





# 8TH GEIA SEMINAR PROGRAM AND ABSTRACTS - virtual event -NOVEMBER 8-12, 2021





### Welcome to the 8th GEIA Seminar

In 2020, humanity faced a great challenge. The COVID-19 pandemic imposed lockdowns and social isolation and forced people all over the world to change their way of living, studying, working and connecting to other people. Technology has played an essential role as we adapt to this "new normal", and it applies to events too. After six years, for the first time we had a "virtual GEIA Seminar". On one hand, we had to get used to recording and watching videos and interacting asynchronously by written messages instead of attending on site presentations. On the other hand, space, time and money were not constraints anymore, and we were delighted to have many international presenters and attendees offering us valuable contributions which would have been impossible otherwise.

In 2021, the pandemic seems to be under control, at least to some extent, and life is returning to "normal" - not like it was before, but in a way that things can be done. Let's take the Tokyo Olympic Games for example. They happened without the audience participation and with athletes wearing masks, but were not less impressive and even more emotional because of that.

But the fruitful experience we had with the virtual event made us want to repeat it. The 8th GEIA Seminar was designed to be totally virtual again. All presentations were pre recorded and will be uploaded to the event website gradually, from Monday to Thursday, so that attendees can watch them throughout the week and use the boxes to ask questions and interact with presenters and other attendees. Please, do interact with the presenters, they are waiting for it!

We start on Monday with two "gold medal" researchers, our keynote speakers: Professor Eric Friginal from Georgia State University, USA, and Professor Noriko Ishihara, straight from Hosei University, Tokyo, Japan. They show how technology-mediated tools can be used to analyze macro and micro policies and the pragmatics of aeronautical communication, with implications for pedagogy and assessment. Tuesday concentrates presentations about Corpus Linguistics and Aviation Language Description regarding pilot-controller communication, Meteorology and Aircraft Maintenance. Wednesday is the day for Aviation English Teaching - and the effect of the pandemic on teaching online is evident in the presentations. Thursday is devoted to Aviation English Testing. What about Friday? Well, on Friday we will have the opportunity to interact with the presenters in a Q&A live meeting. Yes, we miss synchronous interactions, and even though we know different time zones can be a problem, we hope many people can attend it.

We would like to thank:

- DECEA (Brazilian Department of Airspace Control) and ICEA (Airspace Control Institute), for providing the means for making this event possible... from Brazil to the world!

- All presenters who kindly accepted our invitation, our two keynote speakers and the invited speakers who open the event every day.

- The GEIA members who are always so engaged and passionate about our Seminar.

- ICAEA (International Civil Aviation English Association) for helping spread the news about GEIA Seminar to the international aviation English community.

- The international audience for the interest and collaboration with the GEIA Seminar.

To all our attendees: you are the reason why GEIA exists, to exchange research and experiences about Aviation English and make the skies safer. Thank you. Enjoy the Seminar!



