingspan	132 ft 7 in/40.38 m	Operating weight empty	87,276 lb/39,588 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**	128,500 lb/58,287 kg
		Landing distance (135,000 lbs.)	3,100 ft
		Maximum cruise speed	325 KTAS/605 km/hr

- All stats include external tanks and aerial refueling pods
*Higher payload allowable with wing relieving fuel
**Higher zero fuel weight allowable with wing relieving fuel

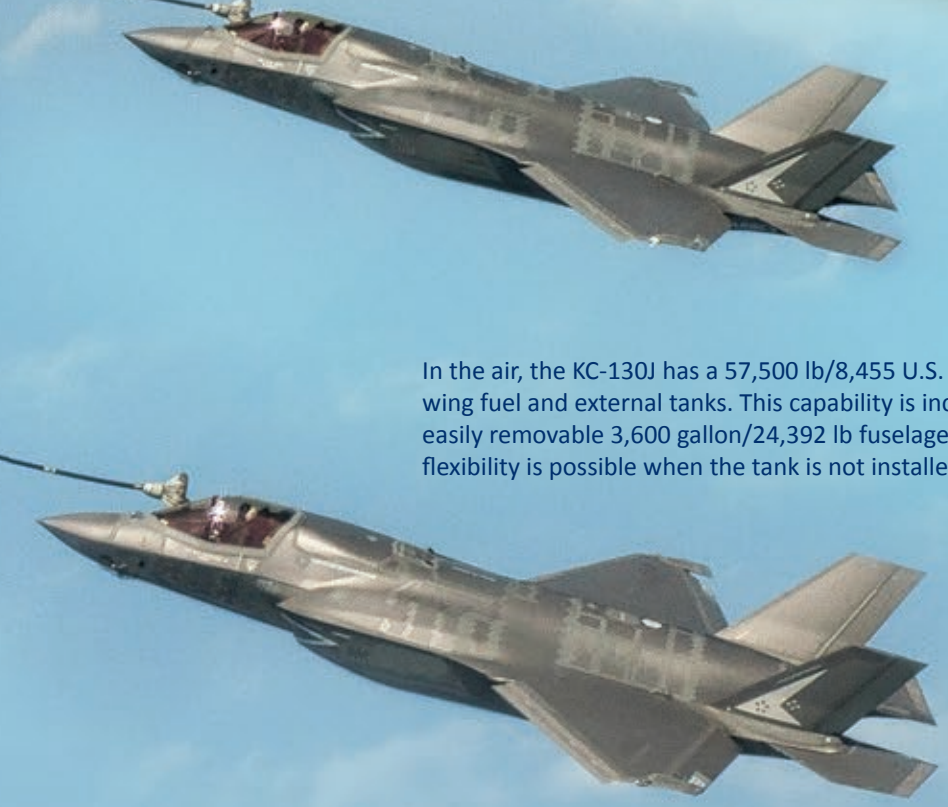
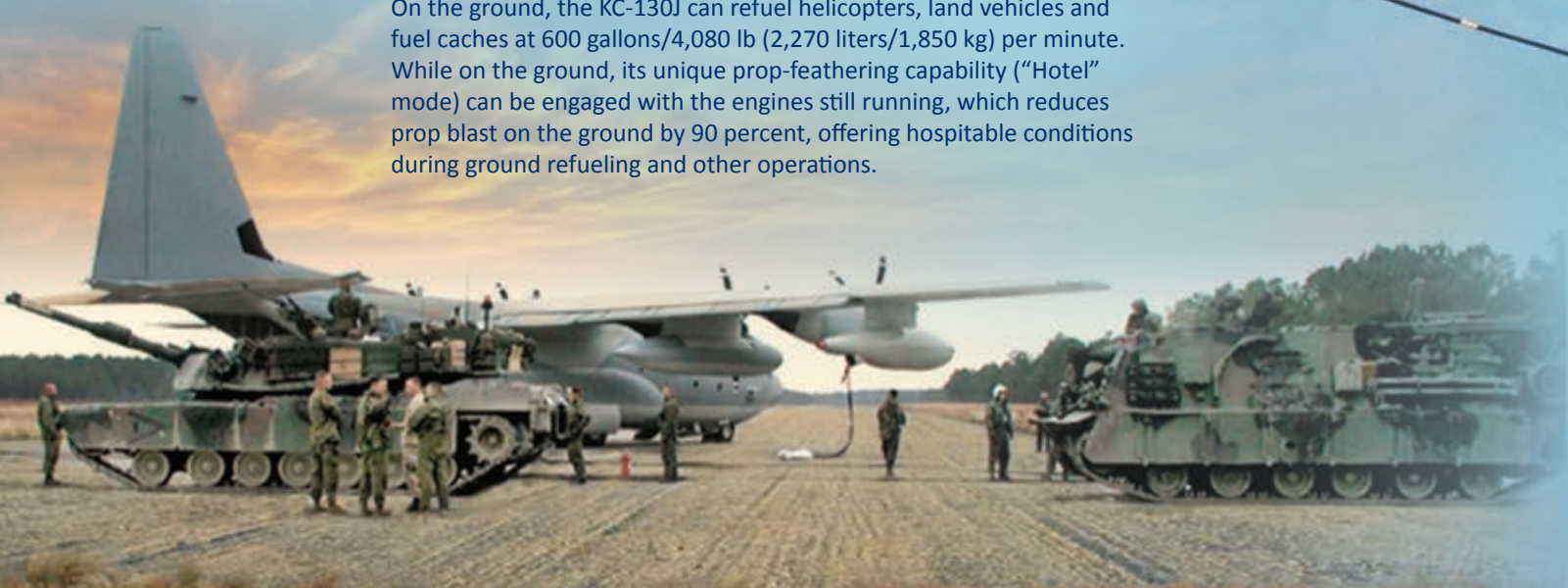
KC-130J CAPABILITIES



The KC-130J is capable of refueling both tactical aircraft, helicopters and tilt-rotors. In addition, it is also capable of conducting rapid ground refueling of expeditionary forces. The KC-130J aerial refueling (AR) tanker is the latest in a long lineage of combat proven C-130 Hercules tanker technology. The KC-130J is a proven tanker design in use worldwide taking full advantage of technological and performance improvements inherent in the basic C-130J aircraft. These performance improvements enable a greater than 50,000 lb fuel offload at a 500 nm radius.

On the ground, the KC-130J can refuel helicopters, land vehicles and fuel caches at 600 gallons/4,080 lb (2,270 liters/1,850 kg) per minute. While on the ground, its unique prop-feathering capability ("Hotel" mode) can be engaged with the engines still running, which reduces prop blast on the ground by 90 percent, offering hospitable conditions during ground refueling and other operations.

In the air, the KC-130J has a 57,500 lb/8,455 U.S. gallon fuel offload capacity using wing fuel and external tanks. This capability is increased with the addition of an easily removable 3,600 gallon/24,392 lb fuselage tank. Greater aircraft mission flexibility is possible when the tank is not installed.



GENERAL CHARACTERISTICS



Length	97 ft 9 in/28.81 m	Max take-off weight (2.5g)	164,000 lb/74,389 kg
Height	38 ft 10 in/11.81 m	Payload (2.5 g)*	36,936 lb/16,754 kg
Wingspan	132 ft 7 in/40.38 m	Operating weight empty	91,564 lb/41,533 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**	128,500 lb/58,287 kg
		Landing distance (135,000 lbs.)	3,100 ft
		Maximum cruise speed	325 KTAS/605 km/hr

- All stats based on Increment 2, including external tanks and aerial refueling pods

*Higher payload allowable with wing relieving fuel

**Higher zero fuel weight allowable with wing relieving fuel

HC/MC FEATURES

- Advanced multi-spectral sensors and 60/90 kVa generators
- Expanded avionics — including enhanced displays and dual military SATCOMs
- Modernized refueling system — low- and high-speed aerial refueling and rapid ground refueling
- Universal Aerial Refueling Receptacle Slipway Installation (UARRSI) for in-flight refueling — virtually unlimited range, endurance
- Fully functional, triple-display combat system operator crew station
- Enhanced cargo handling system — greatly reduced reconfiguration times, excellent airdrop accuracy
- Enhanced service life center wing
- Well-defined growth path to even greater combat capability
- High-altitude ramp and door

The Lockheed Martin HC-130J Combat King II is a personnel recovery aircraft and the MC-130J Commando II is a Special Operations aircraft flown by the U. S. Air Force. Each aircraft delivers increased versatility and operational capability to the warfighter with more powerful engines and unique features.

