CONFERENCE 2018

Building on the ICAO LPRs – Communication as a Human Factor

New Perspectives on Aviation English Training and Testing

PROGRAMME

9 – 11 May 2018

hosted by

EMBRY-RIDDLE
Aeronautical University.

Daytona Beach – Florida, USA
### PROGRAMME

**Day 1: Wednesday, 9 May**  
**Communication as a Human Factor**

#### SESSION 1  
**The role of communication in human factors**

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<thead>
<tr>
<th>Time</th>
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| 8.45-8.55| Conference Opening  
*Alan Stolzer, Ph.D.*, Dean, College of Aviation, Embry-Riddle Aeronautical University |
| 8.55-9.35| **Key Note**  
The role of communication in human factors  
*Dan Maurino*, Safety Management Advisor, ICAO Technical Cooperation Bureau |
| 9.35-10.05| **Presentation 1**  
Recognising the role of communication as a human factor: Perspectives from empirical research in applied linguistics  
*Eric Friginal*, Georgia State University |
| 10.05-10.35| **Presentation 2**  
Notes from the field: Making the case for enhanced English language standards for pilots worldwide  
*Tom Nichols*, former airline pilot (Central Asia, USA and Africa) |
| 10.35-11.05| **Presentation 3**  
A linguistic review of aviation accidents  
*Elizabeth Mathews*, ERAU / ICAEA |
| 11.05-11.30| Break  
Poster Presentations – College of Aviation Atrium |
| 11.30-11.45| **Q&A Panel**  
*Dan Maurino, Eric Friginal, Tom Nichols, Elizabeth Mathews* |
| 11.30-13.15| **Interactive Panel A**  
Looking at the risks  
**Presentations**: 3 x 20 min, followed by **Q&A Panel**: 30 min |
| 14.30-14.50| **Panel Presentation A1**  
The single biggest problem in aviation communication is the illusion that it has taken place  
*Margo Marchbank*, CAA Australia |
| 14.50-15.50| **Panel Presentation A2**  
Language as a factor in aviation safety  
*Karmen Stumberger*, CAA Republic of Slovenia |
| 15.50-16.20| Break  
Poster Presentations – College of Aviation Atrium |
| 16.20-17.20| **Workshop A**  
Exploring intercultural factors in international pilot-air traffic controller communications  
*Ana Lúcia Tavares Monteiro*, Carleton University / ANAC (Brazil) |
| 17.30-17.45| **Day 1 Wrap Up**  
*18.00*: Reception at Henderson Welcome Center, ERAU  
*19.00*: Dinner at Henderson Welcome Center (hosted by ERAU) |

#### SESSION 2  
**Tools and strategies to improve language for communication as a human factors issue**

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| 13.15-13.40| Lunch  
College of Aviation Atrium (hosted by ERAU) |
| 14.30-14.50| Communication as a human factor - what does this involve?  
*Michael Kay*, ICAEA  
*Ana Lúcia Tavares Monteiro*, Carleton University / ANAC (Brazil) |
| 14.50-15.50| **Workshop A**  
Developing cross-cultural communicative competence  
*Michael Kay*, ICAEA  
*Ana Lúcia Tavares Monteiro*, Carleton University / ANAC (Brazil) |
| 15.50-16.20| Break  
Poster Presentations – College of Aviation Atrium |
| 16.20-17.00| **Workshop A**  
Working with the risks  
*Michael Kay*, ICAEA |
| 17.30-17.45| **Day 1 Wrap Up**  
*18.00*: Reception at Henderson Welcome Center, ERAU  
*19.00*: Dinner at Henderson Welcome Center (hosted by ERAU) |
## SESSION 3
**Developing language and communication skills for safety**

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<td>8.45-8.50</td>
<td>Main Room</td>
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<td>8.50-9.20</td>
<td>Main Room</td>
<td>Presentation 4</td>
<td>Language awareness and intercultural competence as human factors in pilot-controller communication&lt;br&gt;Markus Bieswanger, Bayreuth University</td>
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<tr>
<td>9.25-10.25</td>
<td>Workshop Rooms</td>
<td>Workshop C</td>
<td>What should we teach native English speakers?&lt;br&gt;Domnique Estival&lt;br&gt;MARCS Institute, Western Sydney University</td>
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<tr>
<td>10.25-10.55</td>
<td>Break</td>
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<td>10.55-11.55</td>
<td>Workshop Rooms</td>
<td>Workshop C</td>
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<td>12.00-12.50</td>
<td>Main Room</td>
<td>Interactive Panel B</td>
<td>Case studies and perspective from around the world&lt;br&gt;Presentations: 2 x 15 min, followed by Q&amp;A Panel: 20 min</td>
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<tr>
<td>13.00-14.30</td>
<td>Lunch</td>
<td>College of Aviation Atrium (hosted by ERAU)</td>
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## SESSION 4
**The long-term aim of the ICAO LPRs: Enhanced training for better communications and safety**

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<tr>
<td>14.30-15.00</td>
<td>Main Room</td>
<td>Presentation 5</td>
<td>The evolution of teaching and testing Aviation English for Brazilian air traffic controllers&lt;br&gt;Patricia Tosqui, Airspace Control Institute, Brazilian Air Force</td>
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<td>15.10-16:10</td>
<td>Workshop Rooms</td>
<td>Workshop F</td>
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<td>16.10-16.40</td>
<td>Break</td>
<td>Poster Presentations – College of Aviation Atrium</td>
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<td>16.40-17.40</td>
<td>Workshop Rooms</td>
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<td>17.45-18.00</td>
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PROGRAMME

Day 3: Friday, 11 May
Looking Ahead

SESSION 5
Where are we heading with the ICAO LPRs?

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<tr>
<th>Time</th>
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<td>Day 3 Opening</td>
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<td>8.50-8.50</td>
<td>Interactive Panel C</td>
<td>Policy and implementation – challenges and solutions</td>
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<td>Presentations: 3 x 30 min, followed by Q&amp;A Panel: 30 min</td>
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<tr>
<td>8.50-10.25</td>
<td>Panel Presentation C1</td>
<td>A review and discussion: FAA English language standard for an FAA license</td>
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<td>Rick Valdes, formerly United Airlines</td>
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<td>8.50-10.25</td>
<td>Panel Presentation C2</td>
<td>A two-pronged approach to ICAO English language proficiency assessment for licensing</td>
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<td>Pieke Satijn, Eurocontrol</td>
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<tr>
<td>10.25-10.40</td>
<td>Break</td>
<td>College of Aviation Atrium</td>
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<tr>
<td>10.40-10.55</td>
<td>Presentation 6</td>
<td>The ICAO LPRs – Where we are now</td>
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<td>Catalin Popa, Technical Specialist, Air Navigation Service Bureau, ICAO Montreal</td>
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<td>10.55-11.20</td>
<td>ICAO LPR Test Development Guidelines</td>
<td>Introducing the Refined Test Instrument Guidelines project, initiated by ICAEA</td>
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<td>11.20-12.00</td>
<td>Conference Closing</td>
<td>John R. Watret, Ph.D., FRAeS, Chancellor of Embry-Riddle Aeronautical University - Worldwide</td>
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from 12.00: own lunch arrangements
from 12.30: transport from ERAU to Best Western
13.30-15.30: tour of ERAU Campus (optional)
15.30: pick-up from Best Western
16.00: pick-up from ERAU
23.00: return to Daytona Beach

POSTER PRESENTATIONS

Day 1: Wednesday, 9 May

- Modifying Authentic Content for the Aviation English Learner
  Jena Lynch, Embry-Riddle Language Institute

- Egyptian air-traffic controllers’ perceptions of urgency in hedged statements expressing emergency
  Ahmed Mahmoud Ahmed & Ashleigh Cox, Georgia State University

- Bringing Best Practices of Language Training Online: A Module for Teaching ATIS
  Alan Orr, Embry-Riddle Aeronautical University Worldwide

- The Aviation English Hub
  Natália Guerreiro, The Aviation English Hub

Day 2: Thursday, 10 May

- Teaching Cross-Cultural Awareness and CRM in Aviation English Courses
  Lauren Herzog, Embry-Riddle Aeronautical University

- Teaching If-Conditionals to Chinese Aviation Maintenance Students
  Genggeng Zhang, Georgia State University

- Using Corpus Data and the Rules of Technical Writing to Improve Readability of MRO Manuals
  Rachelle Sabrina Udell, Georgia State University

