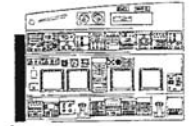
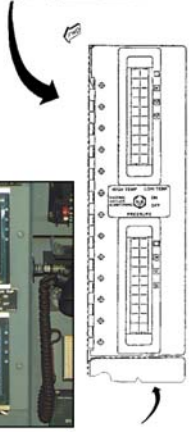
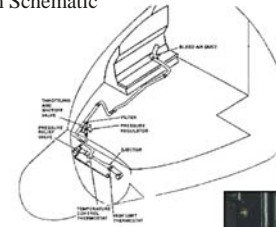


LUM Defrosts MC-130H Anti-Icing System

Designed TCTO to Cor

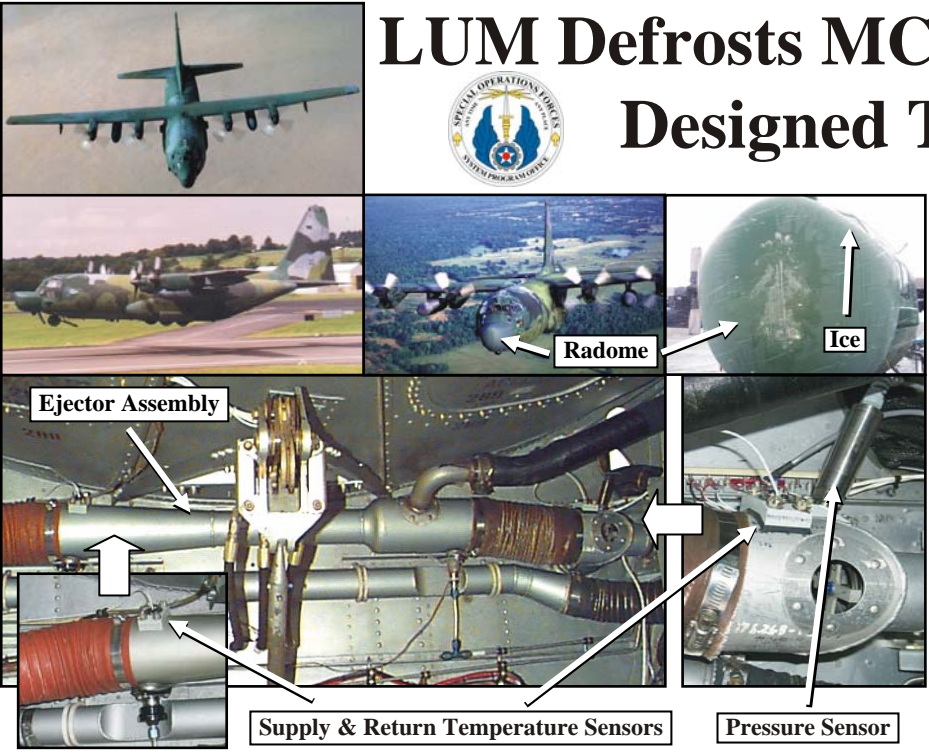


Anti-Icing System Schematic



Navigator's Monitoring Indicators

Nose Wheel Well Ejector Assembly



Radome

Ice

Ejector Assembly

Supply & Return Temperature Sensors

Pressure Sensor

Problem:

- MC-130H Combat Talon II (CT II) Nose Radome Anti-Icing System had history of inadequate anti-icing. Limiting mission capability during certain atmospheric conditions.

Solution:

- Modified Radome Anti-Icing System to provide more efficient radome heating by changing internal air temperature and pressure.
 - Hardware modifications involved replacement of Ejector Nozzle, Pressure Relief Valve, and Bleed Air Control Thermostats
- Added Radome Anti-Icing Monitoring System at Navigator's station for monitoring airflow through radome.
 - Monitoring System includes:
 - Radome Supply and Return Temperature Sensors.
 - Radome Pressure Sensor
 - Two programmable Light Emitting Diode (LED) monitors:
 - Displays internal radome temperature and pressure data.
 - Visually alerts navigator, if preset thresholds are exceeded.
 - Data display is Night Vision Imaging System (NVIS) compatible.

Return on Investment:

- \$200K Sustaining Engineering (583) investment solution eliminated Anti-Icing deficiency. Improves safety of flight. "Any Time Any Place"

