

C-130 H, J Hercules

What is it? The C-130 Hercules primarily performs the tactical portion of the airlift mission. The aircraft is capable of operating from rough, dirt strips and is the prime transport for air dropping troops and equipment into hostile areas. ANG C-130s and associate units operate throughout the U.S. Air Force, serving Air Mobility Command, Air Force Special Operations Command, Air Combat Command, Pacific Air Forces and Air Force Reserve Command, fulfilling a wide range of operational missions in both peace and war situations. Basic and specialized versions of the aircraft airframe perform a diverse number of roles, including airlift support, Antarctic ice resupply, aeromedical missions, peacetime and combat search and rescue, special operations, Senior Scout, Scathe View, firefighting duties for the U.S. Forest Service and natural disaster relief missions.

Features. Using its aft loading ramp and door the C-130 can accommodate a wide variety of oversized cargo, including everything from utility helicopters and six-wheeled armored vehicles to standard palletized cargo and military personnel. In an aerial delivery role, it can airdrop loads up to 42,000 pounds or use its high-flotation landing gear to land and deliver cargo on rough, dirt strips.

The flexible design of the Hercules enables it to be configured for many different missions, allowing for one aircraft to perform the role of many. Much of the special mission equipment added to the Hercules is removable, allowing the aircraft to revert back to its cargo delivery role if desired. Additionally, the C-130 can be rapidly reconfigured for the various types of cargo such as palletized equipment, floor-loaded material, airdrop platforms, container delivery system bundles, vehicles and personnel or aeromedical evacuation.

The C-130J is the latest addition to the C-130 fleet and will replace aging C-130E's. The C-130J incorporates state-of-the-art technology to reduce manpower requirements, lower operating and support costs, and provides life-cycle cost savings over earlier C-130 models. Compared to older C-130s, the J model climbs faster and higher, flies farther at a higher cruise speed, and takes off and lands in a shorter distance. The C-130J-30 is a stretch version, adding 15 feet to fuselage, increasing usable space in the cargo compartment.

C-130J/J-30 major system improvements include: advanced two-pilot flight station with fully integrated digital avionics; color multifunctional liquid crystal displays and head-up displays; state-of-the-art navigation systems with dual inertial navigation system and global positioning system; fully integrated defensive systems; low-power color radar; digital moving map display; new turboprop engines with six-bladed, all-composite propellers; digital auto pilot; improved fuel, environmental and ice-protection systems; and an enhanced cargo-handling system.

What has the Air National Guard done? ANG C-130s have participated in dozens of combat and peacetime operations including Desert Storm, Provide Comfort, Enduring Freedom, Hurricane Katrina. They continue to deploy and support global operations in OEF, OIF, Joint Enterprise, Deep Freeze, Coronet Oak and TACC worldwide missions as well as providing fire fighting to the Forrest Service and airlift support for responders to natural disasters. In addition, 7 ANG C-130s are being loaned to the 314AW, Little Rock AFB, for aircrew training.

What continued efforts have the Air National Guard planned for the future? Three ANG C-130s have been upgraded as part of the Air Force low rate initial production (LRIP) Avionics Modernization Program (AMP). Initial Operational Test and Evaluation (IOT&E) is expected to commence Jan 2012.

Approximately one-third of the ANG legacy fleet (40-45 aircraft) received the large aircraft infrared countermeasures (LAIRCM) defensive system upgrade, with the remainder due the upgrade as funding is provided.

Why is this important to the Air National Guard? The ANG operates approximately half the C-130 fleet, with the average age being over 25 years. A prudent investment strategy emphasizes reliability and maintainability improvements in current operational systems such as the C-130, and modification of those systems with capabilities required performing the mission. ANG C-130 force modernization is crucial to meet the ongoing demands of the Department of Defense and domestic operations.