

**CONFIDENTIAL**

File ED-188C  
Aircraft Equip. (Air Whistle)  
5 November 1958

25X1

**MEMORANDUM FOR THE RECORD**

**SUBJECT: "Jericho Horn" (ED-188C)**

1. On 28 October [redacted] and the undersigned visited the [redacted]. The purpose of the undersigned's visit was to discuss the progress being made by the contractor on the "Jericho Horn" project.

25X1  
25X1

2. The contractor has been establishing the relationships between sound pressure level and optimum mass rate of airflow entering the whistle for various air speeds. These investigations were conducted in a simulated wind tunnel and in the acoustic laboratory sound rooms. Although it is not possible to obtain air velocities of 300 MPH in the laboratory, enough data has been obtained to establish, theoretically, the parameters by which this whistle should operate. The relationship between sound power output and mass rate of airflow into the whistle has been found to be quite critical.

3. At present the contractor is in the process of evaluating an iris attachment for the whistle, which can be adjusted at will by the operator, to regulate the mass airflow and obtain optimum sound power output. Such an attachment will be controlled from the cockpit of the aircraft and allow the operator to obtain the maximum noise output regardless of air speed. Field trials for a final version of the "Jericho Horn" are expected to be conducted sometime in December.

4. [redacted] informed the undersigned that the maximum sound pressure level obtainable by the use of any air whistle of this type is 150 d.b. at 1000 c.p.s. The "Jericho Horn" has exhibited this ability during both laboratory and initial field trials. A further increase in sound pressure level is possible, but must be accomplished by electronic means. This increase could be in the 170-180 d.b. range.

25X1

5. The undersigned obtained a copy of the tape recording of the initial field trials of the whistle. It should be stated that considerable attenuation was used during the trials to prevent damage to the recording equipment. The actual sound power output is higher than can be heard on the recording.

25X1

TO :	8	030786	610956
FROM :	056	56	02
SUBJECT :	5	1	C
DATE :	22	2010	

:mt

**CONFIDENTIAL**