The HC-130J supports worldwide operations requiring rapid deployment to austere airfields and denied territory for expeditionary, all-weather personnel recovery. These aircraft provide airdrop/airland, low-level helicopter air-to-air refueling and forward area ground refueling capability.

The MC-130J aircraft supports worldwide employment for missions requiring clandestine single- or multi-ship low-level aerial refueling of U.S. Special Operation Forces vertical and tilt-rotor aircraft and/or infiltration, resupply and exfiltration by airdrop, or landing on remote airfields.



GENERAL CHARACTERISTICS

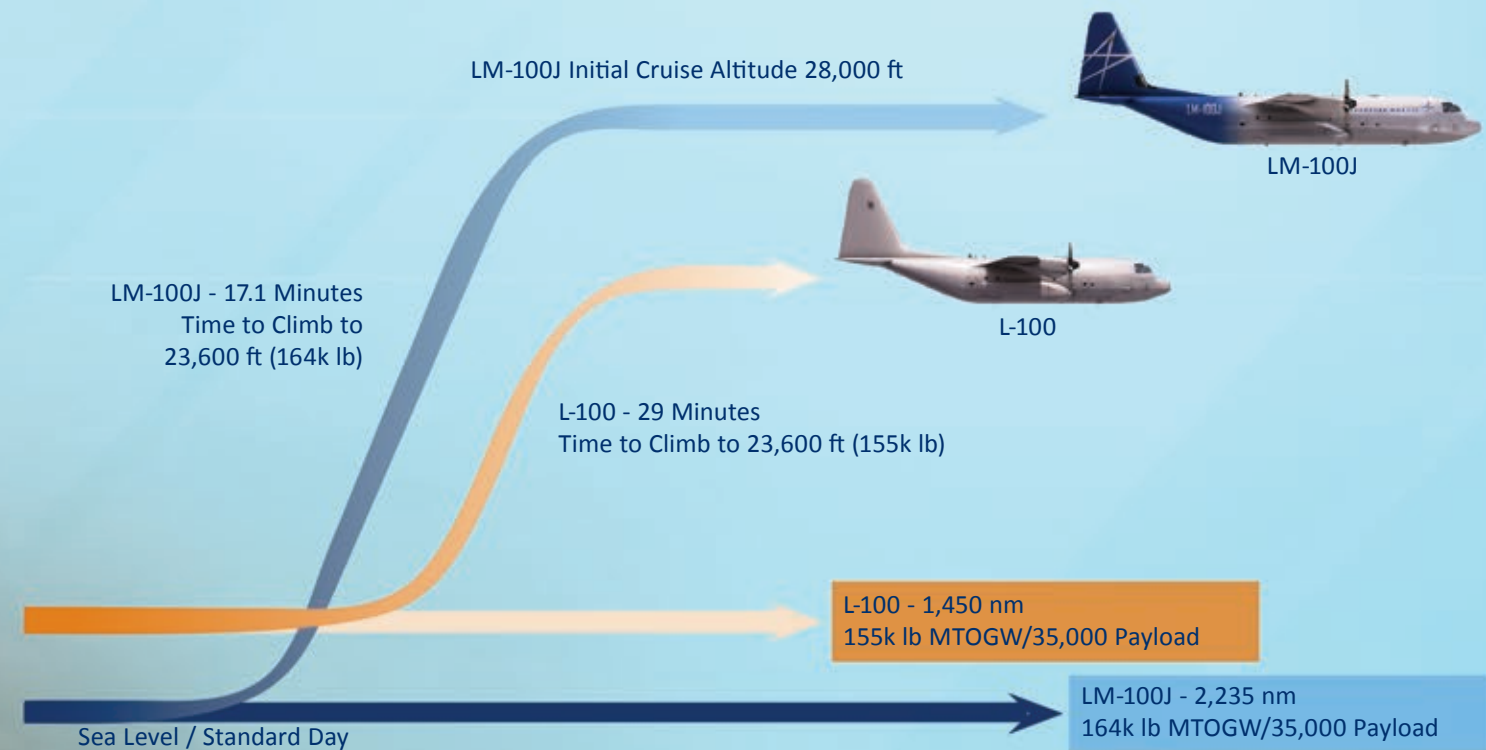


Length	112 ft 9 in/34.37 m	Max take-off weight (2.5g)	164,000 lb/74,389 kg
Height	38 ft 10 in/11.81 m	Payload (2.5 g)*	45,650 lb/20,707 kg
Wingspan	132 ft 7 in/40.38 m	Operating weight empty	80,350 lb/36,446 kg
Power Plant	Four Rolls-Royce AE 2100D3 4,691 pshp turboprop engines, GE-Dowty Aerospace R391, 6-blade propellers, all composite	Zero fuel weight**	126,000 lb/57,153 kg
		Landing distance (135,000 lbs.)	3,100 ft
		Range (40,000 lb. payload, 2.25 g)	2,450 nm
		Maximum cruise speed	355 KTAS/660 km/hr
			*Higher payload allowable with wing relieving fuel
			**Higher zero fuel weight allowable with wing relieving fuel

The LM-100J is the commercial variant of the C-130J Super Hercules offering unmatched flexibility and capability in a single platform. The LM-100J is the most flexible multi-role freighter in the world with capabilities to perform aerial spray (including oil dispersion), aerial surveillance, aerial delivery and standard logistics support to remote sites.

SUPERIOR CLIMB PERFORMANCE

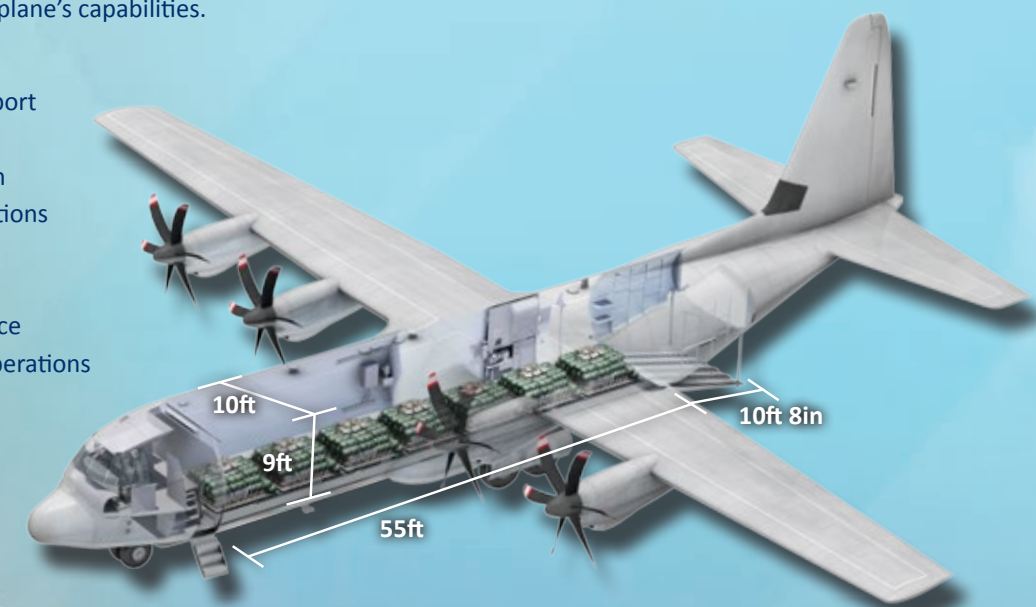
A faster climb allows the LM-100J to get to efficient cruise altitudes more quickly. The higher climb cruise ceiling allows the LM-100J to operate on more fuel-efficient routes.



