

MINUTES OF THE HOUSE APPROPRIATIONS COMMITTEE

Committee tour of the National Institute of Aviation Research at Wichita State University and Challenger Learning Center at Wellington, January 12, 2006.

All members were present except:

Representative Ballard- excused
Representative Feuerborn - excused
Representative Gatewood- excused
Representative Henry- excused
Representative J. Williams- excused
Representative Landwehr - excused
Representative Lane- excused
Representative Light- excused
Representative Schwartz- excused
Representative Sharp- excused
Representative Tafanelli - excused
Representative Yoder - excused

Committee staff present:

Alan Conroy, Legislative Research Department
Nikki Feuerborn, Administrative Assistant
Shirley Jepson, Committee Secretary

Conferees appearing before the committee:

Others attending:

See attached list.

The first stop on the tour was at the National Institute of Aviation Research (NIAR) at Wichita State University. NIAR is recognized internationally as a high-tech research and learning center, working closely with the aircraft industry, other industry and Kansas universities. The facility employees over 100 full-time staff as well as providing research capabilities for approximately 100 student and graduate research assistants. NIAR has 14 fully-operational research laboratories. John Tomblin, Executive Director, led the group on a tour of four of the research laboratories:

- Composites and Advanced Materials - This laboratory's research includes the effects of aging on composite materials including aging aircraft and effects of manufacturing defects on composite structures.
- Crash Dynamics - This laboratory includes a crash simulator for testing air bags, child safety seats and other various components for the automobile industry as well as the aircraft industry.
- Advanced Joining Technology - This laboratory's research includes investigations into post weld heat treatments on aluminum aerospace alloys. The Committee observed the action of a Friction Stir Welding (FSW) machine which performs a solid-state joining process. The process involves no melting as in conventional welding.
- Aerodynamics - This laboratory has rebuilt and modernized the Walter H. Beech Memorial Wind Tunnel giving the lab access to four wind tunnels and a water tunnel. Research is conducted for private industry as well as the aircraft industry.

The second stop on the tour was at the Challenger Learning Center of Kansas at Wellington. The Center has been in the building stages for several years and is now operational with a grand opening scheduled for the latter part of January. The Center uses a hands-on approach to teaching and engaging students in the experience of a Challenger mission in space. When scheduling a session at the Center and before the students come to the Center, teachers are given instruction on how it works, what the students will learn as well as provided with teaching materials to be used in the classroom before the session at the Center. When the students visit the Center, they are divided into two groups - one group works in the mission control center and the other group works in the simulator missile. Each group of students have the opportunity to work in both sections. Along with the mission learning experience, the students learn teamwork as they work through a launch, emergencies that may occur and the landing.

Melvin Neufeld, Chairman