

Abstract Submitted  
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**The Fluid Dynamics Demo Kit: Part I**<sup>1</sup> KAREN FLACK, United States Naval Academy, PATRICK UNDERHILL, Rensselaer Polytechnic Institute, KATHY PRESTRIDGE, Los Alamos National Laboratory — The goal of this project is to develop a fluid dynamics demonstration/experiment kit that can be used by professors and graduate students at high school outreach events. The demonstrations in the kit will be easy to use and true crowd pleasers in order to inspire understanding and pique curiosity about the physics of flow. The kits will be inexpensive, containing readily available materials so that teachers can duplicate the demonstrations and experiments. The kits will be left with the teachers as a gift from the American Physics Society. The experiments and demonstrations cover the concepts of conservation of mass, momentum, and energy, Bernoulli's equation, frictional losses and the ideal gas law. For each experiment, the teachers will receive presentation material, access to instructional videos, plus a worksheet that can be used in a high school physics classroom. This kit has been developed through the efforts of the APS-DFD Mentoring and Outreach Committee and has received funding from the APS-DFD.

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