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March 2018 School of Graduate Studies Newsletter

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SCHOOL OF GRADUATE STUDIES **NEWSLETTER**

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY | COLLEGE OF AVIATION



Pictured: Dr. Brady's T-34 finny flight on his retirement day.

MARCH 2018

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NOTES FROM THE ASSOCIATE DEAN

INTRODUCING DOCTORAL STUDENT TEACHING.

I believe the most important task of a leader is to make new leaders, since doing so serves as a strategic catalyst for future progress. Have you noticed the striking similarities between leadership and teaching? A capable teacher is, after all, a leader who influences the behavior and attitude of students to maximize learning of a given topic. So, if leaders should be making leaders and teaching is about being leaders of learning, you can understand why I say that the top task of a professor is to make new professors.

Academia has been frequently criticized for doctoral programs that produce graduates with no formal training in teaching and who then become professors. Knowledge of a discipline does not magically impart the ability to teach it to others. Whereas K-12 teachers benefit from training certification programs, often nothing similar exists in higher education.

Your School of Graduate Studies has decided to address the criticism head-on by creating a program to forge extremely high quality aviation educators. I am proud to announce the new Doctoral Student Teaching Program. The program entails the Ph.D. in Aviation Program Coordinator selecting candidates from the ranks of our Doctoral Research Assistants and putting them through a rigorous semester-long Practicum to learn all about the craft of teaching. In the Practicum, the candidate observes class sessions, learns to master educational technology, completes workshops with faculty members at the Center for Teaching and Learning Excellence on campus (CTLE), and is evaluated while teaching classes, all to ultimately become certified as a Doctoral Student Instructor (DSI).

A newly minted DSI will then teach undergraduate courses like any professor in the college. I will tell you from experience that teaching an introductory course full of 36 teenagers at 8 am, which is a realistic



Dr. Antonio I. Cortés
Associate Dean

scenario for a new DSI, is not for the faint of heart but can be greatly rewarding. The Practicum and follow-on work are meant to forge DSIs into sharp arrows for the teaching quiver. You should also know that we are exploring how to bring online doctoral students through a Practicum geared to online instruction so that DSIs can teach online courses in the College of Aeronautics of our Worldwide Campus.



Let me finish by sharing a wonderful announcement. Ms. Marisa Aguiar (pictured left), one of our current Doctoral Research Assistants, has been selected as our first DSI Candidate. She is currently deep in the throes of her Practicum, and I know

you will join us in wishing her victory as she makes history for our college.

Stay on target!

FOREVER EAGLES!

GRADUATION

Ph.D. Graduates

In December, we had 6 Ph.D. students who graduated:

- › Timothy A. Sestak
- › Casey E. Richardson
- › Jane Pan
- › Gregory S. Woo
- › Erik R. Baker
- › Stephen Curran

Dr. Sestak walked at our Prescott, Arz., graduation ceremony. On December 18, 2017, Dr. Pan, Dr. Woo, Dr. Baker and Dr. Curran attended our commencement in Daytona Beach, Fla. at the Ocean Center.

We are so proud of your achievements, congratulations!

MSA Graduates

On December 17, 2017, five MSA students were hooded at the ICI Center in Daytona Beach, Fla. Those students are:

- › Chen Jie (Aviation Aerospace Operations and Aviation Safety Management Systems)
- › David Abhishek (Aviation Aerospace Management and Aviation Safety Management Systems)
- › Gelb Brendan (Aviation Safety Management Systems)
- › Guo Siying (Aviation Aerospace Management and Aviation Safety Management Systems)
- › Panyavuthilert Natkamon (Aviation Aerospace Management and Aviation Aerospace Operations)
- › Stephanie Fussell and Revanth Gattupalli who had already graduated, also attended the ceremony.

We are so proud of your hard work and wish you all a bright future. Congratulations and Go Eagles!



