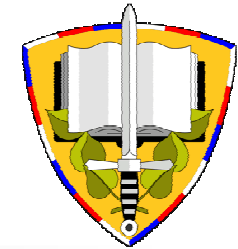


Department of Aerospace and Rocket Technologies



Faculty of Military Technology
University of Defense

- Group of Aircraft and Mechanics of Flight
- Group of Rockets and Engines
- Group of Aircraft and Rocket Service

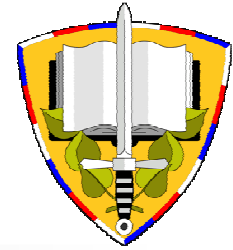
Head of the department:
Ass.Prof. Eng. Zdeněk Křížan, Ph.D.
Tel.: +420 973 445 206
E-mail: zdenek.krizan@unob.cz



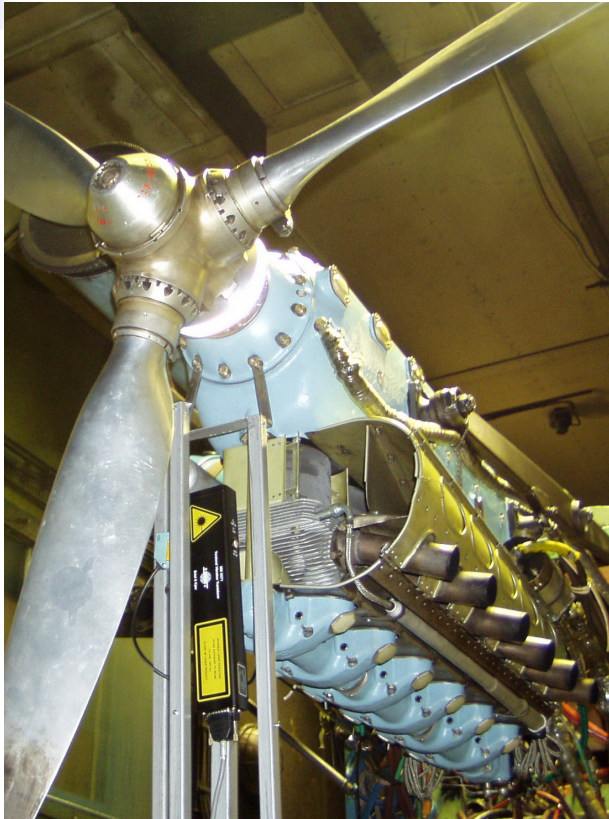
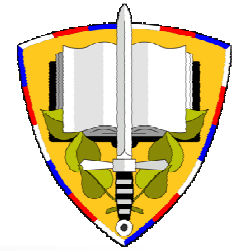


RESEARCH ACTIVITIES

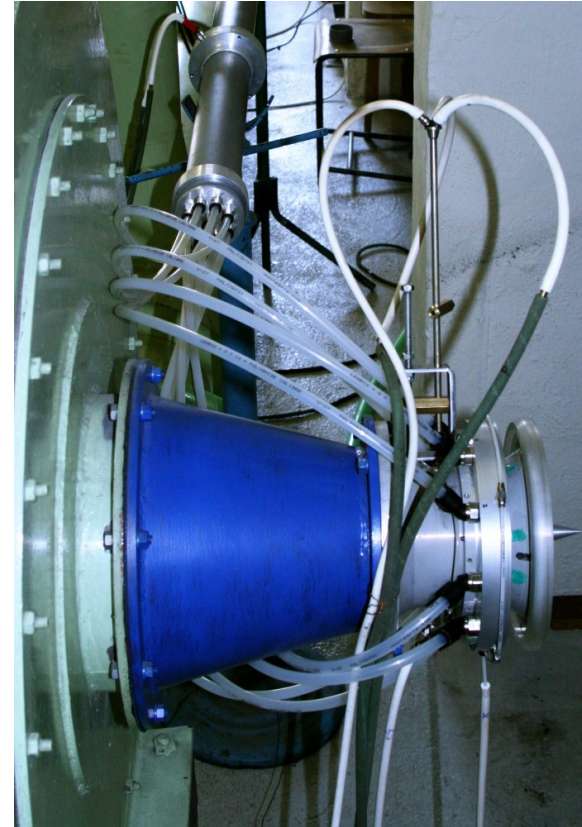
Group of Rockets and Engines



- **Vibrodiagnostics**
- **Coupled vibrations of aircraft engines and their part**
- **Centrifugal air flow compressors**
- **Measurement in Aircraft Engines**
- **Rocket motor design**
- **Solution of thermal stresses in rocket motor walls**



