

Press Release**Contact:**

Chuck Dougherty
Stafford Air & Space Museum
Phone: 580-772-5871
Fax: 580-772-0498
chuck.dougherty@cityofweatherford.com

For Immediate Release:**SWOSU Engineering Students Build Working Display at the Stafford Air & Space Museum**

Thanks to the efforts of a SWOSU engineering class, visitors to the Stafford Air & Space Museum will have the chance to see how one of the pioneering aircraft engines of all times works, and to better understand airplane propellers.

Students from the SWOSU Capstone II, Department of Industrial and Engineering Technology program, led by SWOSU instructor Jeff Short and Stafford Air & Space Museum volunteer Jim Friesen, took a Jacobs R-755 air-cooled radial aircraft engine which had been cut-away to expose the inner workings of the engine, and converted it to operate with electrical power. This allows visitors at the museum to push a button and watch the mechanical movement of the engine to better understand how it turned the propellers of some of the most famous aircraft in history, including many of the combat planes of World War II. The engineering students built a second exhibit that features another of the most significant developments in flight history, the variable-pitch propeller. The display offers the visitors the chance to see how aircraft propellers can be adjusted to more efficiently produce thrust as they cut through the air.

SWOSU students Arnold Adams and Cody Coppock were the lead engineers for the Stafford Air & Space Museum projects. Other engineering students involved were Kyle Eckhardt, Lisa Quintero, Susan Johnson, and Chaz Rutledge.

According to Stafford Air & Space Museum Director Chuck Dougherty, “These SWOSU students have created a couple of very educational and interesting exhibits. When visitors see how the engine and the propeller work, they better understand the mechanical principles involved. The SWOSU engineering students do a great job for the museum, and we certainly appreciate their enthusiastic help.”

SWOSU Instructor Jeff Short stated, “The classroom, laboratory, or campus experience can only go so far in educating our graduates. The Capstone experience enables the students to gain experience in working with real professionals and solving real problems. Service learning projects at places such as the Stafford Air & Space Museum allow students to contribute their work to institutions that are important to western Oklahoma. At SWOSU, we appreciate our community giving our students these opportunities beyond the classroom.”

The students involved in the project are completing their Bachelor of Science in Manufacturing Engineering Technology. SWOSU's program is the only regional university that is accredited by the Accreditation Board of Engineering and Technology. As a part of their degree program, students are required to complete a project that involves using what they have learned in the classroom.

The Stafford Air & Space Museum is named in honor of Lt. General Thomas P. Stafford, USAF (Ret.), who was born and raised in Weatherford, Oklahoma and graduated with honors from the United States Naval Academy. He piloted Gemini VI, and commanded Gemini IX, commanded Apollo 10, and the Apollo-Soyuz Test Project Mission. Stafford was the eighth recipient of the Congressional Space Medal of Honor. Stafford later served as Deputy Chief of Staff, USAF, for Research, Development, and Acquisitions.

The Stafford Air & Space Museum boasts one of the few Titan II rockets displayed indoors. Also on display, on loan from the Smithsonian National Air and Space Museum, is the flight space suit General Stafford wore on Apollo 10, a mission that included the first flight of the lunar module near the moon. There are displays featuring numerous space-flown artifacts as well as several full-size aircraft, including a Russian MiG21R and a USAF F-16 Fighting Falcon. Full-size replicas on display include the Wright Flyer, 1911 Curtiss Pusher, *Spirit of St. Louis*, Apollo Command Module, and Gemini spacecraft.

For more information visit www.staffordmuseum.com or call 580-772-5871.

- END-