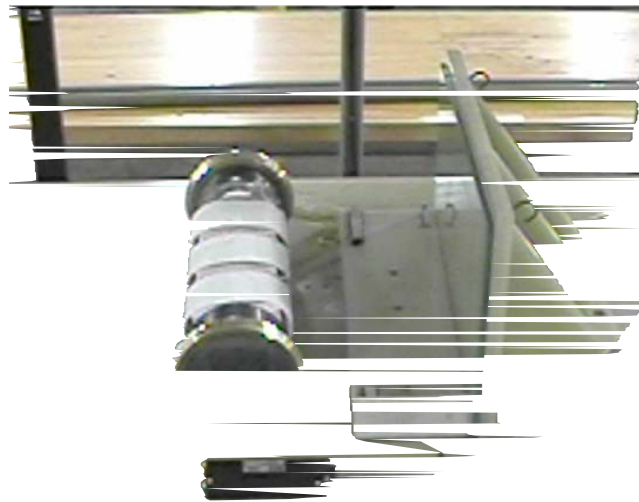


# AUTOMATION OF MAGNETIC SENSOR CALIBRATION TEST FACILITY

Ahmed S. Zaki, Peter Child and William Slater  
[Ahmed.zaki](mailto:Ahmed.zaki), [peter.child](mailto:peter.child), [William.h.slater@navy.mil](mailto:William.h.slater@navy.mil)  
Naval Undersea Warfare Center (NUWC)  
Newport, RI 028

## Project Summary

The objective of this project is to automate the calibration test facility for a solid-state heading sensor. The sensor is placed in a test fixture as shown below, and undergoes a series of specific successive rolls.



Currently the rolls are a manual operation by an operator. We would like to automate this process as follows:

- Use a Stepper Motor to perform the required motion
- Integrate with current software

The work will involve using off the shelf stepper motor driver, Stellaris TI evaluation board Visual Basic.

It requires two students, one hardware and one software.