November 2015 School of Graduate Studies Newsletter

David Esser  
*Embry-Riddle Aeronautical University*

Alan Stolzer  
*Embry-Riddle Aeronautical University*

Follow this and additional works at: [https://commons.erau.edu/db-sgs-newletter](https://commons.erau.edu/db-sgs-newletter)

**Scholarly Commons Citation**

School of Graduate Studies. (2015, November). Embry-Riddle Aeronautical University, College of Aviation, School of Graduate Studies Newsletter. [https://commons.erau.edu/db-sgs-newletter/2/](https://commons.erau.edu/db-sgs-newletter/2/)

This Book is brought to you for free and open access by the College of Aviation at Scholarly Commons. It has been accepted for inclusion in School of Graduate Studies Newsletters by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.
Ph.D. IN AVIATION
[update]
What is something you want the Ph.D. in Aviation students to know about you?
I am proud of them. This Ph.D. program is the culmination of my passions. As a child as far back as I can remember, I loved airplanes. I bet our students had the same experience. Then, as I progressed in school, I found out what a love of knowledge was. ERAU came into my adolescent life. The Ph.D. in Aviation program is a trinity of these three. I will do everything I can to see our students succeed in the doctoral program and in their post-doctoral accomplishments. It is their successes that keeps our Ph.D. program vital.

What do you find most rewarding about your job?
Seeing the student's diligence and intelligence lead to their successes and feeling a small part in directing their effort. Successes and feeling a small part in directing their effort keeps our Ph.D. program vital.

What advice would you give students?
Be ready for challenges. I don't think there is a single Ph.D. who would tell you that it was easy and everything worked out just as planned. The difference between those who succeed and those who elect to stop is adaptation. When something does not go as planned and it appears to be a dead end, reevaluate your path but keep moving forward.

Who has had an impact on your life?
My parents were wonderful. They were loving, nurturing, and disciplining (sometimes I made them have to do this a lot). I was influenced by the early astronauts during the Gemini and Apollo programs. Later in life, I was moved by Dr. Alan Stolzer. One of my Ph.D. advisees noted that I had cited Dr. Stolzer in my dissertation. He wondered if I was trying to gain favor of the boss. I told the student that back when I did my dissertation, I did not know anything about Dr. Stolzer so there is so much more to respect about him now.

What are your hobbies?
Biking if you can call it a hobby; I use it to come and go to campus when it is not raining. I also like swimming, scuba diving, and reading APA.
by: Alan Stolzer, Ph.D.

I read an article in The Chronicle recently that caught my attention, and not in a positive way. The article was entitled, “Your Dissertation is Almost Done. What’s Next? Turnitin”. The article described how plagiarism software is catching on in graduate school, including to ensure that dissertations are not plagiarized. Some universities, including the University of Central Florida, require students to submit their dissertations through the software once the dissertation is nearing completion. One UCF professor lamented that she works to develop a close, personal relationship with students, and then at the end she is forced to tell them that they ‘don’t trust them’ by having them prove that their work is original. She stated that this ‘goes against the kind of pedagogy’ she supports.

I couldn’t see the situation more differently than that professor. The fact of the matter is that plagiarism is a significant problem in graduate school, and no program that has been around for any length of time, including ours, is immune from those problems. A quick Google search on this topic will yield some alarming statistics. Did these professors not have a close, personal relationship with their students sufficient to detect attempted plagiarism? The facts are clear: in spite of our best efforts to stress the importance of research ethics and integrity, not everyone will adhere. Thus, it’s in the best interests of the program and all stakeholders to trust, but verify.

Aside from the issue of research ethics, the practice of submitting work to Turnitin provides protection against inadvertent mistakes made by even the most meticulous researchers. Many of us have probably inserted someone else’s words in our research with the intention of later paraphrasing them (citing it properly, of course), but what if you become distracted and forgot to do that? As careful as I was when I prepared my authored and edited books, I elected to run the entire manuscripts through a plagiarism tool for peace of mind. I simply wanted to be certain that nothing was going to embarrass me later.

That said, the article points out issues that should be considered. One issue is that Turnitin stores submissions in its database, and some people believe that violates an author’s intellectual property rights. For that reason and others, it’s important that students and faculty understand how the software operates. This tutorial explains the essentials: https://ernie.erau.edu/Departments/information-technology/canvas/Pages/www-canva-faculty-training.aspx.

In my last update, I mentioned that some students are progressing slowly in the dissertation, primarily as a result of getting to that point without a clear research plan. The faculty have been discussing strategies to address that concern. I’ll talk more about this later, but expect significantly more focus on the development of a satisfactory prospectus in the second residency, and even some work on the first chapter of the prospective dissertation in the third residency.

We believe these changes will streamline the transition from course work to dissertation and enable students to get a running start on the latter. I had the pleasure of attending NBAA a few days ago and attending presentations by Chris Broyhill and Matthew Grunenwald.
ERAU will be competing for the recently announced Federal Aviation Administration Air Transportation Center of Excellence - Technical Training and Human Performance. We've named it the AERIS Center, which stands for Air traffic organization Excellence through Research and Innovative training Solutions.

**Background:**
In 1990, Public Law 101-508 (49 USC Section 44513) directed the FAA Administrator to create the Air Transportation Centers of Excellence (COE) program. Approximately 12 COEs have been established since that time (many have subsequently closed), and more than $260M have supported over 500 research projects in the various centers. This investment has resulted in significant advances in aviation science, technologies, and technology transfer. Along with contracts and aviation research grants, COEs are an important avenue for funding essential research for the agency.

**COE in Technical Training and Human Performance:**
In July 2015 the FAA announced that it intends to create a new COE in Technical Training and Human Performance (TT&HP). The COE in TT&HP will be established in 2016 to focus on training and human performance for the men and women who will be operating the air traffic system of tomorrow. NextGen is modernizing the national airspace system, and new skills and abilities are needed by those who will manage aircraft operating in that system. The FAA recognizes that there are 'evolutions in teaching, such as part-task trainers, modeling, immersive human-in-the-loop simulation, and adaptive learning technologies that are standard in other technical workforces'. Research will include 'new training technologies, such as course content development, mobile learning, delivery and management systems, and integration of simulation capabilities'. Research in human factors will be an important component as well, including changes in 'learning expectations and academic best practices'.

A public meeting was held October 21-22, 2015. A final solicitation is expected to be issued in January, and a selection is anticipated in May 2016. The center will be operational in October 2016.

**Embry-Riddle’s Approach:**
With world-class training, education, and research in air traffic control, technical training, and aviation human factors areas, ERAU is uniquely positioned to lead a team of universities to compete for the COE. Team members are still being added, but the team will include ERAU (as lead), the University of North Dakota, Purdue University, Hampton University, The Ohio State University, Western Michigan University, and Drexel University as core universities. These core universities both add to and complement our strength in air traffic control (4 are AT-CTI schools), technical training, aviation education, research, and human factors. Our team also includes Arizona State University, Kansas State University, Kent State University, Middle Tennessee State University, University of Southern California School of Cinematic Arts, University of Washington, University of Wisconsin, and Wichita State University (National Institute for Aviation Research), as affiliate universities. We have nearly 25 industry partners on our team. Our team's website is www.aeriscenter.org.

http://www.faa.gov/about/office_org/headquarters_offices/ang/offices/management/coe
https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/operations/at_cti/

1 AT-CTI stands for Air Traffic Collegiate Training Initiative program. The program is designed to ‘establish partnerships with higher educational institutions to broaden the employment opportunities in the aviation industry', particularly air traffic controllers. Approximately 30 schools are involved in the AT-CTI program.