#### PROGRAM

	Monday 08/11	Tuesday 09/11	Wednesday 10/11	Thursday 11/11	Friday 12/11
	Opening	Language Description and Analysis	Aviation English Teaching	Aviation English Testing	<b>Q&amp;A Panel</b> Live interactions
3	Welcome Videos DECEA and ICEA	<b>Invited Speaker 1</b> Jennifer Drayton (New Zealand)	<b>Invited Speaker 2</b> Neil Bullock (Switzerland)	<b>Invited Speaker 3</b> Maria Treadaway (New Zealand)	<b>Q&amp;A Panel<sup>1</sup></b> <b>Zoom Meeting 1</b> 1100 UTC to 1300 UTC (8:00 -10:00 AM Brasília time) <b>Q&amp;A Panel<sup>2</sup></b> <b>Zoom Meeting 2</b> 1300 UTC to 1500 UTC (10:00 -12:00 AM Brasília time)
	Keynote Speaker1 Eric Friginal (USA)	Presentation 1 Malila Prado (China) and Adriana Mendes Porcellato (Brazil)	<b>Presentation 6</b> Patrícia Tosqui- Lucks, Patrícia Tupinambá and Juliana Santana (Brazil)	Presentation 11 Ana Lucia Monteiro (Brazil)	
	<b>Keyote Speaker 2</b> Noriko Ishihara (Japan)	<b>Presentation 2</b> Aline Pacheco (Brazil)	<b>Presentation 7</b> Natalia Guerreiro, Stephanie Faria, Thalita Diniz and Thiago Silva (Brazil)	<b>Presentation 12</b> Angela Garcia (Canada)	End of Seminar
		<b>Presentation 3</b> Andrew Schneider (USA) and Rachelle Udell (USA)	Presentation 8 Lena Ellingburg, Rachel Herman, Michele Von Merveldt and Jennifer Roberts (USA)	<b>Presentation 13</b> Ashleigh Cox and Mehrnoush Karimi (USA)	
		<b>Presentation 4</b> Rafaela Peixoto (Brazil)	<b>Presentation 9</b> Daniela Terenzi and Maria Claudia Pizzi (Brazil)		
		<b>Presentation 5</b> Rachelle Udell (USA)	<b>Presentation 10</b> Ana Lígia Silva and Natalia de Andrade (Brazil)		

<sup>&</sup>lt;sup>1</sup> Speakers from New Zealand, Japan, China, Europe, Brazil <sup>2</sup> Speakers from Canada, USA, Brazil



#### ABSTRACTS

#### Monday - November 8th

#### Keyote Speaker 1

### Linguistic Characteristics of Aeronautical Communications: Implications for Assessment, Policy, and Pedagogy

Eric FRIGINAL (GSU – Georgia State University, Atlanta, Georgia, USA. Professor of Applied Linguistics and Director of International Programs, College of Arts and Sciences, efriginal@gsu.edu)

This presentation examines linguistic characteristics and distributions from specialized corpora of English-based, cross-cultural aeronautical communications, highlighting their similarities and differences across related domains of professional workplace interactions such as maritime communications, health care discourses, and global telephone-based business interactions. I utilize a framework of corpus-based (critical) discourse analysis in exploring various discursive practices among the cultural structures and task dimensions of these registers, focusing especially upon speakers' (e.g., pilots and air traffic controllers) understanding of identities, role-relationships, and power dynamics at work. I follow an iterative cycle which combines computational approaches to data extraction and a progression of stages involving quantitative and interpretive, functional analyses (Baker et al., 2008; Gentil, 2013; Friginal et al., 2019; Friginal, 2021). This process allows me to examine the structure and meaning of crosstalk (Biber, 1998) and how it can be further described and explained using evidence from corpora. I strongly argue for the need to incorporate discourse analytic approaches, grounded in applied linguistics and a combination of technology-mediated tools to capture and describe the nature of real-time aeronautical communications. Implications for language-based performance assessment, training and the production of teaching materials, and macro and micro language policies will be presented and discussed.

Keywords: discourse analysis, corpus linguistics, language policy.

#### Keynote Speaker 2

# Face and politeness in Aeronautical English: How can pragmatics affect radiotelephony communications?

Noriko ISHIHARA (Hosei University, Chiyoda-ku, Tokyo, Japan. Professor of Applied Linguistics and (T)ESOL, Faculty of Business Administration, ishi0029@gmail.com)

Misunderstandings and interactional difficulty in aeronautical communication can have fatal consequences and have regularly presented threats to human lives in the past decades (ICAO, 2010); thus, in-depth investigation of authentic auronautical interactions can be beneficial for enhanced future training and testing of aviation specialists. This presentation aims to identify the role of pragmatic language use in radiotelephony (R/T) communications, particularly that of face and (im)politeness as pragmatics relates to communication effectiveness as a contributing factor in air safety.