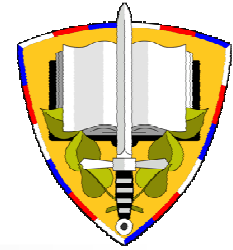
Torsion vibrations of Aircraft Engine with Propeller



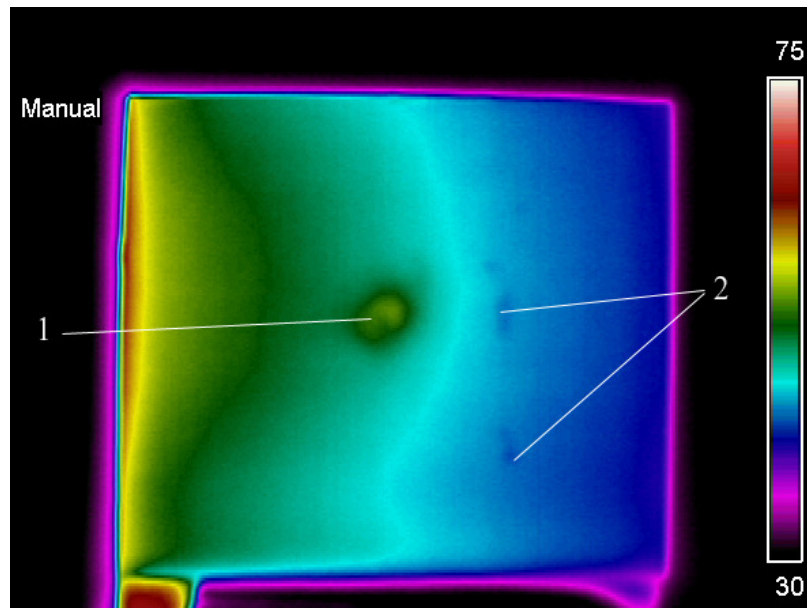
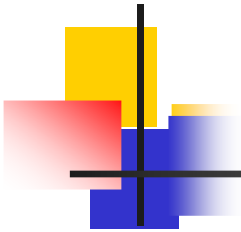
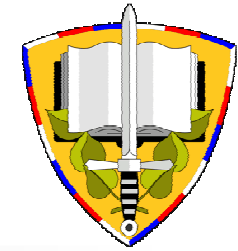
Measurement at the Inlet of Centrifugal Compressor

RESEARCH ACTIVITIES

Group of Aircraft and Flight Mechanics



- **Nondestructive Testing of Composite Materials**
- **Aircraft Corrosion**
- **Combat Aircraft Survivability**
- **Unmanned Aerial Vehicles**
- **Stress Analysis of Aircraft Components**
- **Wind Tunnel Measurements**
- **Flight-Maneuvers Modeling for Aircraft as Controlled Mass Point.**



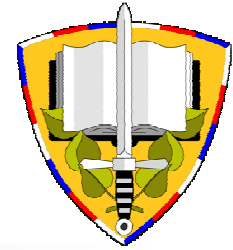
**Nondestructive Thermo Graphic
Testing of Composite Materials**



Testing of Propeller Characteristics

RESEARCH ACTIVITIES

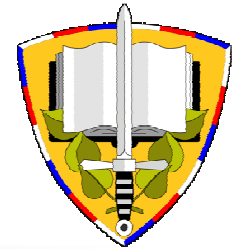
Group of Aircraft and Rocket Service



- **Maintenance of Military Aircraft**
- **Ecological Impact of Military Aircraft**



COOPERATION



- Military bases of Czech Army
- LOM Praha, s.p.
- Brno University of Technology
- PBS Velká Bíteš, a.s. (division of aircraft technology)
- PBS Turbo Velká Bíteš s r.o.
- Košice Technical University
- Academy of Armed Forces M.R.Stefanik Liptovsky Mikulas
- Mendel University of Agriculture and Forestry in Brno
- Ecole Militaire de l'Air, Salon de Provence
- University of Pardubice
- Explosia, a.s. Pardubice
- Hi-Tech Racing (Great Britain)