

# ALSF-2/SSALR

Dual Mode High Intensity Approach Lighting System  
With Sequenced Flashers



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### SYSTEM DESCRIPTION

The ALSF-2/SSALR system is a Dual Mode High Intensity Approach Lighting System providing visual approach lighting patterns for landing aircraft on Category II and Category III runways. The system operates in two modes: a High Intensity Approach Lighting System with Sequenced Flashing Lights (ALSF-2), and a Simplified Short Approach Lighting System with Runway Alignment Indicator Lights (SSALR). The system can be installed in the full 3,000-foot lighting patterns (in compliance with the requirements of glide slope angle restrictions) or in the shorter 2,400-foot lighting patterns. The system can be either controlled locally from the substation using the Control & Monitor (CM) or remotely from the Air Traffic Control Tower (ATCT) using the Remote Control Panel (RCP), or from the FAA regional centers through the Remote Monitoring Subsystem (RMS).

The steady burning approach lights are configured in five lighting loops controlled by dry-type Constant Current Regulators (CCRs). The mode and intensity of the Sequenced Flashing Lights are automatically selected based on the mode and brightness level of the steady burning approach lights. The system meets all of the lamp monitoring and failure reporting requirements of the latest ALSF-2/SSALR specification FAA-E-2689a Amendment 2.1.1. The NBP ALSF-2/SSALR system includes a Remote Monitoring Subsystem (RMS) that monitors the system status and provides diagnostic capabilities for the entire system. The RMS includes a remote Maintenance Processor Subsystem (MPS) interface.

### SYSTEM OPERATIONAL SPECIFICATIONS

#### ALSF-2 MODE

- △ 300 or 500 watt PAR-56 lamps

#### Steady Burning Approach Lights

- △ 277 steady burning lights in the 3,000 foot configuration
- △ 247 steady burning lights in the 2,400 foot configuration

#### Sequenced Flashing Lights

- △ 21 active flashers in the 3,000 foot configuration
- △ 15 active flashers in the 2,400 foot configuration
- △ Each unit flashes twice per second
- △ Time interval between flashes of a single sequence is 16.67 milliseconds

#### SSALR MODE

- △ 300 or 500 watt PAR-56 lamps
- △ 63 steady burning lights
- △ Sequenced Flashing Lights
- △ 8 active flashers in the 3,000 foot configuration
- △ 5 active flashers in the 2,400 foot configuration
- △ Each unit flashes twice per second
- △ Time interval between flashes of a single sequence is 33.33 milliseconds

#### RMS

- △ Meets the requirements of NAS-MD-790A and NAS-MD-793

### SYSTEM ENVIRONMENTAL SPECIFICATIONS

#### Indoor Equipment

- Temperature: -10 to +50 degrees Centigrade
- Relative Humidity: Up to 95%
- Altitude: Sea Level to 10,000 feet
- EMI: MIL-STD-461 (CEO3 and REO2)

#### Outdoor Equipment

- Temperature: -55 to +70 degrees Centigrade
- Relative Humidity: Up to 95%
- Altitude: Sea Level to 10,000 feet
- EMI: MIL-STD-461 (CEO3 and REO2)

