ROTORCRAFT
FLIGHT MANUAL SUPPLEMENT
for
Eurocopter
EC135 Series
Helicopters

Registration Number:_____

Serial Number: _____

The Geneva Aviation **P139-HD Digital Audio System** installed in accordance with **STC SR00521SE** requires this supplement to be included in the FAA Approved Rotorcraft Flight Manual for the aircraft.

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: _____
Manager,
for Seattle Aircraft Certification Office

LOG OF REVISIONS

Rev. Level	Date	Description
-	5/16/2012	Initial Release
A	6/13/2013	Added Detail. Removed EC145 from this RFMS

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

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. This aircraft has the Geneva Aviation P139HD Digital Audio System installed. This audio system controls the Intercom System (ICS) and the transmit/receive audio sources to and from the radios.

1.2. The audio system uses serial data control panels linked to a centralized Router unit to which each radio source is connected.

2. LIMITATIONS

No Limitations

3. NORMAL PROCEDURES

3.1. Power to the Audio System is supplied by two circuit breakers, AUD 1 and AUD 2. One is located on Essential Bus #1 and the second is located on Essential Bus #2. These Buses are controlled by the aircraft's standard systems for these Buses.

3.2. Control Panel operation:

   3.2.1. The rotary knob for each channel adjusts the volume level for that channel. Rotating the knob CCW decreases the volume.

   3.2.2. Depressing the rotary knob and allowing it to pop out enables the channel. Depressing the rotary knob into the locked position disables the audio channel.

   3.2.3. Depressing the button below each rotary knob toggles selection of a particular audio channel as the active transmitter. This audio channel will also be heard, whether or not the rotary knob is in the out (ON) position or the in (OFF) position. The associated LED is illuminated to indicate when a channel has been selected as the active transmitter.

3.2.4. A transmitter audio channel can be de-selected by selecting another transmitter or by pressing the button a second time. The LED associated with the channel will go out.

3.2.5. To activate the intercom system, press the ICS rotary knob so it pops out to the (ON) position. The earphone audio is controlled by the rotary knob; the microphone is energized by depressing the ICS key switch. For the pilot this means depressing the cyclic trigger to the first detent, for the copilot it can be either the cyclic trigger or foot switch. Additionally, the ICS / TX switch on the G13115 or G13116 audio control panels may be used. Forward (up) is ICS Key, Aft (down) is TX Key. For the passengers, a headset adapter cable with switches, or the VOX knob on the passenger audio control panel may be turned fully CW for "Hot Mic". For non-shared audio panels such as the pilot and co-pilot panels, "Hot Mic" is achieved by rotating the VOX knob fully CW. To Disable VOX turn knob fully CCW. After adjusting, the rotary knob may be depressed to prevent nudging if desired. Depressing this knob will not defeat the VOX function.

3.3. For the pilot and co-pilot locations, the second detent of the cyclic trigger switch always keys the #1 VHF Comm Radio in the pilot's location and #2 VHF Comm Radio in the co-pilot's location regardless of the audio panel selection.

3.4. For the pilot and co-pilots locations, a cyclic switch is dedicated for Audio Panel Transmit. This switch will key the radio selected on the audio panel. Familiarize yourself with the locations of the switches as this location on the cyclic will change dependent on the configuration of the system installed in the rotorcraft. In the co-pilots location, an optional foot switch may have been installed for this function as well.

3.5. For passengers, the selected transmitter keying is accomplished with the appropriate push button switch on the headset adapter cable.

3.6.   Setting Volume Levels: If volume levels are not set correctly, audio crosstalk and distortion may result.

3.6.1.   To set volume levels correctly:
a.   Permanently adjust headset volume controls to maximum loudness.
b.   Set the audio panels volume controls to midrange. Verify that the Master Volume control is centered as well.
c.   Adjust audio source (radio, etc.) to a comfortable level.
d.   Use audio panel controls for adjusting listener's volume.
e.   Please note that the Master Volume Control increases or decreases the audio level for all audio sources on the panel with the exception of the ICS Volume.

3.6.2.   Crosstalk and distortion are the result of the audio source (radio, etc.) volume being excessive. This is normally a result of the headset volume control being turned down and/or the audio panel volumes being turned down, and the radio volume being up too loud.

4. EMERGENCY PROCEDURES

4.1. In the event of a complete of failure of the audio system, the pilot's mic and ear phone will automatically be connected directly to the #1 VHF Comm Radio. The co-pilot's mic and ear phone will automatically be connected directly to the #2 VHF Comm Radio. Keying the transmitter is accomplished by depressing the trigger switch to the second detent as always in both the pilot and co-pilot locations. Volume control is possible using the volume control on the radio itself. All other audio functions for all users will be inoperable with the exception of ICS between the pilot and co-pilot. Keyed ICS between the pilot and co-pilot will remain active as long as power is present through either the AUD 1 or AUD 2 circuit breakers. No volume or VOX control is possible for the ICS under this condition and is a fixed level. All aircraft audio alert tones will be heard in all emergency and isolated modes at the pilot and co-pilot locations.

4.2. In the event of a loss of power to the audio system, the pilot's mic and ear phone will automatically be connected directly to the #1 VHF Comm Radio. The co-pilot's mic and ear phone will automatically be connected directly to the #2 VHF Comm Radio. Keying the transmitter is accomplished by depressing the trigger switch to the second detent as always in both the pilot and co-pilot locations. Receive audio for #1 VHF and #2 VHF Comm Radios will only be adjustable at the radio itself. All other audio functions for all users will be inoperable. All aircraft audio alert tones will be heard in all emergency and isolated modes at the pilot and co-pilot locations.

4.3. In the event of a malfunctioning audio system, the pilot's EMERG / NORMAL switch is located on both G13115 and G13116 type control panels, when placed in EMERG (Emergency) position, it will connect the pilot exclusively to #1 VHF Comm radio with the only effect to other occupants being the elimination of #1 VHF Comm radio access and the pilot's ICS audio between the pilot and other occupants. All aircraft audio alert tones will be heard in the EMERG (Emergency) mode at the pilot and co-pilot locations.

4.4. In the event of a malfunctioning audio system, the co-pilot's EMERG / NORMAL switch is located on both G13115 and G13116 type control panels, when placed in EMERG (Emergency) position, it will connect the co-pilot exclusively to #2 VHF Comm radio with the only effect to other occupants being the elimination of #2 VHF Comm radio access and the co-pilot's ICS audio between the co-pilot and other occupants. All aircraft audio alert tones will be heard in the EMERG (Emergency) mode at the pilot and co-pilot locations.

4.5. In the event of generator failure or for any other reason that the electrical load must be reduced. The system is connected to the Essential Buss #1 and Essential Buss #2 and can be deactivated by pulling the AUD 1 and AUD 2 circuit breakers located on the overhead console. Pulling both circuit breakers will result in the pilot being isolated to the #1 VHF Comm Radio and the co-pilot being isolated to the #2 VHF Comm Radio automatically with no further action. No other audio system functions will be operable.

5.   PERFORMANCE

No change to basic Rotorcraft Flight Manual.