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
- Aerial spray
- Oil and gas exploration
- Mining logistics operations
- Aerial firefighting
- Aerial delivery
- Medevac/air ambulance
- Humanitarian relief operations
- VIP 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

GENERAL CHARACTERISTICS



Length 112 ft 9 in/34.37 m
 Height 38 ft 10 in/11.81 m
 Wingspan 132 ft 7 in/40.38 m
 Power Plant Four Rolls-Royce AE 2100D3
 4,691 pshp turboprop engines,
 GE-Dowty Aerospace R391,
 6-blade propellers, all composite

Max take-off weight (2.5g) . 164,000 lb/74,389 kg
 Payload (2.5 g)* 39,469 lb/17,903 kg
 Operating weight empty 86,531 lb/39,250 kg
 Zero fuel weight** 126,000 lb/57,153 kg
 Landing distance (135,000 lbs.) 3,100 ft
 Maximum cruise speed 355 KTAS/660 km/hr

- All stats based on Level 1 aircraft

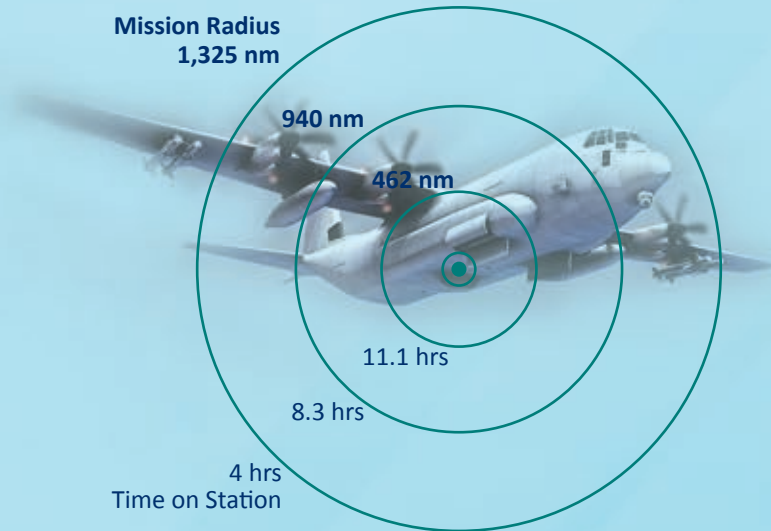
*Higher payload allowable with wing relieving fuel

**Higher zero fuel weight allowable with wing relieving fuel

Airborne Surveillance System Attributes:

- **Modular**
Architecture is designed to allow change in parts without affecting the rest of the system
- **Open**
Architecture identifies non-proprietary key interfaces in hardware and software and uses open standards for those interfaces
- **Flexible**
Provides customers the ability to customize their systems to meet their technology refresh demands

Mission Radius
1,325 nm



ROLL-ON/ROLL-OFF CAPABILITY



Air Mobility

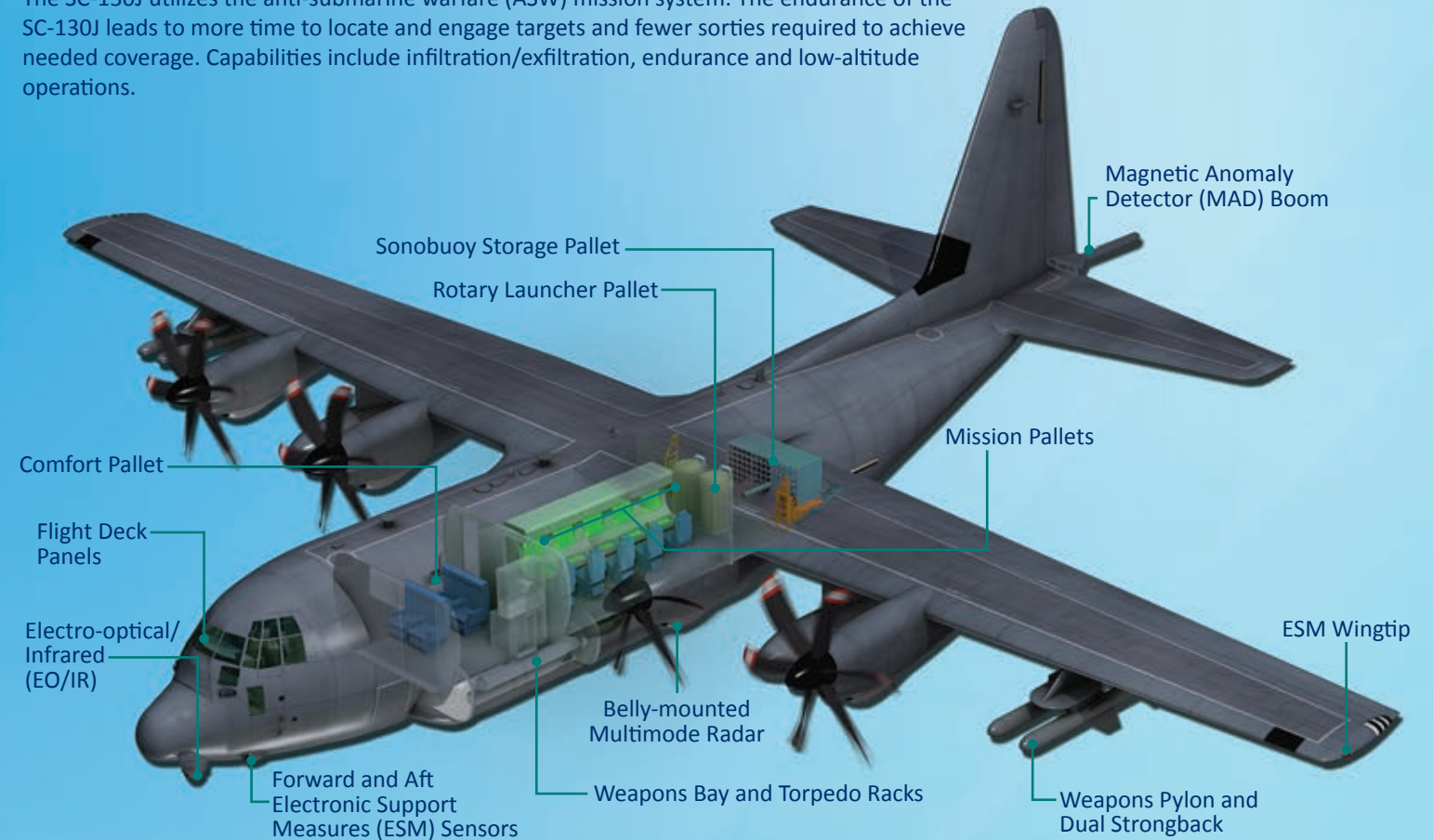
- Entire cargo floor usable
- Combat delivery
- Scanner seats remain on aircraft
- Functional EO/IR remains on aircraft
- Sea-search radar can be removed for long-term deployment

Anti-Subsurface Warfare

- Weapons bay and wing hard points
- Complete maritime patrol aircraft (MPA) functions
- ASW pallets
 - Rest, lavatory/galley, Mission 1 and 2, sonobuoy and ramp pallets

VARIATION COMPONENTS

The SC-130J utilizes the anti-submarine warfare (ASW) mission system. The endurance of the SC-130J leads to more time to locate and engage targets and fewer sorties required to achieve needed coverage. Capabilities include infiltration/exfiltration, endurance and low-altitude operations.



