

ET12-FOP-CWT-001

REVISION: C

EFFECTIVE DATE: Sep 9, 2005

ORGANIZATIONAL ISSUANCE

ET12 EXPERIMENTAL FLUID DYNAMICS GROUP

Facilities Operating Procedure
For

Calibration Wind Tunnel Facility

OPR: ET12/Richard Norman

CHECK THE MASTER LIST-
VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

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DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
AS-IS	BASELINE	Oct/15/97	Baseline AS IS, Calibration Wind Tunnel Software Ver 1.0 Oct 22, 1992.
AS-IS	A	7/19/99	Due to the reorg this Baseline supersedes the document OWI-ED34-CWT-001 by the same title.
Revision	B	3/6/00	Separating Procedure from Reference material, and put into electronic form.
Revision	C	9/9/05	Changed org code and OPR.

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1. PURPOSE

Standard Facility Operating Procedure for the Calibration Wind Tunnel (CWT).

2. APPLICABILITY

Applies only to the Calibration Wind Tunnel operation.

3. APPLICABLE DOCUMENTS

Reference Documents:

Calibration Wind Tunnel Instruction Manual

4. DEFINITIONS

N/A

5. INSTRUCTIONS

Standard Operating Procedure for Calibration Wind Tunnel

5.1 Leak check probe and label the pressure ports.

5.2 Installation and alignment of probe in Calibration Wind Tunnel

5.2.1 Alignment procedure for probe without its own mounting fixture; or one that does not have a level edge or surface.

5.2.1.1 Mount levelling block on probe shaft.

5.2.1.2 Optically align the pressure ports with the flat edges of the block.

5.2.1.3 Mount probe on the probe-holding clamp fixture, located in the test section.

5.2.1.4 Align the probe tip, at the center of the flow inlet section.

5.2.1.5 Level the levelling block. The probe is now geometrically aligned.

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5.2.2 Probe has its own mounting fixture or level edge.

5.2.2.1 Align the probe tip, at the center of the flow inlet section.

5.2.2.2 Level the flat edge of the probe, or the mounting fixture. Probe is now geometrically aligned.

5.3 Set up a calibration file for the probe.

5.3.1 Input the appropriate test parameters; such as barometric pressure, ambient temperature, and the calibration range for pitch and yaw,etc.

5.4 Flip switch that starts up the Calibration Wind Tunnel

5.4.1 Input the frequency, or velocity, which is required for the calibration.

5.4.2 When calibration is complete, turn off the tunnel.

5.5 Data acquisition and plots

5.5.1 The raw and calculated data are stored on data files. Plots of the data are,also, generated.

Data,plots, and probe are returned to the customer.

6. NOTES

N/A

7. SAFETY PRECAUTIONS AND WARNING NOTES

N/A

8. APPENDICES, DATA, REPORTS, AND FORMS

N/A

9. RECORDS

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Calibration Report Printout automatically generated by the software for each probe.

10. TOOLS, EQUIPMENT, AND MATERIALS

N/A

11. PERSONNEL TRAINING AND CERTIFICATION

N/A

12. FLOW DIAGRAM

N/A