- Avialinguistics
  Anna Borowska, University of Warsaw, Faculty of Applied Linguistics

Presented in ERAU College of Aviation Atrium during breaks in the conference programme
EXHIBITORS

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<tr>
<th>There are two reliable venues for pilots to meaningfully practice their radio skills: The cockpit, or PilotEdge.</th>
<th>Attendees will have the opportunity to interact with our leading edge U-SIM Aviation English training tool.</th>
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<tr>
<td>Keith Smith - <a href="http://www.pilotedge.net">www.pilotedge.net</a></td>
<td>Alejandro Pérez Chávez - <a href="http://www.uleadair.com">www.uleadair.com</a></td>
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<tr>
<td>Displayed in ERAU College of Aviation Atrium during breaks in the conference programme</td>
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Biographies & Outlines

Day 1: Wednesday, 9 May

Key Note

The role of communication in human factors

Dan Maurino, Safety Management Advisor, ICAO Technical Cooperation Bureau

**Biography:** Dan Maurino is a former airline captain. He is a safety management advisor to the ICAO Technical Cooperation Bureau, and the Technical Director for Latin America of the Institute pour Une Culture de Sécurité Industrielle (ICSI) from France. He served a 21-year tour of duty with ICAO regular programmes. Dan project-managed the Organization’s Human Factors programme since its inception in 1989. In 2004, the Human Factors programme was merged into ICAO’s Safety Management programme, which Dan managed until his retirement.

**Outline:** The presentation addresses firstly the role of English language proficiency within communication, and raises the question whether proficiency in the English language can (or should) be considered either as a Human Factors or a human performance issue. The presentation moves on to alternatives for justifying the safety case underlying English language proficiency, and raises warnings about pitfalls associated with possible alternatives. The presentation concludes by suggesting an approach to dealing with English language proficiency needs in aviation organizations based in the broad perspective provided by the management of safety as a business function.

Presentation 1

Recognising the role of communication as a human factor: Perspectives from empirical research in applied linguistics

Eric Friginal, Georgia State University

**Biography:** Eric Friginal is an Associate Professor of Applied Linguistics at the Department of Applied Linguistics and ESL and Director of International Programs at the College of Arts and Sciences at Georgia State University, Atlanta, GA, USA. He specializes in applied corpus linguistics, intercultural communication, variationist sociolinguistics, technology and language teaching, and the analysis of spoken professional discourse. His books include The Language of Outsourced Call Centers, Corpus-Based Sociolinguistics: A Guide for Students, and Talking at Work: Corpus-Based Explorations of Workplace Discourse.

**Outline:** Several international airline accidents have been attributed, in part, to inadequate English language proficiency of pilots and limited communicative cultural awareness of air traffic controllers. English has become the official language for pilot-controller communications and also the de facto universal common language in this domain. The focus of this presentation is to strategically apply insights from the academic fields of Applied Linguistics, English for Specific/Occupational Purposes, and Intercultural Communication to describe and examine the complex set of issues related to English as a human factor in global aviation. Emerging research approaches and pedagogical applications to aviation English practitioners will be presented.

Presentation 2

Notes from the field: Making the case for enhanced English language standards for pilots worldwide

Tom Nichols, former airline pilot (Central Asia, USA and Africa)

**Biography:** Tom Nichols has been an FAA Licensed pilot since 1970, flying for US Coast Guard (1975-1985), Delta Airlines as Captain/LCA (1985-2004), and was VPFO at Air Astana, Kazakhstan (2005-2011). He has also held positions with Transamerica Airlines (Africa and Central America), Best Aviation (Bangladesh), Somon Air (Tajikistan) 2013-2014 and has implemented Aviation English programs for pilots at several Central Asian airlines. He is currently SFI/SFE B737NG for Delta Global Services and BMA, a certificated TEFL instructor, and President ProFlight International, a start-up FTO.

