# SUBJECT: BATTERY RELOCATION (P/N 350-700324 & 355-700324)

The existing nickel cadmium battery (15 Ah) is removed from the RH cargo compartment and a high capacity nickel cadmium battery (22 Ah) or a lead-acid battery (28 Ah) is installed in the tail boom. This eliminates or reduces the need for tail boom ballast and increases the usable volume in the RH cargo compartment.

#### **APPLICABILITY:**

This Flight Manual Supplement shall be used when the Battery Relocation is installed on the helicopter.

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| CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH |
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| JUN 2 8 2013   |
| APPROVED ADANIA  |
| CERTIFICATE NO. SH96-31 IRSUE NO. 9                          |

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#### **IMPORTANT NOTE**

THE INFORMATION AND DATA CONTAINED IN THIS DOCUMENT SUPERSEDE OR SUPPLEMENTS THAT CONTAINED IN THE BASIC APPROVED FLIGHT MANUAL FOR THE AS 350 & AS 355 HELICOPTER IN THOSE AREAS LISTED HEREIN. FOR LIMITATIONS, PROCEDURES AND PERFORMANCE NOT CONTAINED IN THIS DOCUMENT REFER TO THE APPROVED FLIGHT MANUAL AND OTHER APPLICABLE APPROVED FLIGHT MANUAL SUPPLEMENTS.

SECTIONS 2, 3, 4, AND 5 OF THIS DOCUMENT COMPRISE THE APPROVED FLIGHT MANUAL SUPPLEMENT. COMPLIANCE WITH SECTION 2, LIMITATIONS, IS MANDATORY.

SECTIONS 1 AND 6 ARE UNAPPROVED AND ARE PROVIDED FOR INFORMATION ONLY.

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| RELEASED BY:                              | P. Sharpe                     | 3rd July2013 | ECL ENGINEERING    |

## **RECORD OF REVISIONS**

| revision        | Description, Reason,<br>Changed Pages   | Prepared<br>(name<br>and date)  | Checked<br>(name<br>and date)   | App'd/Acc'd<br>(Civil A/W<br>Authority)<br>(name and date) | Released<br>(name<br>and date) |
|-----------------|---|---|---|--|--------------------------------|
| 1 through<br>12 | Original Issue  | D. Kerr<br>29 October 2012  | C. Timmins<br>29 October 2012   | TCCA<br>A. Pompei<br>9 November 2012                       | R. Manson<br>23 November 2012  |
| 1 through<br>12 | Text in placard revised<br>to encompass all<br>variants.<br>(Pages 7, 9 & 10) | See Page 1.   | See Page 1.   | See Page 1.  | See Page 1.                    |
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|                 |   |   |   |  |                                |
|                 |   |   |   |  |                                |
|                 | 12 1 through  | 1 through 12 Text in placard revised to encompass all variants. (Pages 7, 9 & 10) | 1 through 12 Text in placard revised to encompass all variants. (Pages 7, 9 & 10) | 12   | 12                             |

NOTE: Revisions to this document will be distributed to operators of this equipment by the STC holder.

NOTE: Revised portions of affected pages are identified by a vertical black line in the margin adjacent to the change.

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#### 1. GENERAL

The existing nickel cadmium battery (15 Ah) is removed from the RH cargo compartment and a high capacity nickel cadmium battery (22 Ah) or a lead-acid battery (28 Ah) is installed in the tail boom. This eliminates or reduces the need for tall boom ballast and increases the usable volume in the RH cargo compartment. The battery is mounted on a removable tray and is accessible through a cutout in the LH side of the tail boom skin between STN's A 1578 and A 2295. The cutout is locally reinforced by the addition of externally mounted sheet metal doublers. The battery can be accessed through a composite door attached to the tail boom with two hinges and secured with two latches. Refer to Figure 1 General Layout.

The nickel cadmium, Saft 2376 battery type comes with a temperature sensor. The lead-acid, Concorde battery, part number RG-390E is a sealed, valve regulated battery without a temperature sensor. Refer to Figure 2 Battery Location.

