

#### SUBJECT: BATTERY RELOCATION (P/N 950-700324 & 955-700324)

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 tall boom. This eliminates or reduces the need for tall 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.

Department of Transport (Canada) Approved

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH
NOV 0 9 2012
APPROVED
CERTIFICATE NO. 5H 96-3

G. David Senior Engineer, Aircraft Certification Aircraft Certification (PAI) Ontario Region

#### 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 358 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 6 OF THIS DOCUMENT COMPRISE THE APPROVED FLIGHT MANUAL SUPPLEMENT. COMPLIANCE WITH SECTION 2, LIMITATIONS, IS MANDATORY.

SECTIONS 1 AND 8 ARE UNAPPROVED AND ARE PROVIDED FOR INFORMATION ONLY.

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# **RECORD OF REVISIONS**

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

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



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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 tail 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.

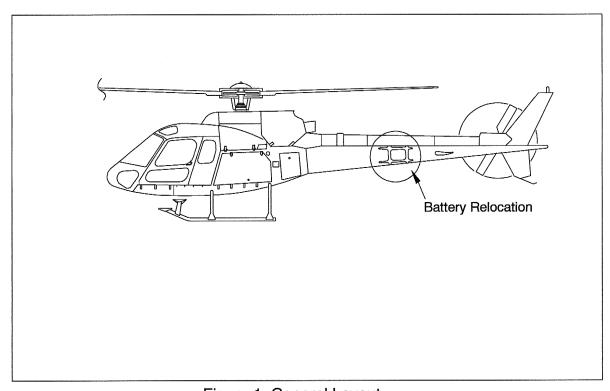


Figure 1 General Layout

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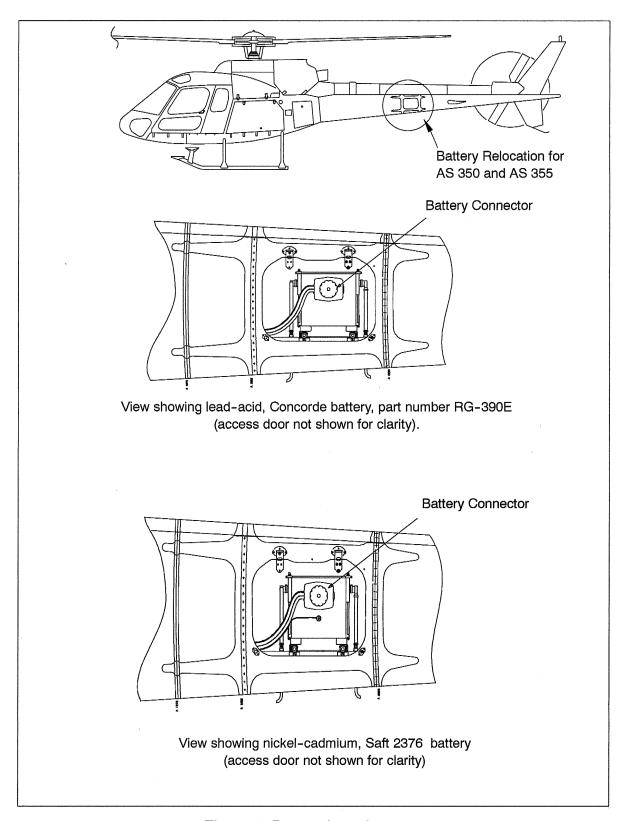


Figure 2 Battery Location

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# 1. **GENERAL** (continued)

## Abbreviations and Definitions

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

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#### 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 (STC SH96-31, STC SR00422NY) INCREASE MAX. LOAD IN RH HOLD BY 20 kg (44 b)

Location:

Located on the Instrument Panel in view of the pilot.

Refer to Figures 4 & 5 depending on aircraft type.