**Outline:** Working pilots with no prior knowledge of English struggle to attain and maintain ICAO Operational Level 4. They often have little understanding of English beyond the requirements of ICAO. This causes difficulties in aircraft technical training and CRM/TEM. A two-pronged approach to Aviation English training for pilots is needed. Ab-initio pilots should be immersed in an English training environment which fosters attainment of expert level English. Current civil pilots need English training materials delivered to them on their hand-held devices for ease of access while on trips. This should be targeted at systems and procedural knowledge.
<table>
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<td><strong>A linguistic review of aviation accidents</strong></td>
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<td><strong>Elizabeth Mathews, ERAU / ICAEA</strong></td>
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<td><strong>Biography:</strong> Elizabeth Mathews is an Assistant Professor in Applied Aviation Sciences at Embry-Riddle Aeronautical University, focusing on the role of language as a factor in aviation safety. Elizabeth was formerly the ICAO Linguistic Consultant leading the development of the ICAO Language Proficiency Requirements, including ICAO Document 9835, Manual on the Implementation of the ICAO Language Proficiency Requirements, 1st Edition. Prior to her work in ICAO, she was the Director of ERAU Aviation and Academic English Language Programs at ERAU.</td>
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<td><strong>Outline:</strong> A systematic linguistic review of accident investigation reports contained in the Air Safety Network Accident Database by a team of applied linguists and aviation operational safety experts and accident investigators was conducted. A systematic approach to identifying accidents that occurred in multilingual and/or cross cultural contexts was used, and those accidents identified were then reviewed for possible language related factors. The study has revealed that language proficiency, including reading proficiency, affects aviation safety in a number of ways, beyond pilot and controller radiotelephony communications.</td>
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<th>Panel Presentation A</th>
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<tr>
<td><strong>The single biggest problem in aviation communication is the illusion that it has taken place</strong></td>
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<td><strong>Margo Marchbank, CAA, Australia</strong></td>
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<td><strong>Biography:</strong> Margo Marchbank is a highly experienced communication professional. Her current role as safety promotion manager with Australia’s Civil Aviation Safety Authority focuses on aviation safety communication. She has a particular interest in aviation human factors, and the important, but sometimes underplayed, role communication plays in aviation safety. She has also worked extensively in the area of safety management systems, producing accessible resources to support industry. She has post-graduate communication qualifications, with Masters in English Literature and Communication Management.</td>
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<td><strong>Outline:</strong> Leading with this somewhat provocative quote, Margo’s presentation will pose a series of questions addressing the conference theme of ‘communication as a human factor’, arguing that adopting a broader, human factors-oriented consideration of aviation communication is overdue. The focus, until now, on the ICAO Language Proficiency Requirements has arguably brought many safety benefits, but its concentration on pilot-ATC communication does not facilitate broader consideration of communication, and its integral role across the aviation safety system.</td>
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<th>Language as a factor in aviation safety</th>
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<td><strong>Karmen Stumberger, CAA, Republic of Slovenia</strong></td>
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<td><strong>Biography:</strong> Karmen Stumberger works at the Civil Aviation Agency of the Republic of Slovenia. She has over 20 years of experience in teaching and testing English for aviation. She has been responsible for the implementation of the Language Proficiency Requirements in the country since 2005. In 2012 she finished a postgraduate study in teaching English for Specific Purposes at Aston University in Birmingham, Great Britain.</td>
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<td><strong>Outline:</strong> This presentation aims to demonstrate the results of the examination of the communication related occurrences stored in the European Central Repository for Aviation Accidents and Incident Reports (ECCAIR). To obtain relevant data for the study, occurrences related to language and phraseology were extracted. The classification showed in which phases of flight communication breakdowns are most likely to occur and why. This presents useful insights into how incidents could be prevented. In addition, the results of a survey pilot and controller survey from around the world will be presented on the use of standard phraseology and English language in aeronautical communications.</td>
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<tr>
<th>Examining safety risk management strategies in pilot-controller communication</th>
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<td><strong>Vincent Oduor, CAA, Kenya</strong></td>
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<td><strong>Biography:</strong> Vincent Oduor is an air traffic controller with Kenya Civil Aviation Authority since 2002 and holds Aerodrome, Approach and Enroute Control ratings with experience as an ICAO ATM inspector. He currently holds the position of Senior Air Navigation Services Planning Officer. Being a strong advocate of aviation safety he enrolled at City University London in 2013 for the Master of Science in Air Safety Management and is due to graduate in July 2018.</td>
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<td><strong>Outline:</strong> With the increase in demand for aircraft use in passenger transport and cargo delivery and to ensure safe, efficient and orderly movement of aircraft from one point to the other, there is need to have clear, precise, unambiguous and uninterrupted communication process between pilots and air traffic controllers. This presentation will discuss the processes of effectively identifying, assessing and managing threats in pilot-controller communication. This would further focus on ICAO Language Proficiency Requirements, air-ground communication hazards, bilingual radiotelephony and ICAO phonetics.</td>
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Workshop A