As politeness is not part of ICAO's phraseology, we may consider it superfluous or unnecessary in R/T communications. However, ICAO (2010, p. 3-9) is aware of aviation specialists' relational needs and approves of the presence of polite language in R/T communications. In fact, greetings, expression of gratitude, politeness markers, and mitigating devices are prevalent in R/T communications; some linguists argue that face and politeness can effectively assist in negotiating meaning (Ishihara & Lee, 2021; Linde, 1988; Monteiro, 2019; Prado & Tosqui-Lucks, 2020). In this presentation, we interpret selected excerpts of R/T communications from a pragmatic perspective considering the affordances and constraints involved in the local contexts. We will then consider ideas for improving future training and assessment of aeronautical communication.

Keywords: face, politeness, pragmatics, relational needs, mitigation.

#### Tuesday - November, 9th

#### Invited Speaker 1

## Time to euthanise standard phraseology and plain language? A linguistic alternative for a new world order

Jennifer DRAYTON (VUW – Victoria University of Wellington, Wellington, New Zealand. School of Linguistics and Applied Language Studies; jenrayts@gmail.com.)

Aviation radiotelephony communication is currently described as a combination of standard phraseology and plain language, but the line between the two is subjective. This paper presents a technical vocabulary approach that provides an alternative lens for language research and ESP pedagogy in aviation. The research used a list of technical vocabulary called the Tower Aviation Radiotelephony Technical Vocabulary List (TARTVL) which covers 68.32% of the types in the standard phraseology corpus. The remaining language is non-technical general English. The list can be used to identify standard and non-standard radiotelephony communication. It is also useful for training, test development, research, safety investigation and language policy in aviation.

**Keywords:** standard phraseology; aviation English; aviation radiotelephony; aviation communication; aviation technical vocabulary.

#### Presentations

### 1. "When I land - if I ever land": exploring if-clauses in aeronautical English

Malila Carvalho de Almeida PRADO (FJUT – Fujian University of Technology, Fuzhou, Fujian, China. Lecturer in Translation Studies, School of Humanities; 62102007@fjut.edu.cn)

Adriana Mendes PORCELLATO (UFBA – Federal University of Bahia, Salvador, Bahia, Brazil. Temporary professor of Italian, Instituto de Letras; adriana.porcellato@ufba.br)

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Conditional sentences are listed in the complex structure glossary of Doc9835 (ICAO, 2010). Recent research has found that expressions with if are indeed relevant in plain aviation English in R/T communications (PRADO, 2019), but did not examine them fully. The present study investigates if-clauses in a corpus of radio communications in abnormal situations (PRADO; TOSQUI-LUCKS, 2019), with a view to identifying the functions they perform in plain aviation English (BIESWANGER, 2016), and how they can be applied in aviation English teaching and assessment. A corpus-based analysis revealed that of the 310 occurrences of if-clauses in the corpus, 64% were employed in requests and orders; 24% in indirect questions; and only 12% expressed conditionality such as "When I touch down / if I ever touch down / do I just kill the throttle or what?". As the first two major categories correspond largely to formulas (if you need, if you can) already discussed in Prado (2019, 2021), we now examine the if-clauses that correspond to conditional sentences so as to inform aviation English pedagogical materials and resources from a pragmatic perspective and in the light of real language use (c.f. Ishihara; Cohen, 2022).

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**Keywords:** conditionals, if-clauses, corpus linguistics, pragmatics, aeronautical English.

# 2. Reported Speech in Aviation English: an analysis through two specific corpora

Aline PACHECO (PUCRS, Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil. Associate Professor, School of Humanities and School of Technology; aline.pacheco@pucrs.br)

Aviation English is a specialized language and, as such, features some specific structures that should be carefully analyzed to be dealt with appropriately. Reported Speech (RS) constitutes an essential communicative function for pilots and controllers because they often must relay information to different parties in complex communication scenarios. Regarding the teaching and learning of RS, the most traditional orientation is that it should observe tense backshifting- the possibilities of not shifting back the tense seem to be treated as exceptions, even in specialized coursebooks. This presentation discusses the use of RS in aeronautical communications by analyzing the occurrences of this structure in two specialized corpora – CORPAC, the Corpus of Pilot and ATC Communications and RTPEC, the Radiotelephony and Plain English Corpus, examining actual conversation samples after verbs 'said' and 'told'. The main findings suggest that around 50% of the indirect reported clauses in aviation maintain the original tense, which seems to be evidence that pilots and ATCs choose to report no changes in the scenario when relaying information in a similar proportion to choosing to backshift. Accordingly, teaching and learning resources like specialized coursebooks or tailor-designed materials should factor the real communication features in their activities.

