

Wind Tunnel Experiment Report

“Coaxial Jets Experiments for Common Channel Pressure Measurement”

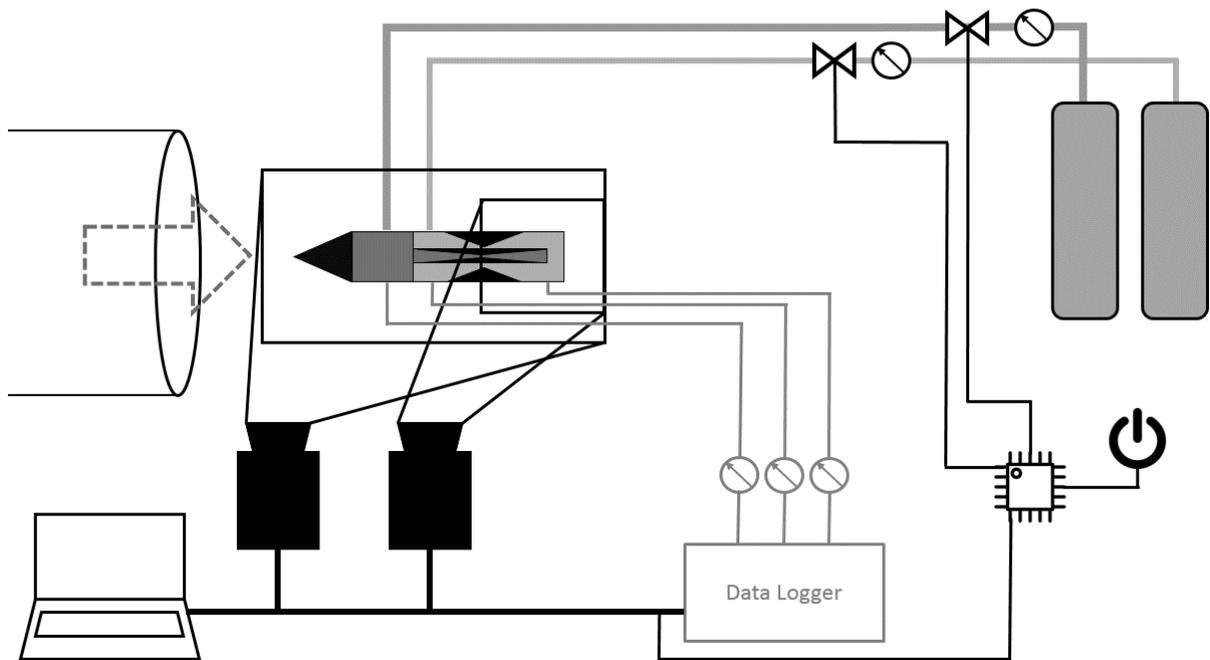
7-10/ August 2017

Personnel Involved:

- Test Section operator: Mr. Mohammad Samara.
- Wind tunnel operator: Dr. Yasumasa Watanabe.
- General advisor: Prof. Kojiro Suzuki.

Description:

The described experiment represents a step in Mr. Mohammad Samara Ph.D. project as it used to measure the pressure at the common channel for the purpose of comparing its values with the values acquired by using the CFD calculations. The experiment uses the coaxial jet model which have two air inlet ports that is used to generate a central jet, as well as a surrounding jet, the experiment also uses a set of pressure sensors, solenoid valves, and a high speed camera in which the values of pressure have been synchronized with the sensors pressure values, the experiment schematic drawing is shown in the figure below.



Experiment Schematic Drawing