Exploring intercultural factors in international pilot-air traffic controller communications

Ana Lúcia Tavares Monteiro, Carleton University / ANAC (Brazil)

Biography: Ana Lúcia Tavares Monteiro is an ICAEA Board Member and a PhD candidate in Applied Linguistics and Discourse Studies at Carleton University, Canada. Her research interests include the impact of cultural factors on pilot-controller interactions and the definition of the construct of multicultural radiotelephony communications to inform test design. Ana is on a training leave from ANAC (Brazil), where she has been working with the LPRs since 2005, as regulator, aviation English test designer, interlocutor, rater and rater trainer.

Outline: This workshop aims to present results from exploratory research that investigates culturally influenced factors arising from international radiotelephony communications as well as pilots’ and ATCOs’ perceptions of their threat to aviation safety. The final goal is to generate a taxonomy of intercultural factors that can be used as a tool to improve intercultural communications within the aviation community. Based on research data, workshop participants will rate the importance of some of the identified factors as safety issues, consider possibilities to incorporate them into training activities, and discuss strategies to address these issues in terms of testing and policy change.

Workshop B

Developing cross-cultural communicative competence

Michael Kay, ICAEA

Biography: Michael Kay has been involved in Aviation English for over 20 years. He has a Masters in Applied Linguistics from the University of Melbourne, with a dissertation on the construct validation of an ICAO LPR test instrument – RELTA. He oversaw the design, development and implementation of this test in parts of Europe, Asia and South America. He is currently President of the ICAEA, and has been based in Bangkok since 2011, working for the Thai ANSP as the leader of a team of instructors and curriculum developers. Michael is interested in the role of language in aviation communication.

Outline: What happens at the communication interface over the radio when a non-native English speaker needs to understand and convey meaning effectively with native or other non-native English speakers? Is focusing on just developing language proficiency among controllers and pilots sufficient? Is it possible to cultivate strategies to help non-native English speaking controllers and pilots communicate more effectively over the radio, including identifying and repairing communication breakdowns to maintain safe operations? In this workshop we will explore how cross-cultural communication skills could be developed for pilots and controllers who use English as a second language.

Day 2: Thursday, 10 May

Presentation 4

Language awareness and intercultural competence as human factors in pilot-controller communication

Markus Bieswanger, Bayreuth University

Biography: Markus Bieswanger is a full Professor of English Linguistics at Bayreuth University (Germany), Head of the Scientific Steering Committee at the Bayreuth University Language Center (which offers courses and proficiency assessment in more than 20 languages), and President of the German Association of Applied Linguistics (GAL). He has a long-standing research interest in Aviation English, including language teaching, learning and testing, the use of English as a Lingua Franca and aspects of intercultural communication in aviation contexts.

Outline: In addition to English proficiency, language awareness and intercultural competence have been identified as factors that influence pilot-controller communication in a number of ways. A lack of language awareness and/or intercultural competence can negatively impact aviation safety and reduce the efficiency of communication in air traffic management. This paper identifies communication problems resulting from inadequate language awareness and/or insufficient intercultural competence. These issues are then linked to existing scholarship on language awareness and intercultural communication in a variety of settings such as international trade, multinational companies or Internet-based communication, to identify parallels with and possible transfers to the field of aviation.

Workshop C

What should we teach native English Speakers?

Dominique Estival, MARCS Institute, Western Sydney University

Biography: Dominique Estival holds a PhD in Linguistics from the University of Pennsylvania. As a linguist, her research spans the computational modelling of language change, machine translation, linguistic engineering, spoken dialogue systems and aviation communication (Estival, Farris & Molesworth, 2016). As a pilot and a flight instructor in Australia, she has first-hand experience of student pilots’ difficulties with radio communication and she studies how pilot training, language background and contextual factors affect pilots’ ability to follow the mandated phraseology.