FOREVER EAGLES! *CONTINUED*

PERSONAL UPDATES

Dr. Tim Brady Retirement

Dr. Brady officially retired on December 22, 2017. Dr. Brady began his Embry-Riddle career in 1998 as Professor and Associate Dean of the School of Aviation and Chairman of the Applied Aviation Sciences Department. He then was promoted to Dean for the College of Aviation in 2000 and has also held the role of interim Chancellor for the Daytona Beach Campus. Dr. Brady has been involved with various associations and boards, among them elected as president for both the University Aviation Association (UAA) and the Aviation Accreditation Board International (AABI). Dr. Brady is the recipient of AABI's Paul A. Whelan Educator Award, UAA's Wheatley Award, Embry-Riddle's Pinnacle Award, the National Air Transportation Association's Excellence in Pilot Training Award, and many more.

Even though his full-time position has ended, he will remain an adjunct professor with the School of Graduate Studies. **Thank you for your commitment to Embry-Riddle, and we are very happy to have you around for a while longer, Dr. Brady!**

Thomas D. Pellegrin

One of our current Ph.D. students, Thomas Pellegrin, has transitioned from his position as PwC's (Price Waterhouse Cooper's) global aviation center of excellence leader in Dubai and has joined IATA (International Air Transport Association) to be their new head of consulting for Asia-Pacific in Singapore. He began this new position in January. **SGS congratulates you and wishes you good luck with your new career!**



COLLEGE OF AVIATION LABS

OPEN COMPUTER LABS

Computer labs at the Daytona Beach Campus are open to students of any discipline to use and are equipped with the standard academic software (including SPSS). Some labs may require an Eagle Card to check in. Below is a list of open computer labs at the Daytona Beach Campus.

If you need more information (available seats, hours, locations and color printer availability), please check the link: ernie.erau.edu/Departments/information-technology/Pages/DB-Open-Labs.aspx

VIRTUAL REALITY (VR) LAB



The picture above was taken by Dr. Cortés. It shows Dr. Truong flying our Navy F-18 Virtual Reality Aerial Refueling Part Task Trainer in the VR Lab, together with MSA student Kahlil Benjamin, doctoral

residential student Marisa Aguiar, and VR developer Rei de la Paz. What a neat picture! Kahlil and Marisa were checking out the device for potential thesis and dissertation research.

Opened in September 2017, the mission of the VR lab in the College of Aviation is to explore, develop, and test immersive simulation technologies (virtual reality, augmented reality, mixed reality) for use in aviation research and learning. The lab is located in building 341 (COA), room 135.

The lab consists of a dedicated physical space equipped with an HTC Vive VR system with a head mounted tracker/display, two hand-controllers with haptic feedback, and two IR beacons defining the virtual space where users can move while tethered to the custom-built simulation computer or through a wireless connection. The heart of the system is a custom built high-end Graphics PC Workstation with of a water cooled 4.2 GHz Intel i7-7700K CPU, GeForce 1080 Graphics Card, and 8 GB of Ram. There are three simulations currently performed in the lab: a virtual walk-around inspection, an aerial refueling simulation, and a space station experience.

Faculty and students are encouraged to use the lab to support their research projects. The VR lab is led by Dr. Cortés.

If you would like to make an appointment to visit or use the lab, please contact the lab technician, Mr. Zack Colman, at dbvrlab@erau.edu.

COGNITIVE ENGINEERING RESEARCH IN TRANSPORTATION SYSTEMS (CERTS)



The CERTS Lab conducts research in Human Factors, human performance, training, attentional allocation, fatigue, situation awareness, adaptive automation, inattentive insensitivity, and NextGen initiatives.

The mission of the CERTS lab is to enhance the interaction of personnel, technology, and the environment in transportation systems through basic and applied research. The lab is located in Room 131 in the College of Aviation (COA).

The CERTS Lab is equipped with:

- › Elite-PI 135 Advanced Aviation Training Device (AATD) with 120 degree view and two simulators:
 - › X-Plane 11
 - › Microsoft Flight Sim X
- › STISIM 100m Driving Simulator
- › Heart rate variability monitor
- › Nexus 10 Electromyography (EMG)
- › Desktop en route ATC simulator

CERTS Lab meetings are held every Tuesday by our faculty, Dr. Andrew Dattel and are assisted by our MSA student, Simona Teodorovic.

If you are interested in attending the meeting or want to make an appointment to visit or use the lab, please contact Simona at teodoros@my.erau.edu.

