

# SHORT-POD® APU UPGRADE KIT



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

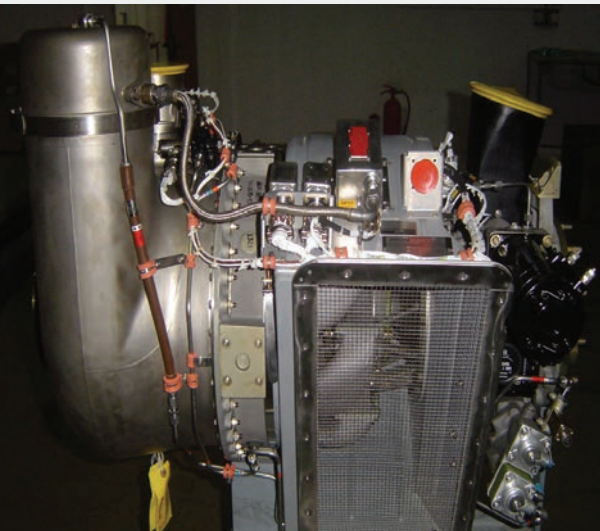
## OVERVIEW

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.

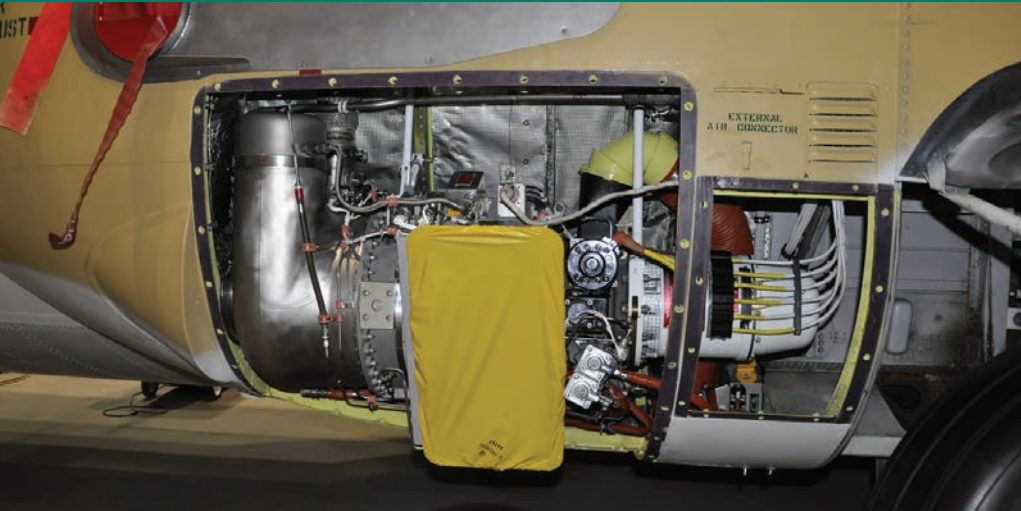


## BACKGROUND

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, its pneumatic power production degrades and ultimately reaches a point where it can no longer start the engines independent 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 its 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 BUSES | ESSENTIAL AND MAIN AC BUSES AND ALL DC BUSES |

## 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

