PRE-LAB ACTIVITY 5
2/3 COMPONENT BALANCE CALIBRATION and PROPER INSTALLATION OF TEST SUBJECT

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OBJECTIVES

After completing the calibration, the student will be able to:

Eliminate errors and accurately Analyze the effects of a properly calibrated test subject.

To have detailed and precise output data on the component balance indicator box.

PROCEDURES

Choose any of the following test subjects (MP 330-016 MP 330-019 MP 330-018 MP 330-015 MP 330-030 MP 330-013 MP 330-011MP 330-017 MP 330-014 MP 330-012). Please see figure 1.
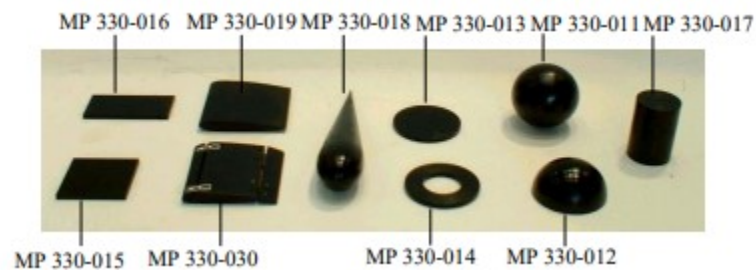

Figure 22. Wind Tunnel Test Subjects

Install the test subject with the proper test subject holder on the balance rod.
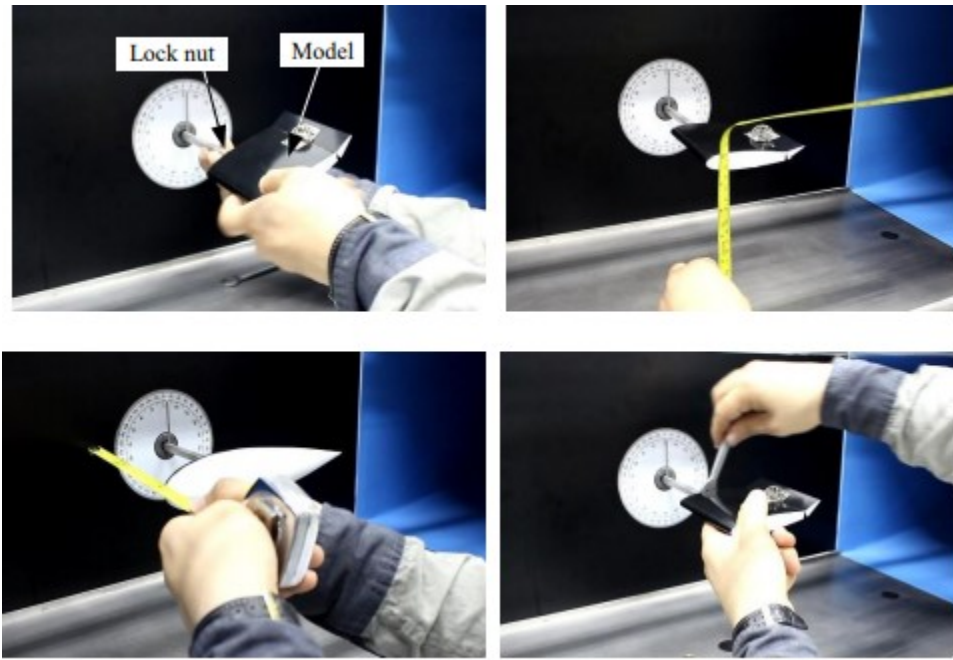
Set the scale index at zero "0" degree using angle adjusting knob.

Install the model by tightening the model to the end of the model holder inside the test section while holding the model holder as figure 2.

Figure 23. Installing the Model to the Holder

Set the model to 0 angle of attack by adjusting the angle of a model and then tighten the lock nut as Figure 3.

Check for the 2/3 component balance cables if they are plug on the right equipment.

Turn on the balance indicator box.

Record all the information displayed on the balance indicator box. (Place all recorded data on table T-1)

Reset the balance indicator box.

Rotate the angle adjusting knob to 10, 20, and 30 degrees. Check and record all the corresponding angle on the balance indicator box. (Place all recorded data on table T-2 for 10 degrees, T-3 for 20 degrees and T4 for 30 degrees)

Write your conclusion for this activity on the last page.

PRE-LAB ACTIVITY 1 RESULTS SHEET

NAME OF STUDENT	
DATE	
COURSE NUMBER/COURSE NAME	
SEMESTER & ACADEMIC YEAR	
NAME OF INSTRUCTOR/PROFESSOR	

Table T-1 Before Resetting

Component Indicator Box	
Lift	
Drag	
Pitch	
VA	
Angle	

Table T-2 at 10 degrees

Component Indicator Box	
Lift	
Drag	
Pitch	
VA	
Angle	

Table T-3 at 20 degrees

Component Indicator Box	
Lift	

Drag	
Pitch	
VA	
Angle	

Table T-3 at 30 degrees

Component Indicator Box	
Lift	
Drag	
Pitch	
VA	
Angle	

CONCLUSION: