Cockpit Voice Recorder Intelligibility Analysis
Flight Test Procedures

Registration: _____ **Serial #:** _____

Model: _____ **Date:** _____

Important Note To Flight Crew

The procedures detailed in this report are intended to demonstrate that the CVR records the required information. Failure to follow each and every step carefully may result in Avmax Avionics being unable to determine if the airworthiness requirements are met, and therefore require the test flight to be repeated. To avoid this undesired situation, please read all test procedures completely before embarking on the test flight, and make sure that you understand exactly what actions need to be performed at each test point. If you are unsure of any procedures, contact the agency responsible for the CVR installation, or Avmax Avionics CVR personnel for clarification.

PLEASE NOTE:
Steps 5, 7 and 13 are frequently performed incorrectly. Pay special attention to these tests.
Certain test procedures may not apply to your aircraft. Indicate not applicable tests with 'N/A'.
The whole test **must not exceed 25 minutes**. The CVR circuit breaker(s) can be pulled between tests to help ensure this is met.

1. Pre-Start

a. The flight crew must be familiar with:
   1) Location of the CVR control unit and all of its functions.
   2) Location of the CVR circuit breaker(s).
   3) Method for turning "OFF" the intercom.
   4) Method for activating in flight the aural warnings listed in Step 17. OK _____

b. Perform CVR self-test and verify the CVR is operating properly. OK _____

c. Ensure that the following systems, if installed, are operable in the aircraft, as they will be required during the CVR test flight:
   1) VHF COMMs
   2) HF COMMs
   3) Audio System
   4) Interphone System
   5) Oxygen Mask Microphone
   6) Passenger Address System
   7) NAVs
   8) ADFs
   9) DMEs
   10) All required Cockpit Aural Warning System listed in Step 17. OK _____

2. Engine Start

a. Start the engine(s). For helicopters, call out rotor speed at 50%, 80%, and 100%. OK _____

3. Pre-flight

a. Ensure that flight deck windows are closed. OK _____

b. Select boom microphone and interphone “ON” at all crew stations. OK _____

c. Just prior to take-off for the flight test, have one of the crew make the following statement over the interphone:

"This is the beginning of the CVR test flight for aircraft..."

Aircraft Model No. _____

Aircraft Serial No. _____

Aircraft Registration: _____

Test Date: _____ OK _____

4. Take-Off

a. Announce V-Speeds.

b. Announce landing gear, flap selections, and propeller settings where applicable. OK _____

5. Area Microphone Test

a. After take-off and during climb out at high power settings, **turn the interphone “OFF”**. OK _____

b. The flight crew must raise their voices to be clearly understood by the other crewmember. OK _____

c. Speaking loud and make the following statements:

"This is the **Captain** performing the area microphone test, testing 1-2-3-4-5", OK _____
"This is the **First Officer** performing the area microphone test, testing 1-2-3-4-5". OK _____
"This is the **Flight Engineer** performing the area microphone test, testing 1-2-3-4-5". OK _____

d. Turn the interphone “ON”.

e. OK _____

6. Interphone Test

a. Communicate from each crew station using the interphone, speak:

"This is the interphone from the **Captain’s** station testing 1-2-3-4-5", OK _____
"This is the interphone from the **First Officer's** station testing 1-2-3-4-5". OK _____
"This is the interphone from the **Flight Engineer's** station testing 1-2-3-4-5". OK _____

7. Uninterrupted Audio Test – Boom Microphone

a. Turn the interphone “OFF” (i.e. no side-tone). OK _____

b. Speak into the **boom microphone**, this time without any transmitter or interphone keyed (no side-tone should be heard in the headsets).

"This is the uninterrupted audio test from the **Captain's** station testing 1-2-3-4-5", OK _____
"This is the uninterrupted audio test from the **First Officer's** station testing 1-2-3-4-5". OK _____
"This is the uninterrupted audio test from the **Flight Engineer's** station testing 1-2-3-4-5". OK _____

8. Comm 1 Boom Microphone Test

a. Perform a test transmission to ATC or another ground facility from the **Captain's**, **First Officer's** and the **Flight Engineer’s** stations using Comm 1. During the test transmission, identify which crewmember is transmitting.

OK _____

9. Comm 1 Hand Microphone and Speaker Test

a. Select Comm 1 receive audio on the cockpit speaker. OK _____

b. Using the **Hand microphone**, perform a test transmission to ATC or another ground facility from the **Captain's**, **First Officer's** and the **Flight Engineer’s** stations using Comm 1. During the test transmission, identify which crewmember is transmitting.

OK_____

10. Comm 2 Boom Microphone Test

a. Select Comm 2 to an unused frequency and again transmit from each station using the boom microphone identifying as follows:

"This is Comm 2 from the **Captain's** station using the boom microphone testing 1-2-3-4-5”,
"This is Comm 2 from the **First Officer's** station using the boom microphone testing 1-2-3-4-5".
"This is Comm 2 from the **Flight Engineer's** station using the boom microphone testing 1-2-3-4-5".

