



The AAE Control Panel, P/N TFC12-0085-1, monitors and operates both the Detection and Extinguishing functions of the AAE Engine Fire Protection System. The control panel is TSO'd per TSO C1C and it meets the applicable environmental qualifications of RTCA/DO-160D.

Its legends are powered by 5 VAC and can be dimmed using the plane's dimming circuits. The Engine FPS can be tested at any time by pressing the TEST button on the control panels at each pilot

station. When the TEST button is pressed, the FPS's detection circuit is tested for continuity.

When the FIRE indication is flashing, the green ARMED LED's for the FUEL SOV and the EXTINGUISHER are illuminated and the legends in the switches are ON. When accomplishing a test, the aural warning can be silenced by pressing the FPS control panel's SILENCE WARNING push button or by the plane's external warning silence switch at each crew station. When the test sequence is complete, the TEST button should be released and all indications on the control panel will be OFF.

A FIRE warning is indicated by a steady red FIRE LED and illuminating the green LED below the FUEL SOV switch indicating it is ARMED. Pressing the FUEL SOV switch, when ARMED causes (1) the FPS to close the FUEL SOV and (2) starts an 8-second timer. After 8 seconds, the squib on the FPS's Extinguisher Bottle is fired and the bottle is discharged to the aircraft's engine compartment.

SPECIFICATIONS:

Dimensions (L x W x H)	5.71 x 5.74 x 2.6 "
Weight	one (1) lb.
Certification	TSO C1C
Power requirements (internal lamps for panel's legends)	5 VAC (max)
Operating Temperature	-20°C to +70°C
Storage Temperature	-20°C to +70°C

ENVIRONMENTAL QUALIFICATIONS:

The following list describes the Conditions & Paragraph # of Conducted Tests per RTCA/DO-160D

- TEMPERATURE & ALTITUDE 4.0 EQUIPMENT TESTED TO CATEGORY A2D1
- GROUND SURVIVAL LOW TEMP 4.5.1 -55 DEGREES CELSIUS
- OPERATING LOW TEMP 4.5.1 -20 DEGREES CELSIUS
- GROUND SURVIVAL HIGH TEMP 4.5.2 +85 DEGREES CELSIUS
- OPERATING HIGH TEMP 4.5.3 +70 DEGREES CELSIUS
- IN-FLIGHT LOSS OF COOLING 4.5.4 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- ALTITUDE 4.6.1 50,000 FEET
- DECOMPRESSION 4.6.2 8,000 TO 50,000 FEET

- OVERPRESSURE 4.6.3 -15,000 FEET
- TEMPERATURE VARIATION 5.0 EQUIPMENT TESTED TO CATEGORY B
- HUMIDITY 6.0 EQUIPMENT TESTED TO CATEGORY A
- SHOCK 7.0 EQUIPMENT TESTED TO CATEGORY B
- OPERATIONAL 7.2 6 Gs, 11 ms
- CRASH SAFETY 7.3 20 G aircraft type 4, (all fixed wing) sustained
- VIBRATION 8.0 EQUIPMENT TESTED WITHOUT SHOCK MOUNTS TO CATEGORY R2 test curves B2&B12
- EXPLOSION PROOFNESS 9.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- WATERPROOFNESS 10.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- FLUIDS SUSCEPTIBILITY 11.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- SAND& DUST 12.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- FUNGUS 13.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- SALT SPRAY 14.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- MAGNETIC EFFECT 15.0 EQUIPMENT TESTED AS CLASS Z
- POWER INPUT 16.0 EQUIPMENT TESTED TO CATEGORY A
- VOLTAGE SPIKE 17.0 EQUIPMENT TESTED TO CATEGORY A CONDUCTED
- AUDIO FREQUENCY 18.0 EQUIPMENT TESTED TO CATEGORY Z CONDUCTED SUSCEPTIBILITY
- INDUCED SIGNAL 19.0 EQUIPMENT TESTED TO CATEGORY Z SUSCEPTIBILITY
- RADIO FREQUENCY 20.0 EQUIPMENT TESTED TO CATEGORY R,R,R SUSCEPTIBILITY
- RADIO FREQUENCY 21.0 EQUIPMENT TESTED TO CATEGORY M EMISSION
- LIGHTNING TRANSIENT 22.0 EQUIPMENT TESTED TO CATEGORY XXC3 SUSCEPTIBILITY
- DIRECT LIGHTNING EFFECTS 23.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- ICING 24.0 EQUIPMENT IDENTIFIED AS 'X', NO TEST REQUIRED
- ELECTROSTATIC 25.0 EQUIPMENT TESTED TO CATEGORY A
- DISCHARGE (ESD)