Keywords: Reported Speech, Aviation English, Corpus-based analysis.



### 3. A corpus-driven approach to Aviation English in pilot flight training

Andrew Schneider (ERAU – Embry-Riddle Aeronautical University, Daytona Beach, Florida, United States. Aviation English Coordinator, Flight Department; schnea14@erau.edu.)

Rachelle Udell (GSU – Georgia State University, Atlanta, Georgia, United States. Ph.D. Student, Department of Applied Linguistics and ESL; rudell1@gsu.edu.)



Radio-telephonic communication between professional pilots and air traffic controllers has been the topic of numerous corpus research projects in the field of Aviation English (see Borowska, (AE) in recent years 2017; Friginal et al., 2020). Notably, Bieswanger (2016), following Biber and Conrad's (2009) framework for register analysis, identified two distinct, specialized, and highly restricted registers of AE in use by professional aviation personnel: Standard Phraseology and "plain" AE. Similar corpus-driven analyses of discourse between student pilots and their flight instructors in training program contexts is skant. The Corpus of Flight Training (CFT) monitor corpus developed in this study will encompass 90+ hours of transcribed audio and video recordings of one-on-one, instructional communication in AE and conversational English registers between flight instructors and student pilots. Authentic linguistic data is collected in three key contexts of flight training operations: oral instructional activities, Flight Training Devices (FTDs), and in-air flight. This presentation discusses the results of a quantitative, exploratory multi-dimensional analysis (see Biber,1988; Friginal, 2013) comparing preliminary CFT between the aforementioned three flight activities to other spoken and written registers of English. Similarities and differences across linguistic dimensions such as involved vs. informational production, narrativity, and explicit vs. situation-dependent reference will be discussed.

Keywords: corpus linguistics, flight training, register analysis.

# 4. Corpus systematization: a discussion on validation of Aeronautical Meteorology terminology at institutional settings

Rafaela Araújo Jordão Rigaud PEIXOTO (DECEA – Department of Airspace Control, Rio de Janeiro, Rio de Janeiro, Brazil. Translator and Researcher, Standards Division; rafaelarajrp@decea.mil.br)

Standardizing terminology is very important to maintain the accuracy of information being disseminated, mainly in specialized fields and at institutional settings. In the case of Aeronautical Meteorology, it is a very specific domain in the Aviation broader area, and it could comprise distinct classifications of the same term (PEIXOTO, 2020). In addition to that, there is scarce literature on Aeronautical Meteorology in Portuguese language. In light of this, the use of corpora may pose very positive influence to best relate normative and descriptive use of language. Taking this into account, this work is based on terminology (PAVEL; NOLET, 2001; CABRÉ, 1999 and 2003) and corpora (SANTOS, 2008 and 2014; TOGNINI-BONELLI, 2011; TAGNIN, 2013) theoretical foundations, and it aims at discussing definitions and translation to Portuguese of expressions and terms contained in Table 4678, concerning the main meteorology



codes, as prescribed by the World Meteorological Organization (2011). As a result, a systematization for terminological procedures is proposed, by using corpora with set validation standards. In this way, this paper intends to contribute to avoid misunderstandings regarding the criticality level of meteorological situations being communicated during air traffic operations.

Keywords: corpus linguistics, terminology, aviation, aeronautical meteorology.

# 5. Square Pegs and Round Holes: Why the ICAO LPRs do not work for Aviation Maintenance and what we should do instead

Rachelle UDELL (GSU – Georgia State University, Atlanta, GA, USA. PhD Student Department of Applied Linguistics and ESL; rudell1@gsu.edu.)