- Magnetic Anomaly Detector (MAD) Boom
- Sonobuoy Storage Pallet
- Rotary Launcher Pallet
- Mission Pallets
- ESM Wingtip
- Weapons Pylon and Dual Strongback
- Weapons Bay and Torpedo Racks
- Belly-mounted Multimode Radar
- Forward and Aft Electronic Support Measures (ESM) Sensors
- Electro-optical/Infrared (EO/IR)
- Flight Deck Panels
- Comfort Pallet

Configuration	Level 1 MSA/ISR	Level 2 APW/ASuW	Level 3 ASW
Sensors (Radar, EO/IR, AIS)	X	X	X
Palletized Work Station (Roll On/Roll Off)	X	X	X
Networks (High Speed, SATCOM, Data Link)	X	X	X
Voice (VHF/UHF/HF)	X	X	X
Radio Direction Finding	X	X	X
Electronic Support Measures (ESM)	X	X	X
Laser Designator (Targeting EO/IR)		X	X
Air-to-Surface Weapons:			
- Anti-Piracy (APW) – Hellfire		X	X
- Anti-Surface (ASuW) – Harpoons		X	X
Sub-Surface Weapons:			
- Torpedoes			X
- Mines			X
Sonobuoy Delivery System			X
Acoustics Processing System			X
Magnetic Anomaly Detection			X
Options:			
- 2nd EO/IR	X	X	X
- Communications Intelligence (COMINT)	X	X	X
- 30mm Gun System		X	

LEVEL 1

Maritime Surveillance (MSA)/
Intelligence, Surveillance,
Reconnaissance (ISR)

LEVEL 2

Armed ISR (A-ISR), Anti-Piracy (APW)
and/or Anti-Surface Warfare (ASuW)

LEVEL 3

Maritime Patrol and Anti-Subsurface
Warfare (ASW)

GENERAL CHARACTERISTICS



Length	97 ft 9 in/29.81 m	Max take-off weight (2.5g)	164,000 lb/74,389 kg
Height	38 ft 10 in/11.95 m	Payload (2.5 g)*	44,184 lb/20,042 kg
Wingspan	132 ft 3 in/40.42 m	Operating weight empty	81,816 lb/37,111 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
		Range (40,000 lb. payload)	2,450 nm
		Maximum cruise speed	355 KTAS / 660 km/hr

*Higher payload allowable with wing relieving fuel

**Higher zero fuel weight allowable with wing relieving fuel

OPERATIONAL FEATURES

- The fully integrated avionics, communications and precision multi-function navigation systems ensure unparalleled situational awareness resulting in mission success under all weather conditions, day or night.
- Two head-up displays certified by the FAA for use as a primary flight reference – ensuring minimal pilot workload under all flight conditions due to integrated control of takeoff, cruise, low-level operations, airdrop and landing.
- Two-pilot cockpit
- Four color multi-purpose display units
- Low-power color radar
- Night vision compatible lighting system
- Data transfer and diagnostic system
- Dual-mission computers

The “expandable” C-130XJ aircraft takes advantage of the exceptional operational capabilities of the baseline C-130J Super Hercules. This aircraft is offered at a reduced price based on a combination of uninstalled line replaceable units (LRUs) and the configuration returns to the legacy C-130 cargo handling system. Provisions remain intact to re-install equipment not included in the baseline aircraft contingent upon the user’s operations.



The C-130XJ retains the same rugged airframe of its predecessors, but is greatly improved with the performance and capability to prove it. The new propulsion system provides increased range, lower fuel consumption and improved takeoff performance. The engines are electronically controlled to provide maximum power up to 104°F at sea level providing much improved performance at high altitudes and temperatures. The reduced takeoff distance allows the C-130XJ to operate from shorter runways; faster climb allows it to achieve safer altitudes more quickly to avoid hostile threats; higher cruise ceiling allows it to operate on more fuel-efficient routes; and faster cruise speed and decreased fuel burn allows for more sorties per day per aircraft.

Lockheed Martin Aeronautics and its subcontractors have upgraded virtually every system of the aircraft to make it more durable, easier to maintain and less expensive to operate. System reliability and maintainability are improved by up to 50 percent; maintenance man-hours per flight hour are decreased by almost 70 percent; and flight and maintenance manpower are reduced by up to 50 percent — resulting in a reduction in squadron operating and support cost of almost 50 percent.

ONE AIRCRAFT, MANY MISSIONS

The C-130 Hercules is the world's premier tactical airlifter. Designed and developed with mission versatility in mind, the C-130 has a unique mix of agility and performance to complete any mission, anytime, anywhere.

AERIAL REFUELING



Features

- Improved hose reel vs. legacy tankers
- New rapid ground refueling port
- New pod fuel pump for increased fuel flow rates

Supply Fuel—Hose and Drogue

- Fixed wing aircraft with a high-speed drogue
- Tilt-rotor aircraft with a high- or medium-speed drogue
- Helicopters with a low-speed drogue
 - NATO standard probe receiver systems

Optional fuselage tank available to increase fuel offload

Receive Fuel

- Receive fuel from a boom-type aerial tanker
- Universal Aerial Refueling Receptacle Slipway Installation (UARRSI)
- Receive fuel from a hose and drogue aerial tanker when equipped with an Aerial Refueling Probe Installation System (ARPIS)

FIREFIGHTING



As an aerial firefighter, modular firefighting systems installed in the Hercules can drop thousands of gallons of fire retardant or water in just seconds. C-130 crews are able to fly over rugged mountainous terrain at low speeds to zoom in on targeted hot spots and drop fire retardant to assist firefighters below.

AERIAL SPRAY



Aerial spray systems provide the C-130 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 (RO/RO) systems with minimal permanent modification of the aircraft.

VIP AND PASSENGER TRANSPORT



VIP Transport Systems provide the C-130 with the capability to transport high-level personnel via a roll-on/roll-off modular or palletized system. The modular systems provide a controlled, self-contained unit for safe and comfortable transport utilizing custom interiors, controlled acoustic levels, environmental control areas, galleys, lavatories, desk or work station areas and communication areas. The palletized systems provide flexible transport utilizing passenger seats, galleys, lavatories and storage closets. All systems are available for legacy C-130s, C-130Js, L-100s and LM-100Js.

UNMATCHED CAPABILITY AND VERSATILITY

MEDEVAC



Airborne Emergency Room

- Critically wounded are treated by medical teams
- Includes supplies and equipment such as oxygen lines
- Space for up to 74 litters (97 litters for C-130J-30) 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

HUMANITARIAN



The Hercules can touch down in austere landing zones often before any other transport to provide humanitarian relief after natural disasters. As just one example, in 2014, the C-130 played a major role in the Philippines humanitarian and disaster relief efforts after Super Typhoon Haiyan/Yolanda, as C-130 crews from more than 10 nations airdropped supplies to remote locations and transported survivors to safety.

AIRDROP



In an aerial delivery role, the C-130 can airdrop loads of up to 42,000 lbs 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 armored vehicles
- Standard palletized cargo
- Passengers

Rapidly Reconfigurable to Accommodate

- Palletized equipment
- Floor-loaded material
- Airdrop platforms
- Container Delivery System (CDS) bundles
- Vehicles and personnel
- Fuel blivets

ARCTIC SUPPORT



The C-130 travels as far south as Antarctica and as far north as the Greenland ice cap. Equipped with Teflon-coated skis, the LC-130 effortlessly lands on the cold terrain, making the Hercules the largest ski aircraft in the world.

PERFORMANCE

Built on the legacy of the basic C-130 design, the C-130J has featured a large, unobstructed, fully-pressurized cargo hold that is rapidly reconfigured for the carriage of troops, stretchers, passengers or airdrops of troops and/or equipment into battle zones. The high-wing design places the cargo floor at truck-bed height above the ground. The aircraft also features tremendous lift capacity, long range and austere landing field capabilities, it is the world's premier tactical airlifter.

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

NIGHT OPERATIONS



All C-130J variants are designed for night operations

- Flight station is fully-compliant with night vision goggles
- Infrared landing lights illuminate the landing zones for Night Vision Imaging System (NVIS) without visible lighting
- Infrared cargo compartment lighting emits no visible light outside the aircraft even with ramp and door open

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

AUSTERE TAKE-OFFS AND LANDINGS



C-130J aircraft incorporates a sophisticated onboard navigation system

- Guides the pilots to the proper landing site quickly, easily and safely
- Operates at night and in adverse weather

Improved airfield operations

- Lands on unimproved surfaces, such as hard-packed dirt, gravel, grass or sand
- Propulsion system may operate in "Hotel" mode, feathering the propellers, reducing dust during ground operations

COMBAT READY



Self Protection System

Equipped with a radar warning receiver and missile warning receiver for alert and warning, and countermeasures for self-protection.

Fuel Tank Inert

Explosion Suppressive Foam installed into main and auxiliary fuel tanks for protection from ignition sources such as ballistics penetration and lightning.

Ballistic Protection

Protection for the pilot/co-pilot seats, augmented crew station seats, crew bunk, loadmaster stations both forward and rear, paratroop door locations and liquid oxygen.