Outline: While EL2 pilots must attain ICAO ELP Level 4 and are tested for the comprehension of a variety of accents, NES pilots are not. We explore the different ways in which NES and EL2 student pilots approach AE and learn to communicate while learning to fly. We discuss how to prepare NES pilots to not only master radiotelephony phraseology in their production, but also how to understand EL2 pilots and EL2 ATC. Training for NES pilots should include comprehension of a variety of accents and an understanding of the difficulties EL2 pilots may experience.
### Workshop D

**Inter-cultural issues in air-ground communication: A case study – triggers for miscommunication**  
**Aline Pacheco, ERAU / PUCRS**

**Biography:** Aline Pacheco is an Associate Professor at Pontificia Universidade Católica do Rio Grande do Sul (PUCRS). She holds a PhD in Linguistic Theory and Analysis from Universidade Federal do Rio Grande do Sul (UFRGS), a Master’s Degree in Applied Linguistics, and a Bachelor’s Degree in Letters from PUCRS. She has been working as an English teacher since 1993. She is currently working at the School of Aeronautical Science. Her major interests are English as a Foreign Language and Aviation English.

**Outline:** The workshop intends to cover some trigger issues in air-ground communications that can lead to an undesired outcome by studying one specific case as an illustration. Participants will be invited to analyze the event, discuss and explore how language was a contributing factor as the events unfolded in the light of some theoretical background. In order to link it to the theme of the session, participants will also be encouraged to reflect and share ideas about classroom practices based on research that can help develop communication skills for safety.

### Workshop E

**Communication considerations from the Argentinian ATCOs' perspective: What are the priorities?**  
**Norma Bravo, EANA SE / ICAEA**

**Biography:** Norma is based in Argentina where she is an active member of the ICAEA Board. Norma has a degree in English Teaching and Linguistics. From 2005-2016 she worked for ANAC-CIPE, implementing the ICAO LPR testing system, and was also an Aviation English instructor and teacher trainer. Since 2016, she has been working with EANA SE, where she is responsible for overseeing the national aviation English training programme for ATCOs, AIS operators and CNS technicians.

**Outline:** During this workshop we will review the findings of a survey conducted on Argentinian ATCOs’ experiences in communicating with pilots across the region, including non-native and native speakers of both English and Spanish. We aim to reveal how issues such as culture, language proficiency and use of ICAO standard phraseology impact on communication. The workshop will go onto explore how the controllers’ perceptions of important issues might inform communications training.

### Panel Presentation B

**Airlines and CAAs on Aviation English: One need, two perspectives?**  
**Sebastien Thomas De La Pintiere, Air Cote d’Ivoire**

**Biography:** Sebastien Thomas De La Pintiere is an airline pilot, flying Airbus throughout Western Africa for a living. Formerly an international project manager, Sebastien shifted to his life-long aviation dream eight years ago, and is now the Flight Safety Manager of Ivory Coast’s flag carrier, Air Cote d’Ivoire. He was part of the team that created the first Aviation English language testing center in francophone Western Africa. He also is an EPLT examiner for the local CAA, a CRM Instructor, and a part-time aviation journalist.

**Outline:** This presentation will underline the constraints of developing and implementing a training programme aimed at developing aviation English proficiency for populations of flight crew, cabin crew and maintenance professionals and suggest remedies to overcome the numerous difficulties encountered.

**Aviation English Training in China: Current trends, challenges, and future directions**  
**Xiaoning Guo, Georgia State University**

**Biography:** Xiaoning Guo works as an Aviation English instructor at Flight Technology College of Civil Aviation University of China. Her study interests are reasons for miscommunications between pilots and controllers in radio communication and pedagogical approaches to improving student pilots’ Aviation English proficiency.

**Outline:** In recent years, with major developments in civil aviation in China, more and more universities and institutes are focusing on how they could best address the national and global needs of teachers tasked to train student pilots across various language and communication needs. The presenter puts forward the problems or challenges typically encountered by Aviation English teachers for student pilots in China and explores the possibility of integrating task-based and situational teaching materials and approaches in Aviation English classes.

### Presentation 5

**The evolution of teaching and testing Aviation English for Brazilian air traffic controllers**  
**Patricia Tosqui, Airspace Control Institute, Brazilian Air Force**

**Biography:** Patricia Tosqui has a PhD in Linguistics, focusing on teaching English for Specific Purposes. With over 20 years of experience teaching English in various contexts, she has been the supervisor of the Aviation English training program for air traffic controllers at Brazil’s Airspace Control Institute since 2009. She is also the leader of GEIA, an Aviation English research group in Brazil. Currently, she’s conducting post-doctoral research about applying corpus linguistics to Aviation English course design and material development.

