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# 24 Volt Aviation Equipment Connector Polarity Standardisation

#### Introduction

Over the past few years a number of occurrences have occurred where State Aircraft Unit managed equipment has been plugged into 24 volt power outlets with incorrect polarity, ie. not as specified in contract documentation.

Through a number of debrief processes a common theme has emerged, that the current A+/B- Connector configuration does not align with helicopter industry standards.

Based on this feedback and a risk assessment, which indicated whilst the risk was low to for equipment damage to occur, lost time to rectify issues during operations was deemed to be high risk.

It has been determined that during Winter 2013 all SAU provided equipment will be modified to be B+/A- in line with aviation industry standards.

### **Aircraft Involved**

The following aircraft will be required to convert 24v electrical connections to B+/A-

- Type 2 State Fleet Helicopters
- Type 2 Call When Needed Helicopters
- Type 3 State Fleet Helicopters
- Type 3 Call When Needed Helicopters
- Light Fixed Wing Contract Aircraft

## **Project Timelines**

The project will begin in mid-August and conclude before equipment is released from maintenance for the Spring planned burning program.

It is expected that all State Fleet helicopters on Requirement 3 will be modified before the end of September.

# **BRIEFING NOTE**

Other State Fleet aircraft are to be modified before commencing 2013-14 Service Periods or prior to being engaged as a call when needed resource.

All relevant aircraft sockets (as specified in contract documentation) should be relabelled to B+/A-.

All State Aircraft Unit (SAU) managed equipment is to be converted prior to release from Winter maintenance. See the equipment list below for timelines.

# **SAU Equipment Involved**

The following SAU operated equipment will be converted.

- Wescam MX10 Systems (July 2013)
- FLIR 2000 Systems (July 2013)
- Polarity Test Equipment (Winter Service)
- Aerial Incendiary Machines (Winter Service)
- Aerial Drip Torch Units (Winter Service)

### **Identifying Converted Equipment**

To ensure that all equipment is compatible with the revised standard, a yellow sticker with B+/A- in black will be fitted to all compliant plugs and sockets.



Figure 1 .Approved Modified Plug and Socket

Aircraft and equipment without a yellow sticker should not be used and reported to the Airdesk.

### **Further Information**

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