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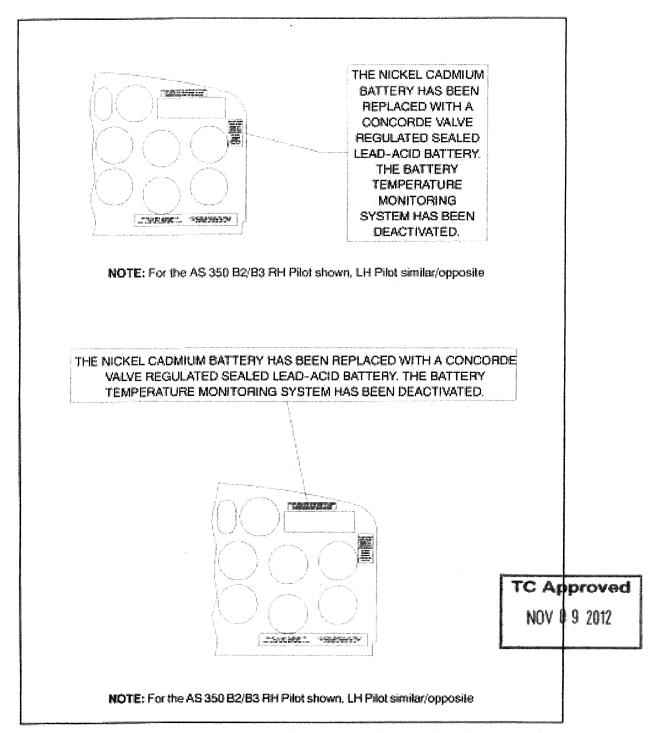


Figure 3 Placard locations typical for AS 350 Instrument Panel (Lead-Acid Battery only)
RH Pilot configuration

# AS 350 / AS 355

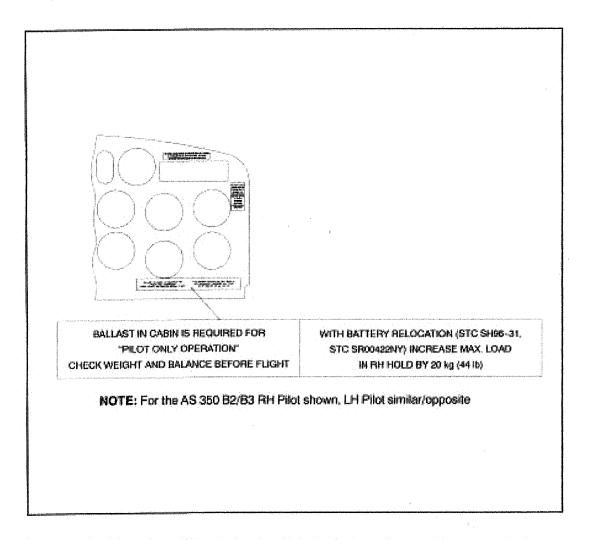


Figure 4 Placard locations typical for AS 350 Instrument Panel (RH Pilot configuration)

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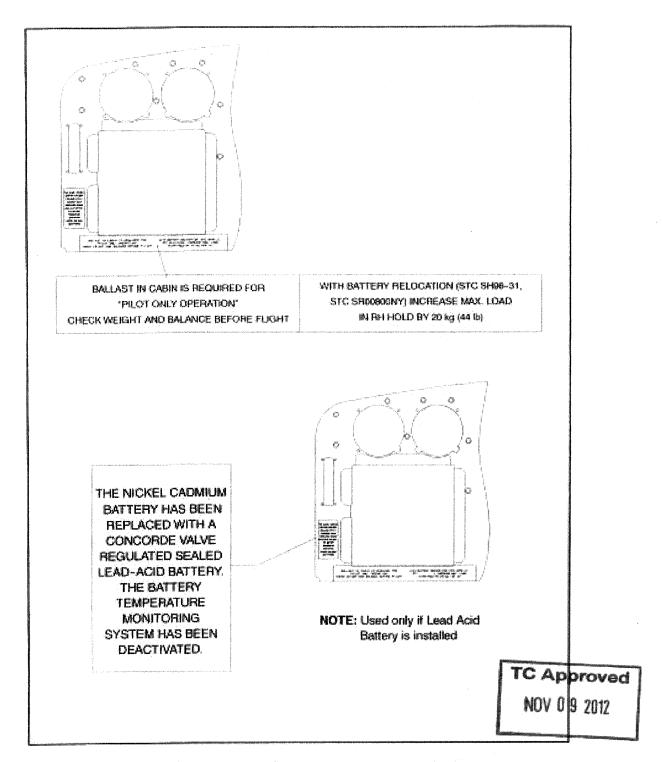


Figure 5 Placard locations typical for AS 355 Instrument Panel



# 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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