

B/L: 131.80  
SYS: BALL/BAR  
LIGHTS AT SLS  
#2

OCT 20 1992

Critical Item: Adjustable Autotransformer (0 to 10A) (9 Items Total)

Find Number: AT3, AT4, AT5 (1 Each/Runway)

Criticality Category: 1 For Night, 3 For Day Landings

SAA No: 29SL02-008

System/Area: Visual Landing Aids at White  
Sands Space Harbor, New  
MexicoNASA  
Part No: NonePMN/  
Name: U72-1338-03  
Ball/Bar LightsMfg/  
Part No: Technipower  
W&LDrawing/  
Sheet No: 80K51890  
3

Function: Each adjustable autotransformer provides controlled voltage to one of the ball lights.

Critical Failure Mode/Failure Mode No: Fails short

FM No. 29SL02-008.010  
FM No. 29SL02-008.023  
FM No. 29SL02-008.036

Failure Cause: Structural failure/Contamination/Corrosion

Failure Effect: Fails short to ground: In line fuse will open resulting in loss of power to the three ball lights. Loss of ability to acquire and maintain the proper inner glideslope during Orbiter landing operations. Possible loss of life/vehicle.

Time to Effect: Immediate.

## ACCEPTANCE RATIONALE

Design:

Rated	Estimated Operating
Voltage = 120 to 120 volts	55.3 volts output
Current = 10 amps/13 amps max.	6.7 amps output

- Transformers are mounted in a rainproof NEMA 3R enclosure.

WORKSHEET

PAGE 6 OF 8

III - 74 01

ATTACHMENT 8050234A  
SHEET 6 OF 8  
FROM 85:58 85. 81 EE=

OCT 20 1992

**Test:**

- Meets requirements of MIL-STD-202, "Test Methods for Electronic and Electrical Components." Tested for vibration, shock dielectric withstand voltage and rotational life in accordance with MIL-STD-202.
- The OMRSD File VI and WSSH Pre-Mission Preparation Procedure requires verification of system setup and proper operation, prior to each Shuttle Launch and landing operations.

**Inspection:**

- The WSSH Preventive Maintenance Procedure requires that equipment is physically inspected and cleaned monthly.

**Failure History:**

- The PRACA database was researched and no failure data was found on this component in the critical failure mode.
- The GIDEP failure data interchange system was researched and no failure data was found on this component in the critical failure mode.

**Operational Use:****• Correcting Action:**

There is no action which can be taken to mitigate the failure effect.

**• Timeframe:**

Since no correcting action is available, timeframe does not apply.

ATTACHMENT 505D234AE  
SHEET 7 OF 8