## SHORT-POD® APU UPGRADE KIT



PN: LE49000-507, NSN 1680-01-593-3146

#### **OVERVIEW**

AllClear Aerospace & Defense is the Original Equipment Manufacturer (OEM) for the SHORT-POD® APU (Auxiliary Power Unit) Upgrade Kit, used to modernize pre-1974 production C-130B through early C-130-H aircraft by replacing the original gas turbine compressor/air turbine motor/ATM generator with the SHORT-POD® APU.

AllClear's proprietary design and continuous improvement of this distinctive upgrade kit has enabled us to deliver more than 78 SHORT-POD® APU Upgrade Kits to global customers.

#### SOLUTION

The SHORT-POD® APU Upgrade Kit is a Lockheed Martin approved solution that provides C-130 operators with increased reliability and reduced maintenance costs.







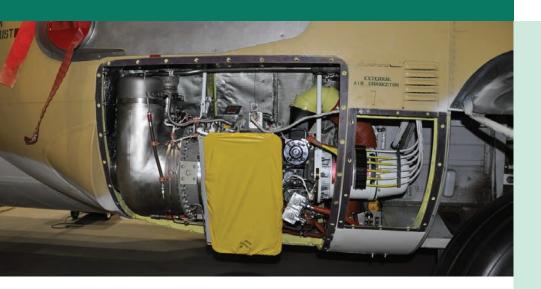
#### **BACKGROUND**

The original GTC85 on C-130 B-H aircraft delivered prior to 1974 has a very low mean time between unscheduled repairs (MTBUR), as well as a marginal capability to produce sufficient pneumatic power to reliably start the T56 engines. As the GTC85-71A wears through normal use, it's pneumatic power production degrades and ultimately reaches a point where it can no longer start the engines indpendent of ground power carts. Additionally, the GTC85-71A is unable to power either one of the aircraft Environmental Control Systems during normal operations. Finally, the obsolete GTC85-71A is operable on the ground only, which means that it's power production is not available in flight, even in emergencies.

#### **KIT INCLUDES**

- SHORT-POD® APU
- CONTROL PANEL
- IMPROVED COWLING
- HARDWARE
- TECHNICAL/IPC/FLIGHT MANUAL UPDATES
- ENGINEERING SUPPORT FOR INSTALLATION
- GROUND AND FLIGHT CREW TRAINING





#### PERFORMANCE COMPARISON

	GTC	SHORT-POD® APU
ENGINE	GTC85-71A	GTCP85-180L
GENERATOR	20/30 KVA	40 KVA
BLEED AIR	90 PPM	150 PPM
KIT WEIGHT	<500 LBS	<500 LBS
MTBUR	450 HOURS	3,350 HOURS
POWERS	ESSENTIAL AC BUS AND ALL DC BUSSES	ESSENTIAL AND MAIN AC BUSSES AND ALL DC BUSSES

#### **UPGRADE BENEFITS**

- Improved reliability
- Greater MTBUR
- · Lower cost of ownership
- Greater mission autonomy due to secure engine starts
- ECS operation on the ground without main engines or GCS support
- · No major aircraft modification needed
- 25 days installation time

# Honeywell



### **WHY UPGRADE**

- Approved, licensed & hologramed by Lockheed Martin Global Sustainment Services
- Improved ground ECS cooling capacity
- Increased operational capability
  & mission readiness reduce
  maintenance downtime
- Increased bleed air availability, which reduces the possibility of hot or stalled starts
- APU direct drive generator (same as engine driven) increased available electrical power while decreasing electrical power fluctuations
- APU high output air provides quicker engine starts, reducing starter and turbine wear and tear
- Certified for in-flight operation of up to 18,000 ft
- 50% less expensive than the long pod installation