OPPORTUNITIES

HIGH PRIORITY PROFESSOR VACANCY

ASSISTANT PROFESSOR OF SPACEFLIGHT OPERATIONS (170067)

Description

Embry-Riddle Aeronautical University is seeking a Tenure Track/Non-Tenure Track Assistant Professor to teach introductory and higher level undergraduate space operations and technology courses in the Spaceflight Operations degree program at our Daytona Beach, Fla. campus.



The Spaceflight Operations degree program is a unique B.S. degree focused on the regulation, planning, flight, safety, policy, management, human factors, and training aspects of today's spaceflight programs introduced at

the Embry-Riddle Daytona Beach campus in the fall semester of 2013. Supporting curriculum for the program comes from the four colleges at the Daytona Beach campus which include the College of Arts and Science, the College of Aviation, the College of Business, and the College of Engineering.

This position includes a mix of teaching, research, and service obligation. Basic teaching requirements are 12 undergraduate credit hours (four courses) per semester with the possibility of replacing some of the teaching credit hours with equivalent funded research. Teaching obligations may include courses in the Space Studies minor at both the lower and upper level, as required.

The candidate is expected to develop new course materials and teach previously developed courses. Service duties include: student advisement, curriculum evaluation, committee participation, and project leadership. The candidate is expected to pursue scholarly activities with the possibility of workload reassignment for funded research, and to participate in individual and group research projects involving students. This is a nine-month position, renewed annually, with the possibility of summer teaching and/or research assignments.

Qualified applicants please attach a cover letter, CV, and unofficial transcripts to the online application.



Qualifications

A doctorate in physics, astronomy, space policy, space science, human factors, or a related aerospace field is desired. A Master's degree in a similar field with significant experience in the space industry will be considered with the commitment that the applicant would pursue a doctorate in a qualifying field.

The candidate must possess effective oral and written communication skills, including the ability to relate space programs operations, planning, or policy to the historical and planned space programs. The candidate is expected to have established a record of, or be able to successfully demonstrate teaching excellence at the undergraduate level.



Organization:

DB-College of Aviation
Instruction - 22819

Primary Location:

United States-Florida-
Daytona Beach

Job:

Research and Academics

Education Level:

Master's Degree

EVENTS & CONFERENCES



EVENT - BECOMING A PROFESSOR

In November, our School of Graduate Studies conducted an event to explore the dynamics of “Becoming a Professor.” The focus of the event was to allow audience participants to ask questions of a diverse group of teachers at Embry Riddle to learn more about what it is like to become a professor. Numerous Embry-Riddle students attended the event, which was very well received. A planned online airing of the session unfortunately did not occur, due to technical difficulties.

Panelists in the session included both fulltime and adjunct faculty with degrees ranging from a bachelor’s degree, a master’s degree, and three panelists with Doctor of Philosophy degrees in varied fields. Two panelists were also doctoral candidates who should earn their terminal degrees soon. Two adjunct faculty working in higher education and industry complemented the five Embry-Riddle full-time faculty on the panel. One goal of having a diverse group of full-time and adjunct faculty was to represent multiple pathways of being able to teach classes at a school like Embry-Riddle. After brief statements by each faculty member summarizing their background and their favorite teaching experience, participants asked questions of the panelists.

Topics panelists and participants discussed included:

- › Academic preparation needed to teach university classes
- › Job tasks of being a professor, especially the three cornerstones of teaching, research, and service
- › Importance of colleagues and mentors both as a graduate student and after becoming a professor
- › Similarities and differences among faculty jobs at various institutions and within the four colleges at Embry-Riddle

During the session, participants sought advice on becoming a professor. Panelists stressed that as a professor you work closely with colleagues both in your department and in your profession as a whole. Developing collegial relationships with faculty and fellow graduate students is an important step in an aspiring faculty member’s career development – a step graduate students should begin early.

Beginning to develop academic scholarship interests and experience is a hallmark of effective graduate study. Academic writing, ideally leading to publication, conference presentations, and other scholarship activities are important skills graduate students should develop. Working on projects that interest you and avoiding areas that you do not find stimulating gives graduate students a greater chance for success.

At the end of the session, the Associate Dean for our School of Graduate studies shared hiring criteria for faculty in our college. These criteria include: a history of funded research and/or scholarship, excellence as a classroom instructor, sound project management experience, a positive temperament for working with colleagues, and a background which enhances the cultural and experiential diversity of the college.

