



Department of Aviation  
St. Cloud, MN 56301

# ST. CLOUD STATE UNIVERSITY

## Flightlines



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### Wright Aero takes delivery of new G1000 Skyhawk



**N6065M boasts the aesthetic paint job of a new single engine Cessna, and is equipped with the Garmin G1000. The aircraft is currently available for rental and flight training at Wright Aero.**

Exciting news! SCSU Aviation students do not need to go any further than STC to gain valuable flight experience in an technologically automated flight deck! Wright Aero has recently taken delivery of a beautiful 2006 Cessna 172SP (N6065M) equipped with the Garmin G1000 system. Standard equipment includes new airplane smell, no creaks, groans, or unusual engine noises, and a glass cockpit to boot (figuratively speaking, of course!!!).

According to Steve Anderson, a VFR checkout for this aircraft can be done in around 1.5 hours of flying and about another 1.5 hours of flying for an IFR checkout. Some ground training will also need to be received. As with any aircraft, the most important aspect is the demonstrated ability to fly the aircraft safely, and use the G1000 system properly.

*(see Skyhawk, page 3)*

### Safety Focus: Situational Awareness *by Mr. Michael D. Ferguson*

Situational Awareness. In terms of the most important aspects of the science of Human Factors and aviation safety, Situational Awareness (SA) ranks near the top of the list. Although it is a term that is bandied about quite frequently in aviation, SA sometimes means different things to different persons. Thus, it will be helpful to explore what SA is and exactly why it is such a critical component in aviation safety.

According to one CRM expert, "SA is the continuous ability of a crew, acting as a single entity, to accurately perceive the relationship of themselves and their aircraft to all factors that could influence successful completion of their mission and to forecast as well as execute tasks based on that perception". The NASA definition of SA includes a section that in part defines SA as "the awareness of acknowledging and assessing; and is the basis for choosing courses of action of the situation both now and in the future.

For the intent and purpose of this article, SA will be defined in four parts as follows:

*(see Safety, page 3)*

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*Flightlines* is published twice a year as an information source for SCSU aviation students, alumni, Advisory Board members, friends of the Aviation Department and the administration and faculty of SCSU. Article submissions, comments, suggestions, and questions are welcome and may be directed to Mr. Michael D. Ferguson, Assistant Professor of Aviation, SCSU Department of Aviation, at (320) 308-3121 (email: [mdferguson@stcloudstate.edu](mailto:mdferguson@stcloudstate.edu)).

**Editor:** Michael D. Ferguson

Current and back issues of *Flightlines* can be found on the Department of Aviation website:

<http://www.stcloudstate.edu/aviation>

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## Congratulations to December Graduates!



**BS in Aviation  
(Management)**  
Barbara Winne  
Polly Chege

Todd Christopherson  
Aubrey Jungbauer  
Casey Jaeger  
Teng Weng Koek  
Alli Dampier

**BS in Aviation  
(Operations)**  
Bryan Sonnkab  
Shanna Lowe  
Abby Spanier

**BAS  
(Maintenance  
Management)**  
Silas Simone



## Can You Guess the Professor?

This aviation professor is an avid musician and has acted in several productions over the years.

*Who could it be?*



## Student Organization Updates

Congratulations are in order for the **SCSU Flight Team!!!** The team finished second at the Regional SAFECON competition, and as a result have earned the right to advance to the National SAFECON in the Spring. The team also won the safety award at the competition. Great job, team!!!

**Women in Aviation (WIA)** donated time to the Tree of Hope toy drive as a way to provide hospitalized children (away from their families and homes) with Christmas presents and holiday joy.

## Faculty News

**Jeff Johnson** was elected as a trustee for the University Aviation Association.

**Jeff Johnson** unsuccessfully ran for the state senate. The votes came in at 44-56% in a highly competitive race. Great job, Dr. J, we are proud of you!!!

**Jeff Johnson** was appointed for a one year term on the Stearns County Board of Adjustment.

**Steve Anderson** attended the Summer Aviation Accreditation Board International (AABI) conference in Duluth, and the Fall University Aviation Association (UAA) conference in Anchorage, Alaska.

**Angie Olson** has been accepted into the Graduate College at the University of Nebraska, Lincoln. She will begin taking classes toward the completion of her doctoral degree in January 2007 via a distance education program.

**Angie Olson** has begun using CRJ 200 flight deck systems software in her Advanced Aircraft Systems (AVIT 421) class. Aerosim software is the "missing link between the analog cockpit and the experience of flying in today's high-tech automated flight decks.

**Tara Harl** & Dave Maib, Director Flight Operations Target Corporation, spoke to the MBAA meeting about the AVIT 413 National Initiative the NBAA CAMC committee is spear heading this year. Feedback from industry was very positive. MNDOT (governor's flight department) and TCF Bank flight ops are now onboard to help with the AVIT 413 SCSU course.

**Tara Harl** & Dave Maib presented at the NBAA leadership conference in Dallas, TX in March on the same national initiative. Industry representatives from the four geographic areas where the AVIT 413 course will be implemented at other universities stepped forward to offer assistance and involvement. Tara also had an article about the initiative accepted for the NBAA Management Journal.

**Tara Harl** was keynote speaker to the international business womens' organization Zonta at their State Conference, and to the faculty and staff of the University of MN's Aeronautical Engineering department in late April. Her topic was the history of women in aviation.

