## Chief Pilot – Execuflight

Directions: Please answer the questions below, preferably typing in Microsoft Word. You can email the document back to me. Any questions about this document should be addressed to [redacted] NTSB/RE-40, [redacted]

1. Confirm your name, title, and function at Execuflight.

   [redacted], Chief Pilot at Execuflight Inc.

2. For the Hawker involved in the accident, please show all CVR checklist-related items that are the responsibility of pilots.

   Please see attached items # 1 & 2

3. For each checklist item, please explain what the pilot is supposed to do and what is a pass or fail.

   To perform a Pre-flight Functional check, push and hold the remote green "TEST" switch for a minimum of five seconds. The green test "OK" annunciator will remain illuminated until the button is released. This would be considered a Pass.

   If the test annunciator does not illuminate within 6 seconds it would then constitute a Fail.

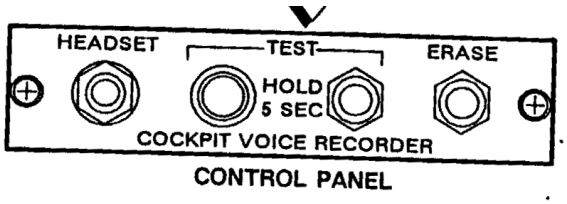
4. How did you develop these procedures?

   These procedures were developed in accordance with CVR manufacturer's checklist. Please see attached items # 1 & 2

5. Can you show me where in your company documents and/or training documents the pilots are instructed how to test the CVR (and comply with the checklist)?

   Please see attached items # 1 & 2

6. Have you ever "plugged in" to the headset jack on the CVR and listened as a test?




Yes.

7. If answer to #5 is yes, what do you believe you were listening to (for example, the ambient microphone, or the playback of the instant recording)?

   Playback of the instant recording.

8. As a pilot, under what circumstances would you consider a CVR inoperative?

   As a pilot, I would consider the CVR inoperative if the test of the CVR is unsatisfactory.

9. What actions would you take to write-up &/or defer (MEL) the CVR?

   With an inoperative CVR, the pilot will write it up on the flight log, then email or fax to the maintenance department to see if the repairs can be made at that time, or be allowed to deferrer in accordance with the MEL while under the guidance from the maintenance department.

10. In your piloting career have you ever personally dealt with an inoperative CVR? If so, please describe briefly.

    Yes, with a previous operation I worked for in the past. The INOP CVR was written up and under guidance of the Director of Maintenance, was sent out for repair.

11. As a chief pilot in a management capacity, have you ever personally dealt with a crew inquiry about an inoperative or suspect CVR? If so, please describe briefly.

    I, personally, have not had to deal with a crew inquiry about an inoperative or suspect CVR since

I have held the chief pilot position.

12. Any other thoughts or concerns related to the CVR from N237WR?

    My concern was of the poor audio quality I heard during my participation in the CVR review in Washington. I was expecting the audio to be of a better quality.

The NTSB plans on entering this document into the public record. Please confirm you understand this document may be entered in the public record.

13. I understand this document will be entered into the public record.

    Yes, I understand.

PF.....Pilot flying. Pilot Flying. The pilot responsible for controlling the airplane. Performs tasks and responds to checklist challengers.
PM .....Pilot Monitoring. Reads checklist challenges.
(BOTH)....PF and PM both perform the task and respond to the challenge.
LH.....Left Hand task that can be completed from left hand seat only.
RH .....Right Hand task that can be completed from right hand seat only.

## BEFORE STARTING ENGINES CHECK

| PM | PF |
|---|---|
| Landing Gear Handle | DOWN |
| Emergency U/C Handle | IN |
| Emergency Gyro/Battery | CHECKED |
| Battery Voltage | CHECKED |
| Battery Switch | ON |
| Fuel Quantity | CHECKED |
| Emergency U/C Pump Handle | LOCKED |
| APU | STARTED |
| Bus Tie | CLOSED |
| Inverters | CHECKED/ON |
| Rear Bulkheads | CHECKED |
| Side Panels | CHECKED |
| Pedestal | CHECKED |
| Flight Instrument Panels | CHECKED |
| Center Instrument Panel | CHECKED |
| Pressurization | SET |
| Radios/Radar | ON/STBY |
| FMS NAVAIDS and V Bars | SET |
| TCAS / GPWS | TEST |
| Landing and Taxi Lights | OFF |
| Fire Warning Panel | CHECKED |
| Overhead Panel | CHECKED |
| Landing Lights | OFF |
| Windshield Wipers | OFF |
| Main Air Valves | CLOSED |
| Flight Deck Heat | CLOSED |
| Cabin Temperature | AUTO/SET |
| Pressurization O/Ride Switch | AUTO |
| Cabin Fan | OFF |
| Flood Flow | AS REQUIRED |
| Cockpit Fan | AS REQUIRED |
| Engine Synchronizer | OFF |
| Engine Computers | AUTO |
| Ignition | OFF |
| Engine Anti-Ice | OFF |
| Ice Detector | AUTO |
| Test Panel | CHECK ALL SYSTEMS |
| Pitot Heat | OFF |
| Windshield Alt/Heat | OFF |
| Interior Lights | SET |
| Emergency Lights | ARMED |
| Cockpit Voice Recorder | TESTED |