As both participants and the School of Graduate Studies leadership deemed the session as very beneficial, we plan to offer a similar session in the future, ensuring that online participants can attend and participate.

CONFERENCE - ICAEA

The 2018 International Conference of the International Civil Aviation English Association (ICAEA) is being hosted in May 2018 by Embry-Riddle in Daytona Beach: “Managing Communication as a Factor in Aviation Safety.” ICAO Human Factors expert and previously captain with Aerolíneas Argentinas, Dan Maurino, is the keynote speaker.

ICAEA has traditionally been focused, as the name suggests, on “Aviation English.” ICAEA has long been active in Europe and to a lesser degree, in Asia. This is its first American event. As a broader focus on language as a human factor, however, is the missing piece in aviation human factors. It is so far receiving strong interest from the aviation industry/community, especially from Latin America.

If you are interested in the effect of language and culture on communication as a human factor, please visit www.icaea.aero for further information.

2018 MASW CANCELLED

The 2018 ERAU-ISASI Military Air Safety Workshop that was planned for this April has been cancelled. Please check the “Events” Tab at the ISASI website: www.isasi.org for information on future Military Air Safety related events.

SGS ANNOUNCEMENTS

OUR STUDENTS, STAFF, FACULTY, AND ALUMNI



Brad Accepted as First Author!

SGS is very proud to announce one of our Ph.D. students accepted as First Author!

Brad Baugh has been accepted as First Author at the 9th International

Conference on Applied Human Factors and Ergonomics. This peer reviewed conference is one of the top tier in the HF field, and this is a great accomplishment for one of our students! He performed best practices and lessons learned for the aviation safety management system professional toolbox. Lecture paper is to be presented at the 2018 Institute of Industrial & Systems Engineers (IISE), Orlando, Fla., during 19-22 May, 2018.

Congratulations, Brad!



Jennifer Won the Best Presentation Award for the TRB Doctoral Workshop 2018!

SGS is also very proud to announce Ms. Jennifer Hunt, one of our Ph.D. students, has won the best presentation

award for the Transportation Research Board (TRB) doctoral workshop 2018, in Washington, D.C., January 7-11. At the TRB conference, she presented the findings of her dissertation research (Low-fare flights across the Atlantic: Impact of low-cost, long-haul, trans-Atlantic flights on passenger choice of carrier). An official TRB award certificate will be given to her during the Network Modeling Committee Meeting at TRB 2019.

Congratulations, Jennifer!

Kahlil Benjamin promoted to Pilot!

One of our MSA students, Kahlil Benjamin was selected to attend pilot training in the Air Force. He is researching balance and its correlation to hand eye coordination and good piloting skills. He said that the research helped him get the job. The interviewers believed it shows initiative, willingness to continue learning, and it brings more to the table in terms of knowledge and skills.

He will go to Officer Training School and then to Undergraduate Pilot Training. According to Kahlil, it was helpful to build a relationship with his professors and find mentors in the career field that he was trying to get a job in. His recommendation to others is to be very persistent and never give up, even if you are not selected initially; get in contact with the company/military branch as soon as possible to start building a relationship with them. He also advised to have a backup job in the meantime, if you don't get selected immediately and to keep pursuing your dream.

Thank you for your advice to our students, and best of luck to you, Kahlil!

SGS ANNOUNCEMENTS *CONTINUED*

OUR STUDENTS, STAFF, FACULTY, AND ALUMNI



Dr. John Maris, A New Member of Canada's Aviation Hall of Fame!

SGS is very proud to announce that, alumnus Dr. John Maris, will be inducted as one of the new members of Canada's Aviation Hall of Fame (CAHF) in 2018.

The induction ceremony will be held on Thursday, June 7, 2018, in the

Sunwest Aviation hangar at Calgary International Airport. Selected for his contributions to Canada's development through his integral roles in the nation's aviation history, he will join the ranks of the 228 esteemed men and women inducted since the Hall's formation in 1973.