DATA TRANSFER AND DIAGNOSTIC SYSTEM (DTADS)



DTADS provides maintenance personnel with an interface to aircraft avionics systems

- Supports on-aircraft and off-aircraft diagnostics
- System control for maintenance
- Data downloads
- Structural Health Management (SHM)
- Engine Monitoring System (EMS)

Software uses data recorded during flight

- Provides post-flight analysis
- Installs on a variety of laptop and desktop computers

Structural Health Management

- Processes post-flight data
- Stores data and supports on-aircraft maintenance
- Interface provides the ability to view the health of major components
- Tracks zones for any current or upcoming required inspections

Engine Monitoring System

- Supports ground maintenance operations
- Tracks cumulative engine metrics
- Provides engine configuration data including:
 - Part number and serial number of installed components
 - Engine run hours and life usage indices
- EMS identifies:
 - Engine components approaching operating limits
 - Evaluate status of engine components based upon accumulated data
 - Information with customer enterprise maintenance systems

SUPPORT SOLUTIONS

The Lockheed Martin approach ensures successful integration into the C-130 operator community by tailoring long-term support based on each customer's individual needs and partnership requirements for both legacy and C-130J aircraft. These support solution concepts enable the customer to achieve a high level of availability and mission performance.

CONTRACTOR LOGISTICS SUPPORT (CLS)



Lockheed Martin provides a dedicated program manager

- Responsibilities include development, execution and oversight of the sustainment program
- Single point of contact between the user and Lockheed Martin for sustainment-related issues
- Provides necessary logistics management ensuring the proper availability of support elements

MAINTENANCE CONCEPT



Lockheed Martin Maintenance Concept

- Two-level organizational-to-depot concept
- Line replaceable units are removed and replaced on the aircraft and returned to Lockheed Martin for repair
- All support elements can be developed under this concept
- Spares, support equipment and maintenance publications
- Maintenance Management System and health monitoring enable "on-condition" maintenance reducing maintenance costs

FIELD MANAGEMENT/TECHNICAL SUPPORT



Lockheed Martin Field Service Representatives (FSR)

- Fully-trained, qualified and authorized
- Provides expert support in the introduction of C-130J aircraft into base infrastructure, operations, maintenance planning and scheduling representatives
- Rapid resolution of aircraft technical inquiries
- On the ground delivering ad-hoc informal classroom training and day-to-day over-the-shoulder technical training
- Reinforces maintenance system knowledge, practices and troubleshooting
- Trained and qualified in areas covering aircraft avionics, electrical, aircraft systems, structures and propulsion
- Support package offers full reach-back to Subject Matter Experts (SME)

The global network of FSRs is able to quickly respond to complex technical issues

Contract Maintenance Team (CMT)

- A deployable team to fully perform or augment customer personnel in planning and execution of organization-level scheduled and unscheduled maintenance



SUPPLY LOGISTICS



Lockheed Martin provides a fully-integrated approach to supply logistics

- Includes existing fleets (C-130B-H) and combined fleets (C-130B-H/J)
- Supply logistics provides initial spare parts, repair programs, replenishment of consumables and support equipment delivery and maintenance
- Lockheed Martin optimizes the spare package utilizing data analytics and modeling simulation tools
- Results in the lowest cost solution that is based upon customer requirements

COMPREHENSIVE SUSTAINMENT

DATA ANALYTICS



Lockheed Martin utilizes the latest analytical method and tools

- Determines the right mix of parts to support initial and follow-on support solutions
- Collected more than 15 years of C-130J operational usage data
 - Data received from customers around the world
 - Represents data from all operating environments
 - Provides precise recommendations to the C-130J customers
- Provisioning service maintains spare part configuration data ensuring the latest material is provided during initial replenishment activities
- Provisioning and supply services teams are integrated via software applications
 - Provides the ability to monitor usage and make inventory-level adjustments
 - Optimizes cost reductions throughout the life cycle

PIPELINE MANAGEMENT



Lockheed Martin provides supply services management

- Ensures aircraft availability is achieved by providing the right part at the right time
- Manages all logistical aspects of support that is scalable based upon customer needs
- Everything is provided from complete logistics support to transactional solutions

COMPONENT REFRESH



Lockheed Martin provides a single point for managing hundreds of suppliers

- Utilizes Hologram Repair vendors ensuring the quality of services meet high standards of excellence
- Services are designed to support the legacy C-130 fleets
- Original Equipment Manufacturer (OEM) repair facilities, managed by Lockheed Martin, support the C-130J fleets
- Ensures the repair of a component is back to original specification lengthening the life of the part and reducing life cycle cost

REPLENISHMENT PROGRAMS



Lockheed Martin provides a variety of replenishment options to support the C-130 fleet. Lockheed Martin utilizes production agreements to provide a low-cost solution for everything from washers to structural components. Lockheed Martin also provides a Hologram Parts program to support Legacy C-130B-H that ensures the parts provided meet C-130 engineering specifications.

SUPPORT EQUIPMENT



Lockheed Martin provides a full set of required support equipment

- Includes equipment for mission systems and ground stations prior to the first delivery
- Site surveys evaluate the existing support equipment need for each aircraft/customer

WORLDWIDE FLEET SUPPORT

ADVANCED MILITARY MAINTENANCE REPAIR AND OVERHAUL CENTER

Advanced Military Maintenance Repair and Overhaul Center (AMMROC), located in Abu Dhabi, United Arab Emirates, is a center of excellence for military aviation services providing superior maintenance services and support. It is designed to meet the ever-changing needs of its customers' military and civil operations in all parts of the world including the South Asian, Middle Eastern and North African (SAMENA) regions. AMMROC is the only Lockheed Martin-certified C-130 Service Center in the SAMENA region.

Established in 2010 as a joint venture between leading aerospace companies, Mubadala Aerospace, Lockheed Martin, and Sikorsky, AMMROC quickly established its credentials as a key aviation partner of choice and now provides unparalleled support to its customers throughout the region.

This unique partnership blends OEM standards with AMMROC's engineering excellence, helping to ensure the highest levels of aircraft readiness, fleet availability and flight safety for our customers. AMMROC's service offerings allow the customer to concentrate on what's most important...performing their mission.

AMMROC offers a complete customer focused service from aerospace engineering, material support, logistics, maintenance, component repair, overhaul and training delivered at dedicated facilities. These facilities are expanding soon with the addition of the new Al Ain center opening in 2016. This new facility will be unmatched in capability with more hangar bays, state-of-the-art backshops, and added support services. The opening of the Al Ain facility continues AMMROC's growth toward being the world leader in aviation MRO services and ensures that our customers, within as well as beyond the SAMENA region, will get the best service possible.



A Mubadala Aerospace, Sikorsky & Lockheed Martin Company



CASCADE AEROSPACE

Cascade Aerospace Inc., an operating unit of IMP Aerospace & Defence, is a Canadian aerospace and defence company that provides commercial reliability with military performance.

As one of only two Lockheed Martin-approved C-130J HMC in the world, and the only Lockheed Martin-authorized HSC in North America; Cascade provides comprehensive program management; performance-based fleet management; maintenance, repair and overhaul; Integrated Logistics Support; materiel management; component repair and overhaul and in-field support.

As Canada's longest-serving Design Approval Organization (DAO), Cascade can also provide design, analysis and testing for aircraft repairs, modifications and installations upon receipt of approval from Lockheed Martin; Supplemental Type Certificate (STC) product design, development and certification; continuing airworthiness and technical support, and logistics packages; configuration and modification management; structural life extension programs; and technical data and publications management.



MARSHALL AEROSPACE

Marshall Aerospace and Defence Group is one of the leading independent aerospace and defence companies, respected and trusted worldwide for its expertise in the civil, military and commercial aircraft. Headquartered in Cambridge, United Kingdom, Marshall has offices on four continents.

Marshall has supported the C-130 airframe since 1965 and has the distinction of being the first Lockheed Martin-approved Hercules Service Center (HSC) and the first Lockheed Martin-approved C-130J Super Hercules Heavy Maintenance Center (HMC). Marshall capabilities include engineering design, manufacture and test, systems integration maintenance and product support, MRO, deep maintenance work, supply chain management, supportability engineering, in-service support and the provision of personnel, training and advice.

Marshall supports C-130 work for ten Air Forces around the world and has completed some 1,500 modifications and upgrades for 35 Hercules operators worldwide.



B-H SERVICE CENTERS

C-130 operators have access to an impressive global logistics network, a worldwide support system and insights from known operational and support costs.