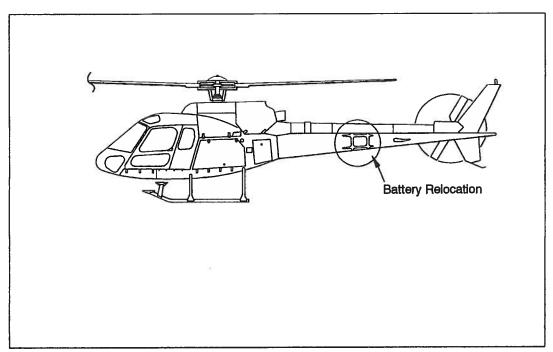


Figure 1 General Layout

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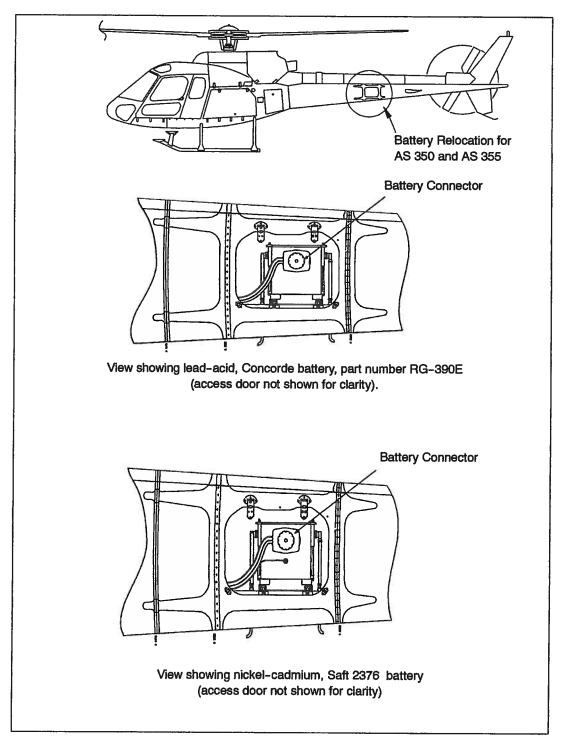


Figure 2 Battery Location

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# 1. **GENERAL** (continued)

# Abbreviations and Definitions

|              | T                               |
|--------------|---------------------------------|
| ABBREVIATION | DEFINITION                      |
| Ah           | Ampere Hour                     |
| A/W          | Airworthiness                   |
| AMM          | Aircraft Maintenance Manual     |
| EC           | Eurocopter France               |
| ECL          | Eurocopter Canada Limited       |
| kg           | kilogram                        |
| lb.          | pound                           |
| LH           | Left Hand                       |
| MDL          | Master Drawing List             |
| PAI          | Aircraft Certification Division |
| RH           | Right Hand                      |
| STC          | Supplemental Type Certificate   |
| STN's        | Stations                        |
| TCCA         | Transport Canada Civil Aviation |



#### 2. LIMITATIONS

#### a. Placards

There are three placards associated with the Battery Relocation.

1) Placard:

THE NICKEL CADMIUM
BATTERY HAS BEEN
REPLACED WITH A
CONCORDE VALVE
REGULATED SEALED
LEAD-ACID BATTERY.
THE BATTERY
TEMPERATURE
MONITORING
SYSTEM HAS BEEN
DEACTIVATED.

Location:

Located on the Instrument Panel in view of the pilot, only if

Lead-Acid battery is installed.

Refer to Figures 3 & 5 depending on aircraft type.

### 2) Placard:

THE NICKEL CADMIUM BATTERY HAS BEEN REPLACED WITH A CONCORDE VALVE REGULATED SEALED LEAD-ACID BATTERY. THE BATTERY TEMPERATURE MONITORING SYSTEM HAS BEEN DEACTIVATED.

Location:

Located on the Instrument Panel in view of the pilot, only if

Lead-Acid battery is installed.

Refer to Figure 3.

3) Placard:

BALLAST IN CABIN IS REQUIRED FOR
"PILOT ONLY OPERATION"
CHECK WEIGHT AND BALANCE BEFORE FLIGHT

WITH BATTERY RELOCATION (350-700324, 355-700324) INCREASE MAX. LOAD IN RH HOLD BY 20 kg (44 lb)

Location:

Located on the Instrument Panel in view of the pilot.

Refer to Figures 4 & 5 depending on aircraft type.