Dr. John Maris received his Ph.D. in Aviation degree from Embry-Riddle in 2017. He has had an exceptional career as an active Canadian Armed Forces operational pilot, test pilot, project manager, and Canadian Space Agency team leader. He

has worked in Canada and the United States as well as in New Zealand. John has also played important roles in the industrial organization sector through his chairmanship of the Aerospace Industries Association of Canada. He has been recognized for his work by all major Canadian, U.K., and U.S. aerospace agencies. Significant accomplishments included his leadership of the team developing aviation systems, engineering for the robotic arm deployed on the International Space Station, conception of electronic charting, and development of its underlying graphics library technology.

Congratulations, and we are very proud of our alumnus' worldwide achievements!



Dr. Cuevas and Ms. Neal at "Habitat for Humanity Saturday"!

SGS would like to share some volunteer work done by our faculty member Dr. Haydee M. Cuevas and Lead Instructional Designer

Ms. Jan Neal. They devoted their time to "Habitat for Humanity Saturday" on November 4, 2017.

Volunteering for Habitat for Humanity through the Embry-Riddle Alumni Association, Ms. Neal stated, is wonderful because one gets to meet and work with new and current colleagues - students, staff, and faculty. She and her husband, also an Embry-Riddle alumnus, look forward to it each year. She stressed that experience is not necessary! The site managers assign tasks according to an individual's skills and wishes and also teach (tell me, show me, let me) if someone wants to learn something new. All tools and safety gear are provided at the site, as are drinking water and restroom facilities (i.e., porta-potty). Ms. Neal also mentioned that one can volunteer during any part of a day, but usually 3 to 4 hours is desired. According to her, usually the home owner is also on site, working alongside the volunteers, and they are always so appreciative of the community support in achieving what is a life-long dream for many. She did not forget to mention that it was great to volunteer with Dr. Cuevas this year!

Dr. Cuevas also recommended to visit the website to get involved: alumni.erau.edu.

According to the website, Embry-Riddle alumni around the globe observe #EaglesHelp, an effort to serve our local communities and show people everywhere our Eagle generosity and team spirit each November. This event is part of #EaglesHelp: The Embry-Riddle Alumni Month of Community Service.

For more information, contact Edmund Odartey ('04, '10, DB), a Senior Director of Alumni Relations via email: edmund.odartey@erau.edu or Joyce Pepin ('81, DB), an alumni network leader via joyce@pepinrealty.com.

SGS ANNOUNCEMENTS *CONTINUED*

SCHOLARSHIP

SGS is pleased to introduce a scholarship program to our graduate students. Stephanie, our residential Ph.D. student, wanted to share this great chance.

Thank you Stephanie, and good luck graduate students!

Introduction

The Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) will offer the Twenty Eighth Annual RADM Fred Lewis Postgraduate Scholarships. The Lewis Scholarships are being offered in the amount of \$10,000. The scholarships are being offered to stimulate student interest and university participation in preparing individuals for leadership in the Modelling & Simulation, Training and Education communities. The Scholarship recipient(s) will attend I/ITSEC '18 (November 26-30, 2018) at the expense of the I/ITSEC organization, where he or she will be recognized, view the latest in simulation, training, and education technologies, and meet the leading figures from government, industry, and academia associated with this community.

Qualifications

The applicant must be a U.S. citizen and successfully complete undergraduate studies by the end of Spring Term 2018. The applicant also must be enrolled or accepted for a full-time masters or doctoral program at a U.S. Institution with a focus on any of the following areas:

- › Engineering (Modeling, Simulation, and/or Training Related)
- › Operations Research/Systems Analysis/Mathematics
- › Distance Learning Methodologies
- › Human Factors (Psychology or Engineering)
- › Instructional Design and Training Methodology
- › Computer Science and /or Information Sciences

How to Apply

Submit the following to the I/ITSEC Scholarship (Lewis Scholarship) Program, postmarked no later than June 18, 2018 at www.iitsec.org.

- › Statement of how the scholarship will aid student in career pursuit (not more than 500 words). The synopsis must include a description on how the scholarship fits into the applicant's planned career by incorporating the Modeling, Simulation, Training, or Education field.
- › Proof of U.S. Citizenship (copy of Birth Certificate, Social Security, or Passport)
- › Personal resume to include positions, outstanding awards, publications (if any), and leadership capabilities. Ensure that your contact information (i.e. mailing address, phone, and e-mail) is included
- › Undergraduate transcript
- › Graduate transcript (if applicable). Transcripts must be official.
- › Recommendations from major advisor and one professor from the aforementioned focus area.