Hercules Service and Heavy Maintenance Centers have proven capabilities that provide recurring scheduled maintenance services as well as aircraft depot level maintenance modification and overhaul support.



TRAINING

Lockheed Martin offers a full range of tested and proven training devices and state-of-the-art courseware that provide a cost effective and low-risk training solution for legacy and C-130J customers. These mature products and services are offered as flexible options tailored to meet the specific needs and stated goals of any customer. Training options are based on the size of the aircraft fleet and additional options to capability as desired.

Lockheed Martin's experienced training system management team is ready to address customer requirements. Together with training system suppliers, the team offers the single most experienced source for combined C-130 training and training equipment needs. Proven and streamlined management processes are followed for efficient and effective customer application.

These processes, combined with existing training product designs, significantly reduce schedule risk and cost of management oversight. The management approach emphasizes customer and industrial participation in key product areas to ensure that products meet both customer preferences and national interests. Each C-130 customer helps determine the best fit of in-country training resources with training products and services for maximum affordability.

The full range of existing C-130J training products includes:

- Computer Aided Instruction (CAI)
- Computer Based Training (CBT)
- Weapon System Trainer (WST)
- Cockpit Procedures Trainer (CPT)
- Integrated Cockpit Systems Trainer (ICST)
- Loadmaster Fuselage Trainer (LFT)
- Loadmaster Part Task Trainer (LMPTT)
- Systems Familiarization Trainer (SFT)
- Avionics Systems Management Trainer (ASMT)
- Engine/Propeller Part Task Trainer (EPPTT)
- APU Part Task Trainer (APUPTT)
- Flight Controls Part Task Trainer (FCPTT)
- Communication, Navigation, and Identification - Management Unit (CNI-MU) emulator
- Multi-Function Color Display (MFCD) emulator
- Virtual Flight Deck Multi-Function Training Aid (MFTA)
- Full complement of initial and follow-on aircrew and ground crew courses
- Instructor guides/student study guides
- Simulator/trainer exercises
- Training Management System (TMS)

Applicability of these products to customer requirements is determined through in-depth training and trade-off analyses.

TECHNICAL PUBLICATIONS

Lockheed Martin supplies technical publications with each aircraft in both paper and digital media. A publication revision service is also included as part of its Interim Contractor Support Program. The Lockheed Martin C-130J publications set based on proven commercial and military manuals concepts, is in use throughout the world.

The technical publications competency conveys knowledge and information to aid customers in the operation, maintenance, modification, and servicing of all Lockheed Martin produced and supported aircraft, safeguarding the airworthiness of the aircraft.

The C-130J Technical Publications team is deeply involved in all aspects of supporting the airplane for the life of the aircraft. The team is specifically dedicated to the C-130 program in support of all Hercules customers and is responsible for the overall management, development, validation, production, quality and delivery of the C-130 technical publications.

The C-130J publications development history and perpetual upkeep ensure that C-130J customers have the safest, most efficient and effective procedures for operating and maintaining their C-130J fleet. Publication currency is maintained through scheduled updates and supplements are issued as required in the interim.

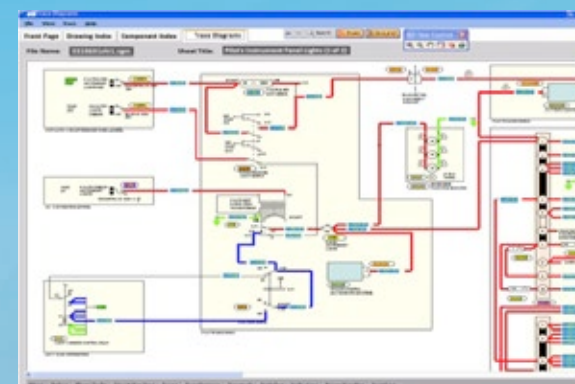
INTERACTIVE ELECTRONIC TECHNICAL MANUALS (IETM)

Lockheed Martin is developing a baseline C-130J S1000D Interactive Electronic Technical Manual (IETM). This process converts the current PDF technical manual product that supports the baseline stretch configuration of the C-130J into a user-friendly interactive electronic manual. The IETM will be compliant with S1000D Specification, Issue 4.0.1.

The IETM includes flight, maintenance, fault isolation, Illustrated Parts Breakdown (IPB), structures, and inspection manuals. Flight/operator manuals are available both electronically and on paper. The IETM is capable of being printed on demand for individual tasks or procedures. Initial functionality includes configuration filtering by aircraft tail number and graphics hot spotting. Lockheed Martin is pursuing the use of tablets for the IETM in the flight station.

An Interactive Electronic Wiring Diagram (IEWD) contains a drawing index filtered by configuration based on tail number or service bulletin. The IEWD viewer provides signal mode trace capability with user choice of colors, shows links between sheets while following colored traces, includes a robust search function, displays a listing of components contained on a particular drawing, and accommodates printing of individual diagrams.

Spiral development accommodates a wide range of future functionality. The IETM is capable of incorporating features such as supply chain management integration, maintenance planning, and integration with training modules to provide on-the-spot refresher training. Other available functionalities include the ability to capture maintainer actions and feedback on maintenance actions and network connectivity for updates.



WEAPON SYSTEM TRAINER (WST)



The C-130J Weapons Systems Trainer (WST) is a high fidelity simulation of the C-130J design basis aircraft. It is capable of simulating either the basic C-130J or the C-130-30 variant.

The C-130J simulator provides students with flight crew (pilots and loadmaster) training that is directly transferable to the C-130J aircraft. Pilots practice and learn the use of all controls and instruments during takeoff, landing, crew coordination, transition, instrument flight, tactical missions to include airdrop, low level navigation and aircraft emergency procedures.

The simulator contains a visual system which presents a realistic out-the-window view to the pilots. This enhances training by allowing pilots to take advantage of visual cues when performing all missions.

The simulator is also equipped with a digital simulation of the cargo compartment at the loadmaster station to allow for enhanced training in airdrop emergencies and crew coordination for the loadmaster student. The complex interrelations of flight controls, aircraft systems, cargo handling, radar, and navigation equipment are accurately reproduced.

Cockpit motion is also realistically reproduced by a six-degree-of-freedom electronic motion system. Each WST is designed to meet the simulation standards of the 14 Code of Federal Regulations (CFR) Part 60.

FUSELAGE AIRCRAFT SYSTEMS TRAINER (FAST)



The C-130J Fuselage Aircraft Systems Trainer (FAST) is a modified C-130 aircraft designed to represent the performance, functions, and appearance of the C-130J aircraft. The FAST provides the functionality necessary to support maintenance training in the operation, servicing, adjustment, calibration, and removal and replacement of the installed aircraft systems and its components at the organization level.

The FAST also provides the correct fuselage location, arrangement, operation and interface of:

- Air conditioning
- Electrical
- Power
- Waste
- Fire protection
- Flight controls
- Fuel
- Hydraulics
- Pneumatic
- Landing gear
- Oxygen
- Windows
- Ice and rain protection
- Auxiliary power unit
- Structural doors
- Fuselage stabilizers
- Wings
- Propellers
- Engine systems
- Externally-mounted components
- Equipment and furnishings

The FAST is able to support training at the organizational level for both normal and emergency procedures training.

MULTI-FUNCTION TRAINING AID (MFTA)

The C-130J Multi-Function Training Aid (MFTA) is a touch panel familiarization and procedures trainer. It is a new generation of affordable training technology. A versatile platform comprised of Commercial Off-the-Shelf (COTS) hardware that is easily adapted to support training for a wide range of C-130J aircraft and missions.

The MFTA contains a worldwide WGS-84 database with flight facilities and navigational systems including traffic, weather and air features.

MFTA enhancements include control-loaded operator flight controls in addition to the multi-touch side-by-side glass cockpit environment, Head-Up Display (HUD), additional crew station positions, Electro-Optical/Infrared Radar (EO/IR) Sensors and Distributed Interactive Simulation/High Level Architecture interoperability, among others.

The MFTA technologies and tools help servicemen and women better prepare for mission execution in the C-130J aircraft.