**Tara Harl** Tara Harl, Dave Maib, and William Baldwin, director flight operations for J.W. Childs are spearheading a revision of the internship section of the NBAA website.

**Michael Ferguson** has arranged for his students in AVIT 429 (Airport Planning and Design) to work on four different projects for the Army National Guard base which will be built at the St. Cloud Regional Airport. The class is divided into four teams, each of which will study force protection, sound attenuation, environmental controls, and hot fueling. This is the second 429 class that has worked on this project.

*(see Faculty News, page 3)*



## Faculty News *(continued from page 2)*

**Michael Ferguson** developed and taught a brand new class during the 2006 Intersession. The class, AVIT 496 “The Current State of the Aviation Industry” was very successful, and will be offered again in the 2007 Intersession. The class included numerous tours of various aviation organizations.

**Michael Ferguson** also has developed and taught another new class. AVIT 317 - “Ethics in Aviation” was conducted for the first time in Fall 2006, and had a Load Factor of over 100%! The class has been very well received by the students, and has a 100% Load Factor again for Spring 2007. All aboard, final boarding call for Spring 2007!!!

**Michael Ferguson** has been accepted into the Graduate College at the University of Nebraska, Lincoln. He will begin taking classes toward the completion of his doctoral degree in January 2007 via a distance education program.

## Safety *(continued from page 1)*

- > Continuous awareness of the immediate environment
- > Immediate awareness of when a change occurs in the environment
- > Reacting in an appropriate manner to the change without fixating or losing awareness
- > Continuing and completing the activity with a heightened level of alertness

The importance of continuously practicing SA cannot be overstated. The evidence from many accidents and incidents clearly shows that a loss of SA was a primary causal factor in some of these events. A loss of SA occurs for many reasons, including, but not limited to fatigue, fixation, distractions, time pressure, stress, misinterpretation of information, failure to follow established procedures, etc. Advances in technology are helpful for enhancing SA, but are still not enough. It is up to each person to remain situationally aware AT ALL TIMES!

Here are some things that you can do to enhance own level of SA: follow all established procedures and use checklists; manage your time, don't rush; stay adequately rested and nourished; avoid fixating on distractions. Finally: THINK, PLAN and then ACT!

Maintaining SA can not only help to ensure that you are a safer pilot and person, it may also make the difference in saving your life. Practice Situational Awareness at all times!

## Skyhawk *(continued from page 1)*

Steve also stated that Instrument students should consider doing a block of training in the new Skyhawk. Students could choose to combine an IFR checkout with some of the required cross-country IFR work. The plan is to eventually require a block of glass cockpit training in the instrument flight class syllabus.

In addition, Steve also recommended that CFI students should think about getting some glass cockpit experience so that they are prepared to teach in this type of aircraft. This factor will also eventually be a required element of the CFI class syllabus.

Students can prepare themselves for flying this aircraft by doing some studying ahead of time. Toward this end, the Aviation Department computer lab and Wright Aero have a PC based software simulator for the G1000 that are excellent learning tools.

The airplane is priced at \$129 per hour, and several Wright Aero instructors are ready to give training in the aircraft and more will be available soon.

On a personal note, I have just been checked out on this aircraft, and it is a pleasure to fly. Check it out for yourself, N6065M is a great flight experience!

## Way to Go, Todd Christopherson!

Todd Christopherson was hired and assigned to report to the advisory board chair and Tara Harl.

A new online web based alumni directory is now up and running for the department.

Thanks Todd, great job!!!

## *New Certificates & Ratings*

**Barbara Winne**  
MEL—private/  
instrument

**Craig Johnson**  
MEL— Commercial

**Chad Howard**  
MEL—Commercial/  
Instrument



## *Scholarship Winners*

**Barbara Winne**  
**Joseph Frasca**  
Excellence in Aviation  
Scholarship

**Joe DeRose**  
CAE Simuflite Citation  
Type Rating  
Scholarship

**Congratulations!!!**

## Student/Alumni Endeavors & Happenings

**Nicholas Johnson, Teng Weng Koek** and **Shanna Lowe** have entered the "FAA Airport Design Competition for Universities". The topic for submission is on immediate toxicity of deicing solution at MN airports (the title will change upon submission). The deadline is in April with an awards ceremony in the summer of 2007.

**Melanie Pudsey**, a December 2005 graduate of St. Cloud State aviation program, has been accepted into the Canadian Air force.

**Jared Annextad, Neil Patras** and **Justin Pearson** are entering the "FAA Airport Design Competition for Universities." The topic is on reducing runway incursions utilizing new GPS technology. The project will be completed in December and will be submitted for consideration in April.

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to join the aviation List Serv and to view previous issues of *Enroute* and *Flightlines!*

### We Would Like to Hear from YOU!

Graduation? Career change? Promotion? Retirement? Anything else going on in your life? Please take a moment and give us an update. Can we feature YOU in our next newsletter? Yes \_\_\_

Name \_\_\_\_\_ Year Graduated \_\_\_\_\_ Major \_\_\_\_\_

Address \_\_\_\_\_

Employer \_\_\_\_\_ Position/Title \_\_\_\_\_

Email Address \_\_\_\_\_ Telephone \_\_\_\_\_

Please check here if this is a new address \_\_\_ Please check here if this is an updated address \_\_\_

Can we count on you to make a donation to the Department of Aviation? Yes \_\_\_

If you would like to get our newsletter twice a year via email, please email us at [aviation@stcloudstate.edu](mailto:aviation@stcloudstate.edu)

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