OK _____

11. Comm 1 Oxygen Mask Test

a. Select Comm 1 to an unused frequency and transmit from each station using the oxygen mask mic:

"This is Comm 1 from the **Captain's** station using the oxygen mask microphone testing 1-2-3-4-5",
"This is Comm 1 from the **First Officer's** station using the oxygen mask microphone testing 1-2-3-4-5".
"This is Comm 1 from the **Flight Engineer's** station using the boom microphone testing 1-2-3-4-5".

OK _____

12. Comm 2 Oxygen Mask Test

a. Select Comm 2 to an unused frequency and transmit from each station using the oxygen mask mic:

"This is Comm 2 from the **Captain's** station using the oxygen mask microphone testing 1-2-3-4-5".
"This is Comm 2 from the **First Officer's** station using the oxygen mask microphone testing 1-2-3-4-5".
"This is Comm 2 from the **Flight Engineer's** station using the oxygen mask microphone testing 1-2-3-4-5".

OK _____

13. Uninterrupted Audio Oxygen Mask Test

a. Turn the intercom “OFF” (i.e. no side-tone). OK _____

b. When convenient, again speak into the oxygen mask, this time without any transmitter or intercom keyed (no side-tone should be heard in the headsets), identifying as follows:

"This is the uninterrupted audio test from the **Captain's** oxygen mask testing 1-2-3-4-5",
"This is the uninterrupted audio test from the **First Officer's** oxygen mask testing 1-2-3-4-5”.
"This is the uninterrupted audio test from the **Flight Engineer's** oxygen mask testing 1-2-3-4-5.

OK _____

14. Other Transmitters

a. Repeat Step 8 for any other transmitters installed in the aircraft. Identify the transmitter in the test transmission, and list these transmitters here:

1) HF:
2) FM:
3) Other:

OK _____

15. Passenger Address System Test

a. When convenient, select the Passenger Address System and again transmit from each station identifying as follows:

"This is the P.A. system from the **Captain's** station testing 1-2-3-4-5",
"This is the P.A. system from the **First Officer's** station testing 1-2-3-4-5".
"This is the P.A. system from the **Flight Engineer's** station testing 1-2-3-4-5”.
"This is the P.A. system from the **Flight Attendant's** station testing 1-2-3-4-5".

OK _____

16. Receiver Audio Test – Captain's, First Officer & Flight Engineer

a. Turn all receiver audios "OFF" at all audio control stations. OK _____

b. On the **Captain's** audio panel, set Comm 2 to a station such as ATIS, WWV or Weather and identify the crew station selected (e.g. Captain's Comm 2). Repeat for all other transmitters tested in step 14. Fill in the table below to indicate what receive audio are available in the A/C.

OK _____

c. On the **Captain's** audio panel, turn NAV 1 audio on and tune the navigation receiver to a station providing audio identification. Identify the crew station and each receiver on the interphone (e.g. Captain's Nav 1 audio). Repeat for all other navigation receivers (e.g. NAVs, ADFs, DMEs, etc.). Fill in the table below to indicate what receive audio are available in the A/C.

OK _____

d. Repeat steps 16, a b & c, for the **First Officer's** Comm and Nav receiver audio tests. OK _____

e. Repeat steps 16, a b & c, for the **Flight Engineer's** Comm and Nav receiver audio tests. OK _____

Receiver	Captain		First Officer		Flight Engineer	
	Completed	N/A	Completed	N/A	Completed	N/A
Nav 1						
Nav 2						
ADF 1						
ADF 2						
DME 1						
DME 2						
Comm 2						
HF 1						
HF 2						
FM						
Mkr Beacon						
Other:						

17. Cockpit Warnings

a. Activate as many aural cockpit warnings as possible. Activate each warning in turn for 2 to 3 seconds and identify each one on the interphone just before it is activated. If the warning system is not installed in the aircraft, or it does not provide an aural alert (e.g. stick shaker), omit that system. If there are any other system installed in the aircraft that generate an aural alert but are not listed below, activate them as well and identify them on the interphone.

Aural Cockpit Warning	Completed	N/A
Stall		
Overspeed		
Landing Gear		
Fire		
Trim in Motion		
Altitude Alerter		
TCAS		
GPWS		
Windshear		
Autopilot Disengage		
Master Caution		
Stability Augmentation System		
Rotor Speed		
Other:		

18. Doors and Windows

a. If applicable, announce and open the flight deck cabin door. Announce and close the door after approximately 10 seconds. OK _____

b. Where permitted, and if applicable, announce and open the flight deck windows. Announce and close the windows after approximately 10 seconds.

OK _____

19. Auto-Rotation and Hover (Helicopter Only)

a. At a safe altitude in helicopter installations, announce and perform an auto-rotation descent with power recovery. OK _____

b. Announce and hover for approximately 20 seconds. OK _____

20. Pre-Landing

a. Pull the Cockpit Voice Recorder circuit breaker so the above information can be saved and recovered by Avmax Avionics personnel. OK _____

21. Post-Flight

a. When the aircraft is on the ground, remove the CVR and route it, along with this completed report, to Avmax Avionics for analysis.

OK _____

22. Notes

23. Certification

I certify that all tests in this report have been satisfactorily completed as described above, unless otherwise noted.

Pilot: _____ Date: _____ License #: _____

Copilot: _____ Date: _____ License #: _____

Witness: _____ Date: _____