ENHANCED INTEGRATED COCKPIT SYSTEMS TRAINER (E-ICST)

The C-130J Enhanced Integrated Cockpit Systems Trainer (E-ICST) is a multi-role trainer supporting pilot, auxiliary crew member and maintenance technician training tasks.

As an aircrew training device, the E-ICST provides aircraft and cockpit system management, general and procedural training, and refresher flying training. As a maintenance training device, the E-ICST provides practical experience in the operation, servicing, adjustment, rigging, calibration, troubleshooting, and repair of the system installations, components, and equipment of the C-130J avionics systems.

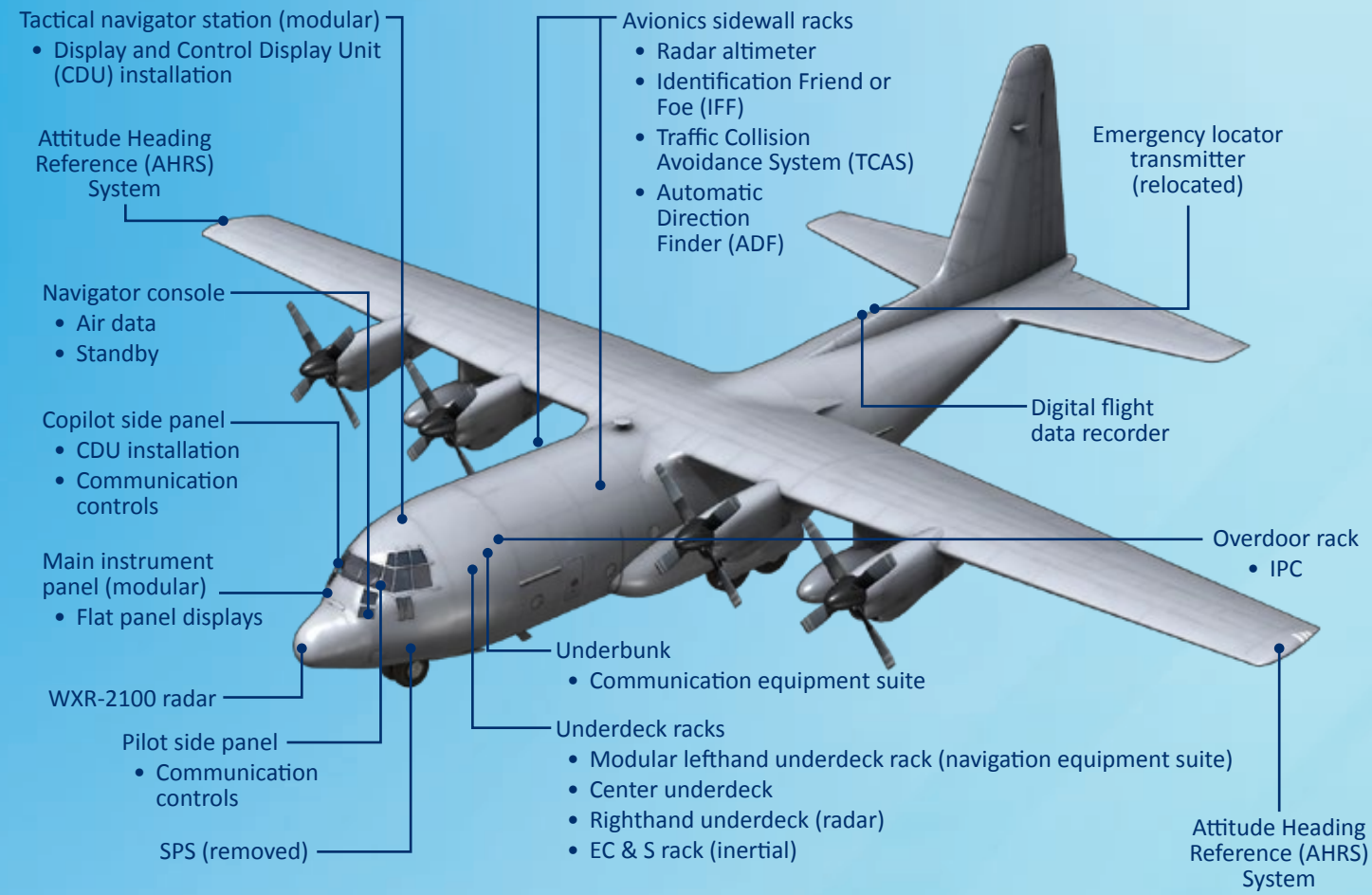
The E-ICST simulator allows maintenance technicians to practice and learn the operational use of all maintenance controls and instruments during preflight, post flight, and maintenance diagnostic testing.

The E-ICST supports integrated diagnostic functions as stimulated by the Data Transfer and Diagnostics System (DTADS) computer and is capable of utilizing the Ground Base Data System (GBDS) and Operational Maintenance Program (OMP) in maintenance training scenarios.



LEGACY UPGRADES

CNS/ATM



BEFORE

AFTER



Lockheed Martin developed a Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) kit that can be updated with customer's individual and unique requirements. The modifications take advantage of the digital age to put more information in the operator's hands.

Lockheed Martin designed all elements of the technical approach to provide a cost-effective, fully compliant solution supported by the team. The open architecture solution remains current with CNS/ATM requirements through simple software upgrades or replacement of component modules. It is fully upgradeable and provides interface connections for customer required equipment.

CENTER WING BOX



Enhanced Service Life (ESL) Center Wing Box replacement for both legacy C-130 and older C-130Js provides durability enhancements by decreasing local stress levels with a combination of increased material sections and improved detail design. When using the ESL Center Wing Box as the replacement component, it allows sustained center wing service life of two-to-three times longer than its predecessor. Additional services such as tailored customer designs, installation instructions and tooling design are available upon request. The ESL is the baseline configuration of all new C-130J aircraft.



BLOCK 7.0 AND BLOCK 8.1



The Block 7.0 program adds 29 new capabilities to the C-130J Hercules including:

- Link-16 Tactical Data Link which provides enhanced situational awareness by linking voice and graphic communications between allied aircraft
- New Flight Management System that complies with CNS/ATM mandates and includes vertical navigation and coupled auto throttle capability
- Special mission display processor
- Civil GPS
- Ground power modes

The Block 7.0 capabilities were selected by a multi-national C-130J users group that includes the United States, Italy, Denmark, United Kingdom, Australia, Norway and Canada.



The Block 8.1 upgrade program adds 10 new capabilities containing both software and hardware expansion to the C-130J platform. These 10 capabilities were chosen through a multi-national selection process that included collaboration between the United States, Italy, Denmark, United Kingdom, Australia, Norway and Canada.

The new Block 8.1 configuration includes:

- Updated Identification Friend or Foe (IFF)
- Automatic Dependent Surveillance Broadcast (ADS-B)
- CNS/ATM Data Link
- Enhanced Inter-Communication System
- Enhanced Approach and Landing Systems
- Enhanced Diagnostics
- Improved PA System
- Additional covert lighting

The program is contracted through the U.S. Air Force's International Program Office (IPO). The contracted effort is for the design, development, integration, testing and Trial Kit Installation (TKI) of the C-130J common core baseline upgrade.



SPECIAL MISSION AND PASSENGER MODULES



Lockheed Martin works with specific suppliers to provide roll-on/roll-off modules for passenger transport and/or special operations.

The Module Systems are customized and are scalable to meet mission requirements. Module sizing can be as small as one pallet position or as large as five pallet positions. The units are acoustically and vibration treated.

Modular units are fully customizable with various capabilities:

- Very important persons (VIP)/distinguished visitor (DV) and/or staff personnel transport options utilizing different types of seating
- Galleys and lavatories with FAA-approved equipment
- Secure SATCOM possible with operator rack and workstations
- Communication equipment with aircraft interphone Interface and video conferencing capabilities
- In-flight entertainment with FAA-approved equipment
- Self-contained environmental control units



MEDICAL MODULES



Lockheed Martin works with specific suppliers to provide roll-on/roll-off modules for C-130, C-130J and 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.



PASSENGER



Lockheed Martin works with specific suppliers to provide passenger palletized systems for all models of the C-130.

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.

MEDICAL PALLETS



Lockheed Martin works with specific suppliers to provide medevac pallets for all models of the C-130, 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 C-130 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.