**Outline:** This presentation will outline some interesting facts and information about a decade of ATCO training and testing in Brazil, concerning courses offered, people trained on the job, test development and test applications. There will be some information about methodology used in the courses and the Blended Learning Training Program, as well as the creation of a research group to support the practices. It will be possible to see the evolution of the processes through time. The numbers are impressive and reflect a country with the size of a continent.
### Workshop F

**Intelligibility of American Aviation English standard phraseology**  
*Julia Trippe, University of Oregon*

**Biography:** Julia Trippe performs basic and applied research in aviation human factors: automation and communication. Julia earned a PhD in Linguistics from University of Oregon in 2018, focusing on Aviation English phonology. She has been a commercial pilot since 1994 and holds ATP and flight instructor certificates. Julia's foundational pilot/controller communication research examines Aviation English production and perception by native and non-native English speakers. Her automation research focuses on pilot understanding of aircraft automation, decision making and risk mitigation.

**Outline:** My past research shows that Aviation English standard phraseology (AESP) and Conversational English (CE) differ phonologically to the degree that they may not be mutually intelligible. My current study examines AESP intelligibility for three different populations: native English speaking non-pilots, native English speaking pilots and non-native English speaking pilots. Findings indicate that conversational English proficiency is not a sufficient or appropriate predictor of Aviation English proficiency. Yet little AESP is taught prior to pilot flight training. While they are trained in CE, flight students are not trained in AESP intelligibility. This workshop focuses on design elements of AESP training aids.

### Workshop G

**Identifying issues that affect the effectiveness of communication**  
*Jennifer Roberts, ERAU / ICAEA-RG*  
*Alejandro Perez, formerly Aeromexico, ULEADAIR*

**Biography:** Jennifer Roberts holds an MA in Applied Linguistics and ESL and now works at Embry-Riddle Aeronautical University – Worldwide as the Aviation English Specialist in the College of Aeronautics. Previously, she served as an English Language Fellow in Indonesia, and an English instructor at Tsinghua University in Beijing.  
**Biography:** Alejandro Perez is a retired Aeromexico Boeing 787 Captain and founder of Uleadair. He has a Masters in Anthropology at Wayne State University, Detroit, Michigan. He was a principal investigator on the Mexican Government funded project “Evaluation design for the implementation of ICAO’s Aviation English Proficiency Testing Process”. He was a pioneer in the introduction of CRM at Aeromexico and researcher on the project “Culture and Flight Deck Operations,” funded by Boeing Commercial Company. He collaborated on the project “Close Call Data Sources Review and Analysis” funded by NASA.

**Outline:** This workshop will ask participants to identify the interaction process between pilots, and pilots and controllers, with consideration as to how these interactions can lead to an accident. To help participants be aware of these interaction variations that affect performance when facing a complex task, they will be invited to play a game that recreates cognitive, affective and conative aspects of communication, the main categories of the interaction process. The ultimate goal is to link these categories with the communicative approach as a teaching method.

### Workshop H

**Integrating contextual factors into teaching of English for aeronautical communications**  
*Neil Bullock, ICAEA-RG*

**Biography:** Neil Bullock, based in Switzerland, has been an English language teacher, trainer, examiner and test developer in aeronautical communication for 15 years. Having previously worked in Air Traffic Control for 20 years, Neil complimented his operational experience with an MA in Applied Linguistics and has continued to write and present on language learning and testing in aeronautical communication. Neil is a Joint-Coordinator of the ICAEA Research group, as well as Coordinator of IATEFL Testing Evaluation and Assessment SIG.

