

## 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

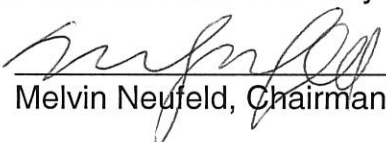
Conferees appearing before the committee:

Others attending:

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 employs 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