ARMED ROLL-ON/ROLL-OFF



Capability Rapidly Converts the C-130J to a Robust Armed Response Asset

- Capabilities include Command and Control (C2) and targeting
- Roll-On/Roll-Off approach leverages existing C-130J wing hard points

Inboard and Outboard Hard Points

- Mission Pod installed on inboard hard point
- Includes a 20-inch EO/IR sensor for targeting identification and designation
- Datalink provides off-board communications of video and other data enabling command control approval
- Outboard hard point holds a weapon rack and pylon with four Hellfire missiles

Advanced Mission Pallet

- Operators control the mission from the pallet installed in cargo compartment

Optional Weapons

- Palletized 30mm gun system installs in the aft fuselage at the paratroop door

ISR/MSA ROLL-ON/ROLL-OFF



Capability Provides Rapid Response as an ISR or an MSA Asset

- Palletized mission system and a reconfigurable sensor pod install without any structural modifications to the existing airframe
- Pod sensors include 20-inch EO/IR, multimode radar, and communications datalinks
- 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

DIRECT INFRARED COUNTER MEASURES (DIRCM)



The Directed Infrared Counter Measures (DIRCM) system capability is designed to provide customers worldwide with effective protection against shoulder fired man-portable air defense system (MANPADS) missiles. The advanced multi-spectral infrared fiber-laser system rapidly acquires multiple incoming MANPADS and deflects them from the target using a very powerful laser beam.

The system provides a rapid response with protection against multiple, simultaneous missile threats while being highly reliable and requiring minimal maintenance. The C-130 provides multiple DIRCM solutions including integrated, semi-integrated, and federated methods of meeting customer requirements. Lockheed Martin has extensive experience with DIRCM installations on multiple C-130 customer platforms and provides aircraft kit equipment supporting a DIRCM system which meets or exceeds C-130 aircraft installation standards.

MISSILE WARNING SYSTEM (MWS)



The AN/AAR-47 missile warning system (MWS) is a passive electro-optical system designed to protect the aircraft from IR-guided missile attack with integrated laser warning to detect laser-guided and laser-aided threats.

The MWS consists of one Computer Processor (CP) and four Integrated Optical Sensor Converters (IOSC).

RADAR WARNING RECEIVER (RWR)



The Radar Warning Receiver (RWR) capability is designed to provide customers worldwide with effective aircraft protection against all types of radar based weapon systems. The system is an advanced dual-band wideband receiver that rapidly detects, discriminates and identifies multiple radar emitters even in dense electromagnetic environments. The system provides the crew with an instantaneous view of the most dangerous threats, thus the crew can take preventive actions, and simultaneously the system can trigger the CMDS to automatically counter the radar threats. It is highly reliable and requires no preventive maintenance. The system is easily programmable with in-country Electronic Warfare (EW) support systems.

ADVANCED COUNTERMEASURES DISPENSING SYSTEM (ACMDS)



The Advanced Countermeasures Dispensing System (ACMDS) installation will consist of seven (optionally nine) dispenser stations, each consisting of a digital sequencer switch (DSS) and two dispenser assemblies (DA). The dispensers are located in the aircraft positions that will provide optimum dispensing patterns to counter the incoming threat.

Five EMI filters/safety switches will be installed centrally in the cargo bay in order to individually control the arm power to the forward/nose, LH underwing, RH underwing, aft/tail and optionally wing pylon dispenser stations.

The ACMDS mission data file (MDF) will be programmable via the mission support tool (MST). The MDF holds all ACMDS related aircraft configuration data, dispense routine, dispense program settings. The ACMDS will support asymmetric dispense pattern definition, manual/semi/automatic modes of operation, mixed payload capability, bypass mode of operations and built-in self-test.

UPGRADES

APU/ECS UPGRADE FROM GTC/ATM



APU Installation

The Auxiliary Power Unit (APU) and Environmental Control System (ECS) service bulletin 82-706 Retrofit Kit replaces the Gas Turbine Compressor (GTC)/Air Turbine Motor (ATM) installed on the legacy C-130B/E/early C-130H aircraft. The APU/ECS kit provides:

- 40 kVa electrical power for ground operations
- Increased bleed air generation for ground air conditioning
- Ability for emergency in-flight engine starts using the APU
- Greatly reduced maintenance and increased service life



ECS Installation

The service bulletin kit configuration is identical to the production C-130H APU/ECS installations for commonality with newer C-130H and C-130J aircraft. This commonality reduces operator logistics costs.

PARATROOP DOOR INTERNAL LOCKING HANDLE



Locked Paratroop Door Handle

Operators have reported damage to the paratroop door lower tracks due to contact with the door locking pins during closing. The pins are retracted during closure, but if the operator of the door uses the locking handle as a handhold during closing, the pins begin to protrude as the door is moved outward and the operator inadvertently rotates the handle.

The internal locking handle is modified such that when the handle is rotated 90 degrees and unlocked a thumb pushbutton extends from the handle. As long as the locking button is not depressed the operator cannot inadvertently deploy the locking pins and damage the paratroop door tracks.

The modification poses no change to emergency ingress or egress. The handle can rotate to the unlocked position from the inside or outside of the aircraft. The modified handle works with the existing ground lock (lollipop) and if equipped, requires no additional maintenance action to install or remove an armor kit. The only action that cannot be performed would be to open the door from inside the aircraft, exit through the half opened door and lock it from the outside. If this action is desired the locking button could be designed with a feature that would allow the operator to depress the locking button, rotate it and for it to remain depressed. The door could then be locked from the outside and the locking button would automatically reset itself for the next unlocking operation.



Unlocked Paratroop Door Handle

ADDITIONAL MODIFICATIONS

- Air-to-air refueling tanker retrofit
- Digital interphone system retrofit
- Commercial-type power outlets addition
- Electronic engine instrument display
- Enhanced Ground Proximity Warning System

GROUND PANELS



Ground panels can be statically located on either side of the aircraft. Each panel is equipped with two standard military connectors, which ground the electrical equipment to the aircraft. The modification requires connecting directly to the aircraft, which enhances the opportunities for using various platforms of electrical equipment.

ROLL-UP DOORS



For added enclosed storage aboard the C-130, two roll-up doors can be installed in the aft of the aircraft to provide additional covered and secured storage. These roll-up doors are currently installed on the HC/MC-130J but can be fit to be installed on any C-130 aircraft. The door is mechanical and does not require any electrical input.

The most advantageous aspect of the roll-up doors is the contents can be accessed with cargo ramp up or down.

EO/IR TURRET-CHIN MOUNT RETROFIT



The capability to detect, track, and identify targets during day and night hours, is essential to the success of missions requiring 24-hour operation. Thermal imagers provide an effective tool for accomplishing activities such as border patrol, maritime patrol, drug interdiction, enforcement of laws and treaties, and search and rescue. Lockheed Martin offers a kit to “chin mount” an Electro-Optical/Infrared (EO/IR) turret under the aircraft radome providing a 360° field of view for enhanced day/night mission capability. Installation of the EO/IR turret has very minimal effect on aircraft handling characteristics, radar operation, or ground operations such as towing.

MICROVANES



Microvanes are small devices, approximately 10 inches long and one inch tall, that reduce the drag penalty associated with upswept aft fuselages present on military transports like the C-130. Flight testing conducted on the C-130J resulted in high quality test data with excellent repeatability and confirmed pre-test computer simulated (Computational Fluid Dynamics) predicted drag savings of four percent at cruise conditions with no impact on air drop or cargo handling. Addition of microvanes could potentially result in a fuel savings of approximately 2.4 million gallons annually.

LOCKHEED MARTIN/C-130 RESOURCES

With almost 2,500 C-130s delivered to operators in 63 different nations, the C-130 is literally a global asset.

Lockheed Martin and its partners stand ready to provide support for any current or potential operator's C-130 needs. Below is a list of resources to provide additional insight for any C-130 Hercules needs.

General Information

www.lockheedmartin.com/c130

C-130 Worldwide Fleet Support

Email: hercules.support@lmco.com

Telephone: (800) 952-6569 or (770) 494-9131

C-130 WORLDWIDE OPERATORS

C-130 legacy, L-100, C-130J and LM-100J operators



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WE'RE ENGINEERING A BETTER TOMORROW

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