SGS ANNOUNCEMENTS *CONTINUED*

PUBLICATIONS



Article

An article written by our alumnus Dr. Jonathan Velázquez has been published in the journal titled Safety. While he was doing his Ph.D. program at Embry-Riddle, he performed his research project using a combined methods approach. However, in the recent article, he utilized a qualitative approach.

Velázquez, J. (2018). The presence of behavioral traps in U.S. airline accidents: A qualitative analysis. *Safety*, 4(1). doi: 10.3390/safety4010002

PUBLISHING IN HIGH-IMPACT JOURNALS *By Dothang Truong*



Conducting research is an exciting process as it involves discovering new knowledge in the field of our research interest. This is a time-consuming process; some research projects may take two years or more depending on the nature of the project. When a research project is completed, the next step is not any less challenging: publishing the findings in peer reviewed journals. This is a necessary action to disseminate our research findings to academic audiences. The obvious question that we all face is: To which journal should we submit our research manuscript? This is not an easy decision to make given overwhelming information on the Internet. Reputable publishers such as Elsevier, Emerald, Taylor & Francis, Sage, and Springer provide long lists of their journals in various fields. We also often receive emails from publishers all over the world inviting us to submit papers to their journals; some promise

quick turnover time and quick publication. We may also note a large number of open source journals that charge a publishing fee. While the choices are tremendous, it is very imperative that we should put our effort in publishing in high-impact journals.

What are benefits of publishing in high-impact factor journals?

› **For doctoral students:** If you have spent two or more years working on a dissertation and made great discoveries in the field of aviation, then it just makes sense that you want to publish the findings in quality journals to attract top researchers in your field. This also increases the likelihood that your article will be cited in quality articles. I have met an editor of a reputable journal, and he stated that he only read and cited articles from certain highly ranked journals that he could trust. Some top tier journals may even require authors to cite sources from quality journals only. Moreover, when you are ready to search for a faculty or researcher job in academia, publications in high-impact journals will give you great advantages over other candidates.

› **For faculty:** Higher-impact journals have higher requirements and expectations, which reflect the quality of their articles and audiences. Publishing in high-impact journals is a recognition for the quality of published articles and can enhance the faculty's research reputation worldwide. In addition, publishing is an important part of faculty performance evaluation, both for tenure or promotion decisions. In the tenure and promotion evaluation process, publications in top tier journals are certainly considered more valuable than the ones in lower tier journals.

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SGS

ANNOUNCEMENTS *CONTINUED*

- › **For Ph.D. programs:** Faculty and student research outcomes are often used to evaluate the success of a Ph.D. program. Research productivity by faculty and students is a particularly important factor in the periodic program review and also in the accreditation review process. Please be reminded that the mission of our Ph.D. in Aviation program is to “produce outstanding scholars for careers in research and teaching in the aviation field.” Publishing in high impact journals is a vital step in achieving that mission. Such publications indicate the values that our research studies contribute to the literature and the recognition of the research quality by top researchers in the field. The more high-impact publications that students and faculty in a Ph.D. program produce, the higher the reputation of the program; this eventually leads to a higher ranking of the program.
- › **For institutions:** Advancing research productivity and reputation is one of the most important goals at any research institution. As Embry-Riddle Aeronautical University is moving toward becoming a research institution, this goal is even more vital. The University President, Dr. Barry Butler, continues to emphasize the importance of advancing research and highlights the roles of Ph.D. programs in enhancing research performance. Among research efforts, publishing in high-impact journals will help disseminate student and faculty research findings to top researchers in other research institutions, thus enhancing the university’s research reputation.

What metrics are used to measure the impact of journals?

There are various metrics used to measure a journal’s impact. However, the four most popular methods are Impact Factor (IF), SCImago Journal Rank (SJR), h-index, and Source Normalized Impact per Paper (SNIP). In 2016, Elsevier launched a new metric CiteScore, to help evaluate and track journal performance (Zijlstra and McCullough, 2016). Given the early stage of this metric, it is not included in this analysis.

