



Third Laureate Applied Research

Project Title: Design and manufacturing of a tri-sonic
wind tunnel and its affiliated measuring equipments

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Abstract:

The most effective and efficient practical method for research into performance and characteristics of flying vehicles, in which air is passed over the body of the object with desired speed, is wind tunnel. Forces and other parameters in 5 dimensions are measured, stored and processed, is used to improve the aerodynamic design of the object. In addition to its instrumentation, this 48 m long wind tunnel, with the help of a novel method can have air speeds of up to few Mach. Instruments for measurement of static and dynamic components of acting forces on the models were designed and built for this project.