D. *An aural check of the self-test 640 Hz tone and recorder channel switching should be accomplished by inserting a 600 Ohm headset into the remote "HEADSET" or GA150 Control Unit "HEADSET" jack. To test the operation of the cockpit area microphone, speak in a normal voice 6" away from the mirophone, and listen for undistorted reproduction of speech after an approximate 1/2 second delay. This test assures that the cockpit area microphone is operating.*

E. *Verify that the following microphone inputs are recorded on their appropriate CVR channels, regardless of Audio Control Panel mode or audio (communications radio) selection, for Cockpit Voice Recorder installations within aircraft or rotorcraft intended for service within the National Airspace Systems:*

*CHANNEL 1: Third Crewmember Station or Public Address Systems.*

*CHANNEL 2: Primary Co-Pilot's Boom, Mask, and Hand Microphone Input.*

*CHANNEL 3: Primary Pilot's Boom, Mask, and Hand Microphone Input.*

*CHANNEL 4: Cockpit Mounted Area Microphone.*

F. *The Bulk Erase function can occur only when the aircraft is resting on its landing gear. After depressing the bulk erase button (must be pushed in and held for a minimum of 2 seconds), verify function by listening for loud 400 Hz tone through the "HEADSET" jack. Tone duration: approximately 5-12 seconds.*

G. *Test the Automatic Shutdown function, if connected, by the following method: Allow the Cockpit Voice Recorder to operate while the aircraft engine(s) are shut down. Within a period of 8 to 10 minutes, the recorder delayed shutdown feature will stop the CVR from operating. The remote green "TEST" switch or the "TEST" push-button on the Control Unit must not be depressed during this test to avoid resetting the recorder shutdown timer.*

H. *To verify the shutdown of the CVR, speak into the cockpit area microphone and note the absence of audio output from the test "HEADSET" jack.*

## *3.0 OPERATION TESTS*

## *3.1 PRE-FLIGHT FUNCTIONAL CHECK*

*The Pre-flight Functional Check is used to assure the operator that the equipment is serviceable. Therefore, it is to be performed before every flight or*

*whenever maintenance has been performed on the aircraft or rotorcraft which may have affected the performance of the Cockpit Voice Recorder or its associated Audio System interface, accessories, or components..*

*To conduct the Pre-flight Functional Check, push and hold the remote green "TEST" switch or "TEST" switch on the Control Unit for a minimum of five seconds. The green test "OK" annunciator will remain illuminated until the button is released. If the test annunciator does not illuminate within 6 seconds, the recorder must be removed from the aircraft for servicing.*

## *3.2 COMPLETE AUDIO SYSTEM TEST*

*A test of the Cockpit Area Microphone can be accomplished with a 600 Ohm headset inserted into the remote "HEADSET" jack or into the "HEADSET" jack on the Control unit. Speak in a normal voice 6" away from the Cockpit Area Microphone, and determine audible clarity after approximately a 1/2 second delay without any significan distortion. This test ensures the Cockpit Area Microphone is operating.*

*A complete Audio System Interface test must be completed during each annual inspection or specified maintenance period on the aircraft or rotorcraft whenever unscheduled maintenance is performed on the aircraft or rotorcraft which may have effected the performance of the Cockpit Voice Recorder system. To accomplish this test, the Pilot's, Co-pilot's, Cockpit Area Microphone, and Third Crewmember or Public Address System inputs must be individually checked for their operational integrity with the Cockpit Voice Recorder. Upon satisfactory achievement of this test, an entry shall be made in the maintenace records of the aircraft or rotorcraft.*

## *4.0 INSTALLATION ACCEPTANCE BY FIELD APPROVAL METHOD*

*An applicant for Field Approval of a CVR installation must be properly certificated and appropriately rated, qualified, and equipped to accomplish the installation and approve the aircraft or rotorcraft for return-to-service. The CVR should be installed in accordance with the instructions and limitations contained within this Installation Manual.*

*Drawings and other information, such as structural related data to show the method of attachment of the CVR components to the airframe, wiring diagrams, appropriate weight and balance data, identification of all CVR system components used in the installation should be made available to the Inspector conducting the Field Approval.*

*The GA100 Instruction Manual containing Operating Instructions and System description must be made available to the inspector for review and evaluation of the CVR system.*