# ROTORCRAFT FLIGHT MANUAL SUPPLEMENT for **AS350 Series Helicopter**

Registration Num	ber:
Serial Number:	

This Electrical System Upgrade

installed in accordance with STC SH4747NM requires this supplement to be included in the FAA Approved Rotorcraft Flight Manual for the aircraft, only if any of the modifications shown in this Rotorcraft Flight Manual Supplement have been installed. The STC covers many modifications to the aircraft that are not listed in this supplement, and therefore do not require this supplement.

THIS ROTORCRAFT FLIGHT MANUAL SUPPLEMENT IS FOR AIRCRAFT WITHOUT THE P132, P148, or P149 **AVIONICS CONSOLES INSTALLED** 

This supplement only adds to the basic Rotorcraft Flight Manual. For limitations, normal procedures, emergency procedures and performance information not contained herein, consult the FAA Approved Rotorcraft Flight Manual.

FAA Approval: Shun Right for Manager,

Seattle Aircraft Certification Office

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# LOG OF REVISIONS

Rev. Level	Date	Description	
-	Jul 26, 1989	Initial Release	
Α	Jan 30, 1991	Added B2 Model	
В	Jun 30, 1993	Added BA Model	
С	Aug 4, 1995	Added Option 1 Enhanced Console (P132 Avionics Console)	
D	Mar 3, 1999	Updated details.	
Е	Apr 20, 2000	Deleted unnecessary figures, and added general information.	
F	Jan 10, 2003	Added P122 Console	
G	Jan. 9, 2004	Removed P132 Console references	
Н	Jan. 15, 2004	Added "Rotorcraft" before "flight manual"	
J	10/12/07	Adds section 3.9 for Master Cutoff switch and 3.11 for the Direct Battery Switch; updates section 3.3, 3.5, and 3.7 Removed section 6 Figures	
K	9/25/08	Revised color coding of switches in 3.3; removed 4.2 for resetting circuitbreakers	
L	7/17/09	Added Section 3.12 for P122 dimmer control	
M	10/26/10	Added Section 4.2 for Generator Reset function	
N	2/10/11	Added Section 3.13 for Float Arm switch and 4.3 for the Float Inflate switch.	

# Note:

The approval for the revision is implemented by the FAA Approval signature on the cover page.

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# 1. GENERAL INFORMATION

- 1.1. The electrical system in this rotorcraft has been modified by changing fuses to circuit breakers, and push button switches to toggle switches, as well as various other optional changes.
- 1.2. An optional instrument light modification replaces the factory instrument panel lighting with post lighting for the instruments. An optional Auxiliary Circuit Breaker Panel provides space in front of the pilot for switches and circuit breakers.
- 1.3. Some of the circuits have been wired differently from the factory original wiring, although the functional operation is unchanged. Refer to the installation documents when performing electrical maintenance on this aircraft.

#### 2. LIMITATIONS

No Limitations

## 3. NORMAL PROCEDURES

- 3.1. Push button switches on the console switch panel have been replaced with toggle switches. When a procedure calls for the "pushed" position for a switch, move the correct toggle switch to the ON position. For most switches, the ON position is toward the nose of the aircraft, or toward the ceiling if mounted on a vertical panel. Some switches may be a center-off type of switch with two on positions.
- 3.2. For a center-off type of switch, the label will designate the action performed in each non-center position. For example, the anti-collision light switch is normally a center-off switch.

  The label: ANTI-COL ALL / TAIL indicates that the up position turns on all strobe lights attached to this switch, and the down position turns on only the tail strobe light. When you see the slash character think of it this way: UP / DOWN.
- 3.3. The HYDRAULIC TEST (or HYD or ACCU TEST) and MASTER CUTOFF switches are locking toggle style. Some of the remaining switches may optionally be locking toggle or normal toggle type switches. For locking toggle type switches, pull out on the toggle while moving it to disengage the locking feature. The MASTER CUTOFF switch, and no other, is color coded RED. The HYDRAULIC TEST switch, and no other, is color coded YELLOW. Other switch toggles may optionally be color coded using colors other than red or yellow to help identify the switch.

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- 3.4. If the WARN / FIRE TEST switch is a center-off type of switch, then move the switch toggle in the up direction to test all of the Caution Panel warning lights, and move the switch toggle in the down direction to test the Fire Warning System.
- 3.5. Most of the switch and circuit breaker locations are optional and will vary from aircraft to aircraft. Be sure to familiarize yourself with the arrangement of switches and circuit breakers in this particular aircraft.
- 3.6. Fuses have been replaced by circuit breakers. The circuit breaker plunger can be pulled out to the OFF position. The plunger will "pop" out if the corresponding circuit is over-loaded. The circuit breaker can be reset by pushing in the plunger.
- 3.7. Circuit breakers may be located on the P122 Console, the optional Auxiliary Circuit Breaker Panel, inside the Master Electrical Box, and are marked to identify the associated circuit.
- 3.8. The typical installation contains circuit breakers and switches for functions that may not be applicable to this particular aircraft. The non-applicable circuit breakers and switches may be re-labeled and wired for another function at the discretion of the installer, or they may be left uninstalled, otherwise they must be labeled to indicate that they are not used.

- 3.9. Aircraft that are post-mod 350A07-3273 are factory equipped with an Emergency Switch mounted on the instrument panel. Pre-mod aircraft are factory equipped with a Master switch in the factory console. In either case, this switch has been removed and replaced with the MASTER CUTOFF switch on the console.
- 3.10. Leaving the MASTER CUTOFF switch in the cutoff position (toggle toward the nose) provides power to certain devices, which will cause the battery to run down if this switch is left in the cutoff position when the aircraft is parked, regardless of the position of the BAT-EXT POWER switch.
- 3.11. If the aircraft is equipped with a Direct Battery Bus, leaving the DIRECT BATTERY switch in the ON position (toggle toward the nose) provides power to certain devices, which will cause the battery to run down if this switch is left in the ON position when the aircraft is parked, regardless of the position of the BAT-EXT POWER switch.
- 3.12. For the P122 Switch Console, the switch legends are illuminated. Dimmer control for the legends is controlled by the rotary knob located on either the top of the console in the lower switch row or on the console aft wall. Turning the knob clockwise increases the brightness for the legends.

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3.13. For consoles equipped with a FLOAT ARM switch: Prior to takeoff over water, first check the FLOAT INFLATE switch to make sure it is OFF and covered. Next, ensure that the FLOAT ARM switch is in the armed position. Verify that the two FLOAT ARM amber indicator lights are illuminated.

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## 4. EMERGENCY PROCEDURES

- 4.1. Moving the MASTER CUTOFF switch toward the aircraft nose disconnects most electrical power to aircraft equipment. The ROTOR TACH and the Pilot's overhead floodlights continue to receive power when the MASTER CUTOFF switch is in the cutoff position. Any installed equipment that is connected directly to the battery will continue to have power as well.
- 4.2. To engage the Generator Reset function, move the toggle of the GENERATOR ON / RESET switch to the aft position and hold in place for 2 seconds. Also, there is no GENE or GENE RST breaker on the P122 console; its function is handled by the CRANK breaker, located on the right side of the P122 console.
- 4.3. For consoles equipped with a FLOAT ARM switch: The FLOAT INFLATE switch is located on the cyclic stick mounted to the tube below the grip. To activate the switch, open up the cover and flip the toggle. Refer to the float manufacturer's RFMS for procedures on inflating the floats.

#### 5. PERFORMANCE

No change to basic Rotorcraft Flight Manual.

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