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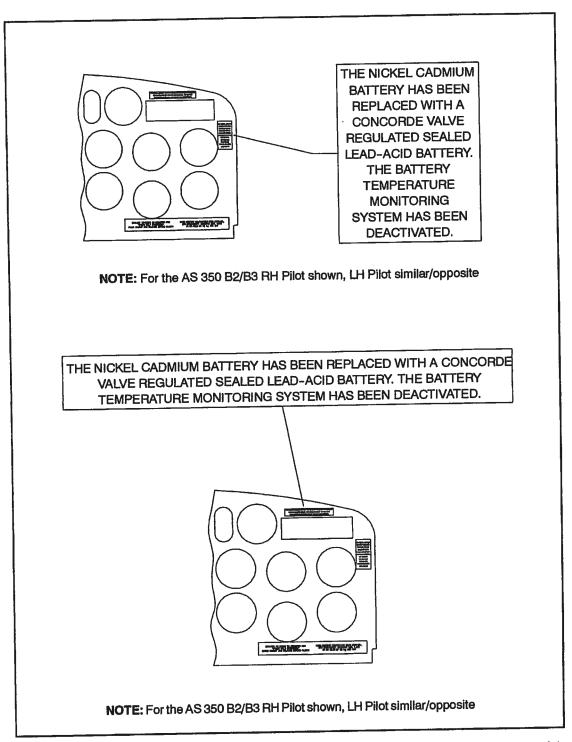


Figure 3 Placard locations typical for AS 350 Instrument Panel (Lead-Acid Battery only)
RH Pilot configuration

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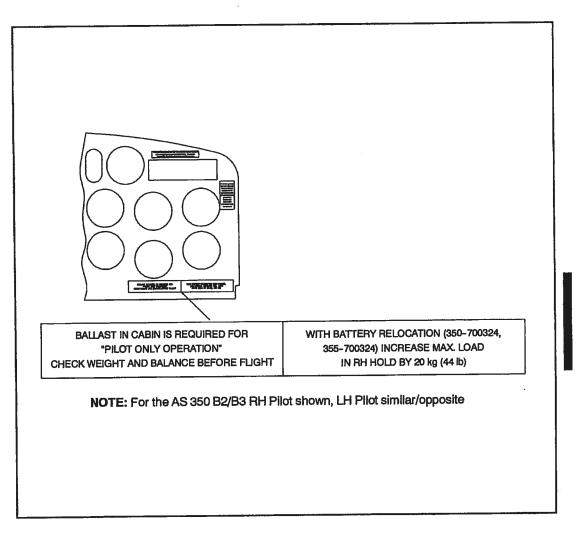


Figure 4 Placard locations typical for AS 350 Instrument Panel (RH Pilot configuration)

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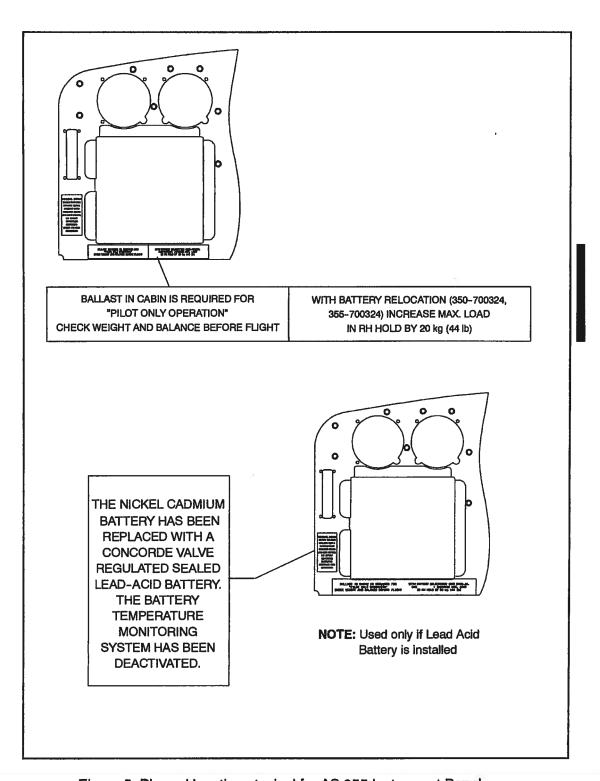


Figure 5 Placard locations typical for AS 355 Instrument Panel

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## 3. EMERGENCY AND MALFUNCTION PROCEDURES

No change to existing approved Flight Manual.

## 4. NORMAL PROCEDURES

**NOTE** Open battery access door.

a. Before the first flight of each day

Battery connector (Figure 2)

- Secure

## 5. PERFORMANCE DATA

No change to existing approved Flight Manual.

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# 6. MASS AND BALANCE (removable Items) (unapproved)

Total changes to weight and balance resulting from this modification are covered in the applicable Instructions for Continued Airworthiness.

Items that are removed between routine operations: Not applicable

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