



RESEARCH MACHINE SHOP

The Research Machine Shop supports research at NIAR, WSU and within the aviation industry. The staff's intimate knowledge of the wind tunnels and other research tools greatly increases the shop's value and efficiency.

FACILITIES & EQUIPMENT

- 8,000 sq. ft. of shop space
- Mastercam X6 software
- CATIA V5 R21 software
- HAAS VR-8 five-axis VMC 64" x 40" x 30" travel
- HAAS VF-4 five-axis VMC 50" x 20" x 25" travel
- HAAS VF-2 five-axis VMC 30" x 16" x 20" travel
- HAAS VF-2 four-axis VMC 30" x 16" x 20" travel
- HAAS VF-2 three-axis VMC 30" x 16" x 20" travel
- FADAL 8030 VMV 80" x 30" x 30" travel
- HAAS TL-3 CNC Lathe 20" DIA. x 60" long
- HAAS HRT-310, 12" Rotary Table
- HAAS HRT-210, 9" Rotary Table
- HAAS SR-100 three axis router 100" X 52" X 8" travel
- Grey Planter Mill 96" x 30" x 30" travel with Bridgeport mill head
- K&T #2 Rotary Head die mill
- Harding high-speed tool room lathe
- Colchester 15" x 50" lathe with tracer
- South Bend 24" x 100" lathe
- Thompson surface grinder 12" x 36"
- Wood working machines; cabinet and pattern capabilities
- Welding; mig, stick arc and oxy-acetylene
- Hawkeye Borescope with Sony video camera/capture
- 48" x 48" - 60ksi Waterjet Cutters

PROJECTS

- Full-Scale Structural Testing Lab Support
- Lightning strike research support
- Friction stir welding research support
- Beech Wind Tunnel upgrades and support for several tests
- Crash Dynamics Lab upgrades and support for several tests
- Composites and Fatigue and Fracture labs tooling and specimens
- Nordam Transparency Division tooling and specimens
- Aircraft icing research project support
- Support for the Center of Innovation for Niomaterials and Orthopaedic Research (CIBOR)
- Support for Fairmount Technologies
- Icing research systems
- Wind tunnel models
- Wind energy systems
- Tooling

CONTACT

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