- › The journal Impact Factor (IF) is listed in Journal Citation Reports (JCR), an annual publication by Clarivate Analytics (previously the property of Thomson Reuters). IF calculates the yearly average number of citations to recent articles per paper in a particular journal. Specifically, the IF of a journal equals the total number of citations of articles published in that journal during the two preceding years divided by the total number of published articles in that journal during the same time period. While IF can be useful for comparing journals, the absolute IF may not be used to compare journals from different fields (Elsevier, 2017a). IF can be found at ISI Web of Science (webofknowledge.com) (Free access through Embry-Riddle Hunt Library – log in required).
- › SCImago Journal Rank (SJR) is published by Scopus. According to SCImago (2007), a journal’s SJR equals the average number of weighted citations in that journal in a particular year divided by the total number of articles published in the journal in the three previous years. Basically, SJR takes into account not only the number of citations but also the journal rank. A citation from a highly ranked journal has a higher weight than a citation from a lower ranked journal. SJR can be found at www.scimagojr.com
- › The h-index is an author-level metric that was proposed by Jorge E. Hirsch in 2005 (Hirsch, 2005). It measures both the quantity (number of publications) and quality (number of citations) of a researcher. Currently, the h-index is also used to measure the impact of a journal. Basically, the h-index of a journal equals “the journal’s number of articles (h) that have received at least h citations” (SCImago, 2007). Journals’ h-index can also be found at www.scimagojr.com.
- › Source Normalized Impact per Paper (SNIP) measures a journal’s impact by weighting citations based on the total number of citations in a subject field. A journal’s SNIP equals raw impact per article published in the journal divided by the relative database citation potential (RDCP). SNIP takes into account the frequency of citation, citation impact, and citation potential (Elsevier, 2017b). It allows us to make a direct comparison of journals in different subject fields. This is an advantage over IF, which can only compare journals in the same field (Elsevier, 2017a). SNIP can be found at Scopus Journal Metrics journalmetrics.scopus.com.

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SGS ANNOUNCEMENTS *CONTINUED*

Now that we understand how these journal impact indicators are measured, let's take a look at some examples of journals that publish articles relevant to research areas covered in the Ph.D. in Aviation program. Table 1 shows selected journals along with their SJR, h-index, SNIP, and IF in 2016; these journals are ranked by SJR. You can access the full list of journals through the links above. Note that if you cannot find a journal in any of these lists, it means this is a fairly new journal (insufficient information to evaluate) or this journal may not meet the requirements of these citation databases.

Table 1: Journals and Their Impact Indicators

Fields	Journals	SJR	h-index	SNIP	IF	
Transportation Operations	Journal of Travel Research	3.04	94	2.34	4.56	
	Transportation Research Part B: Methodological	2.74	98	2.43	3.77	
	Transportation Research, Part C: Emerging Technologies	1.93	82	2.53	3.81	
	Transportation Research Part E: Logistics and Transportation Review	1.69	78	1.76	2.97	
	Transportation Research Part A: Policy and Practice	1.61	93	1.94	2.61	
	Transportation	1.59	60	1.8	2.63	
	Transportation Research Part D: Transport and Environment	1.19	67	1.57	2.34	
	Transportation Research Part F: Traffic Psychology and Behavior	1.07	63	1.39	1.83	
	Journal of Air Transport Management	0.98	53	1.47	2.36	
	Transportation Research Record	0.49	76	0.72	0.59	
	Safety	Analytic Methods in Accident Research	5.09	14	3.47	N/A
		Accident Analysis and Prevention	1.49	108	1.97	2.685
		Safety Science	1.05	75	1.95	2.25
Journal of Safety Research		1.02	66	1.52	1.84	
Risk Analysis		0.96	99	1.46	2.52	
Human Factors	Ergonomics	0.91	86	1.36	1.82	
	IEEE Transactions on Human-Machine Systems	0.88	91	1.92	2.49	
	Applied Ergonomics	0.88	72	1.66	1.87	
	Human Factors	0.8	88	1.23	2.22	
Operations Research	Management Science	3.89	198	2.58	2.82	
	Omega	3.67	102	2.71	4.03	
	Operations Research	2.94	109	2.06	1.78	
	Transportation Science	2.57	87	2.27	3.275	
	European Journal of Operational Research	2.5	200	2.34	3.3	
	Decision Sciences	1.25	90	1.1	1.595	