**Outline:** This workshop is based on more than 10 years research and practice of teaching and testing English in aeronautical communication. It will engage participants in activities to increase awareness of the many factors that determine how the language in pilot/ATCO communication is formed and used. Three areas will be covered: functional language in non-visual and visual communication, cultural awareness in a multi-cultural environment, and understanding real world language as trainers. The activities will highlight the importance of considering multiple factors in language use to give valid and meaningful learning of real-world communication to our learners.
Day 3: Friday, 11 May

Panel Presentation C

A review and discussion: FAA English Language Standard for an FAA license

Rick Valdes, formerly United Airlines

**Biography:** Rick Valdes started his flying career in 1975 and retired from United Airlines in 2013. From 2000 to 2013, Rick was the International Federation of Airlines Pilots Association (IFALPA) representative to the ICAO Proficiency Requirements in Common English Study Group (PRICESG). He is a graduate of the Air Line Pilots Association International (ALPAI) basic and advanced Accident Investigation and Safety School. Rick is a former FAA Air Safety Inspector. He holds a Bachelor’s Degree from Barry University in Miami, Florida. Rick has over 24,000 hours’ flying hours, including extensive international flying experience in Europe, South America and Asia.

**Outline:** This presentation will look at current FAA regulations and guidance that provide guidance and direction to aviation safety inspectors, designated pilot examiners, flight instructors and flight schools concerning the ICAO English Language Proficiency Requirements for pilots.

A two-pronged approach to ICAO English language proficiency assessment for licensing

Pieke Satijn, Eurocontrol

**Biography:** Pieke Satijn is a former air traffic controller from the Netherlands. He also holds an aviation weather forecaster diploma and a PPL. Pieke works for EUROCONTROL as the ELPAC Test Manager. Currently, 56 States are using the ELPAC test to assess their ATCOs and pilots. The ATCO test version is fully recognised by ICAO under the AELTS programme. In 2015 EUROCONTROL and ICAO signed a cooperation agreement aiming at supporting ICAO language proficiency implementation in ICAO Contracting States and promoting the use of ICAO recognised language proficiency tests.

**Outline:** The introduction of the ICAO LPRs in 2011 caused significant challenges for CAAs responsible for their implementation among ICAO Contracting States. While the new requirements were drawn up in response to several accidents involving professional ATCOs and pilots, the changes affected all license holders. This presentation highlights how aeronautical communication issues still occur frequently. The need for a good standard of ICAO (English) language proficiency assessment has never been so clear. This will be followed by a review of the impact of the changes, the challenges for CAAs, the current situation and a proposal for an alternative approach towards language proficiency endorsement and ATCO and pilot licensing.

English in the Aviation Maintenance industry: The impact on safety and an exploration of the need for standards

Mike Walker, Boeing

**Biography:** Patrick (Mike) Walker is responsible for development of new Maintenance Training Programs and Maintenance Services in the Training and Professional Services group of Boeing Global Services. Mr. Walker came to Boeing in 2001 and has taught several models of Boeing airplanes to customers around the world. He has extensive training experience across multiple disciplines and was the International Regulatory Representative in Maintenance for the Boeing Company. He currently holds an FAA Certificate as an Airframe and Powerplant Mechanic, Turbojet Flight Engineer and Dispatcher.

**Outline:** The focus will be on comprehension of maintenance documentation and how this may affect safety and efficiency in the working environment. Personal experience will be shared where an individual worker attempted to alter an airplane’s condition to conduct a test without properly adhering to the maintenance procedure. When questioned why procedures were not being followed the response indicated that there wasn’t full understanding of the consequences of not following the procedure. In addition to this example, another experience will be shared where a pilot would not accept an airplane for dispatch because ground crew could not effectively communicate to the pilot what corrective actions had taken place on his airplane. This resulted in a flight cancelation that was not necessary.

Presentation 6

The ICAO LPRs – Where are we now

Catalin Popa, ICAO

**Biography:** Catalin Popa, a retired Lieutenant-Commander and former Romanian CAA Inspector, is now a Technical Specialist within Operational Safety Section, ANB / ICAO. He has been involved in military and civil aviation since 1995. In 2016 he became Romania’s representative to Eurocontrol. In his current position, Catalin is responsible for providing technical advice and services in relation to personnel licensing and flight operations, specifically in the implementation of the Standards and Recommended Practices (SARPs) of Annex 1, Annex 6 - Parts I, II and III, Annex 8 and Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868). He also is responsible for analysing problems raised by states and international organizations in the field of language proficiency, training and personnel licensing and recommending appropriate solutions.

**Outline:** In this presentation we will revisit the main ICAO language provisions, and explore the need for greater common understanding and application of these requirements. I will also discuss plans and developments in this area for the near future.