In conclusion, it is important to make efforts to publish in high-impact journals. While this is not an easy task, it is worth the time and effort. It is not unusual that these journals have higher expectations and may take a longer time to review. It is recommended to collaborate with dissertation chairs or experienced researchers to increase the acceptance likelihood. Before preparing a manuscript, it is important to identify a good journal and understand the journal requirements so you can make sure they are met. Journals have different focuses, structural and formatting requirements, and word limits. If you are not successful at the first attempt, do not feel disappointed. You should rather use the reviewers' comments to further improve the manuscript and send it to another high-impact journal. Eventually, the hard work will pay off, and the record of high-impact journal publications will provide convincing proof that you are the known expert in your field.

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ANNOUNCEMENTS *CONTINUED*

2018 Ph.D. RESIDENCY

We are in the beginning stages of planning our next residency for August 2018. Please save these important dates below:

- › Pre-work begins Monday, July 30, 2018 – Sunday, August 12, 2018
- › Residency begins for DAV 701s on Monday, August 13, 2018, and ends Friday, August 17, 2018
- › Residency begins for DAV 702s & 703s on Tuesday, August 14, 2018, and ends at noon on Friday, August 17, 2018
- › For anyone who is taking the Qualifying Exam, you will need to be here Sunday, August 12, 2018, and Monday, August 13, 2018, for the two-day examination

We have reserved a block of rooms for you at a discounted rate at the Residence Inn by Marriott Daytona Beach Speedway/Airport.

You may call the reservation line at (800) 331-3131 or the hotel directly at (386) 252-3949. You can also make your reservations by clicking on this [Reservation Link](#).

Book your group rate for Embry-Riddle Aeronautical University Ph.D. Residency College of Aviation.

Ph.D. ANNUAL BOARD MEETING



The annual Ph.D. in Aviation Advisory Board Meeting was held on February 13, 2018, in the ATCA Board Room located at 1011 King St. in Alexandria, VA. In attendance were the following members:

- › Dres Zellwiger
- › Robert “Buck” Joslin
- › Agam Sinha
- › Dothang Truong
- › Steven Hampton
- › Antonio Cortés
- › Susie Sprowl

This was a very successful meeting, and we will be sure to deliver any updates to the program when we receive the meeting minutes.

SGS

ANNOUNCEMENTS *CONTINUED*

CALL FOR PAPERS!

Do you have an aviation-related topic you'd like to explore in a technical paper? ATCA's Technical Paper Competition is Back!

This year we're once again highlighting conference proceedings at ATCA's Technical Symposium - May 15-17, 2018, in Atlantic City, N.J. All submissions will be reviewed by the ATCA Tech Symposium committee, and the top three papers will be presented at the Symposium. One of the three finalists will be a Young Aviation Professional (YAP), so even if you're new to the industry, we want to hear from you!

The three finalists will present their papers during a separate conference session that's open to all attendees, and the audience will vote on a winner. The winner's paper will be published in the fall issue of ATCA's flagship publication, The Journal of Air Traffic Control.

Here are the general guidelines, which will also serve as the committee's evaluation criteria:

- › **Technical Merit:** Think more technical capability, less procedural changes.
- › **Impact on Aviation:** How will your topic affect change? Is it being embraced by a larger segment of the aviation industry?
- › **Timeliness:** Does the topic properly reflect a current or future issue within our industry?
- › **Impact to the NAS:** How will this help increase the safety, capacity, and/or efficiency of the National Airspace System?

You must be an ATCA member in good standing to be selected.

Not a member? Learn more about the benefits of ATCA membership at www.atca.org/membership.

For the selection process, all company names, branding, and author/presenter names will be redacted to keep the review as objective as possible. Please focus on the technical and leave the marketing aspects behind.

Please don't hesitate to reach out to me with any questions. Good luck!

Paul Planzer
Air Traffic Control Association
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www.atca.org/techsymposium
703.299.2430 x305

Important dates:

- › April 6 - Deadline for submissions
- › April 27 - Authors contacted
- › May 16 - Finalists present their papers at the Tech Symposium

COLLEGE OF AVIATION
SCHOOL OF GRADUATE STUDIES NEWSLETTER

Please feel free to send all updates/announcements to
Katie Esguerra at dunnk2@erau.edu for future newsletters.

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