Assumptions persist that the ICAO Language Proficiency Requirements (LPRs) need not be expanded to include Aviation Maintenance Technicians (AMTs), since these individuals utilize relatively self-contained literacy skills (e.g., reading maintenance manuals and task cards) to perform their work, posing minimal risk to safe and efficient operations. However, Lomperis (2019) and others have observed that maintenance technicians employ multiple language skills in a variety of complex and integrated patterns to accomplish critical communicative tasks and facilitate vital information transfer -- the life-blood of the aviation industry. Moreover, these patterns of language use appear to be separate and distinct from those employed by pilots and ATCs during RT communication. Recently, the United States Federal Aviation Administration (FAA) established of a set of Aviation English Language Standards (AELS) meant to hold all FAA certificated airmen to the same ICAO LPR rubric and rating system developed for pilots and ATCs. Clearly, this is problematic since the current ICAO LPRs fail to address the language use domains and constructs specific to aviation maintenance communication. This presentation explores the unique nature of AMT language use, identifies some of the risks posed by inaccurate or insufficient communication, and proposes a preliminary framework to evaluate AMT language proficiency.

**Keywords:** language for specific purposes, Aviation English, language proficiency assessment, language policy, qualitative methods.

#### Wednesday - November, 10th

Invited Speaker 2:

### From the Microphone to the Classroom - Ensuring that real-life communicative skills are an integral part of teaching English to pilots and air traffic controllers

Neil BULLOCK, (Englishplus Language Consultancy – Lausanne, Switzerland; neilbullock@englishplus.ch)



Communication between Pilots and Air Traffic Controllers is very dynamic, context specific, and technically referential. It is reliant on a variety of communicative skills and includes such skills as understanding of operational knowledge and cultural awareness as well as being mindfulness of and accommodating the needs of the other person. This presentation will highlight the need for teachers to carefully consider and identify student's real-life communicative needs in context when teaching English to pilots and Air Traffic Controllers. It will focus on adopting a more inclusive approach to understanding and using the broad range of communicative skills that both sets of students need for effective and efficient communication, including but not restricted to, a more traditional language pedagogy. Using ideas from my own classroom practice and doctoral studies, the presentation will offer tips and guidance to help teachers by integrating real-life and scripted examples from real-life communication in the classroom. It will show how they can develop a much greater critical awareness of their students' real-life professional communication, which will ultimately help in curriculum planning, material development and classroom practice and offer learning to their students that matches all of their real-life needs.

Keywords: real-life, communication, skills, pilots, Air Traffic Controllers.

#### Presentations

### 6. Games, Corpus and Medals - Challenging and Innovating Experiences in Aeronautical English Hybrid Learning

Patrícia TOSQUI-LUCKS (ICEA – Airspace Control Institute, São José dos Campos, SP, Brazil. Aeronautical English Training Sector Supervisor; patriciaptl@fab.mil.br) Patrícia Palhares TUPINAMBÁ (ICEA – Airspace Control Institute, São José dos Campos,

SP, Brazil. Aeronautical English Training Sector Coordinator; patriciapalharespptfs@fab.mil.br)

Juliana de Castro SANTANA (ICEA – Airspace Control Institute, São José dos Campos, SP, Brazil. Aeronautical English Consultant; julianajcs@decea.mil.br)

In this presentation we will share some innovative training practices for the Aeronautical English learning, conceived in the hybrid mode (face-to-face or synchronous virtual interactions and asynchronous learning). We will discuss the conception, elaboration and implementation processes of new training tools designed for Brazilian air traffic controllers, based on the linguistic categories of the ICAO Rating Scale (ICAO, 2004, 2010). The face-to-face part was developed to explain the descriptors of the rating scale, clarifying the differences between operational and non-operational levels. The elaboration of the game-like activities was data driven, and the data were composed by frequent mistakes compiled in a corpus with oral productions of students who have attended other courses; difficulties presented by candidates who have obtained proficiency level 2 or 3 in the Aeronautical English Proficiency Exam (EPLIS); as well as linguistic problems collected by experienced teachers. The combined work of English language experts and subject matter professionals played an important role in the development of both parts of this hybrid learning tool. The

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gamification of the ESP content aimed to provide an engaging and more appealing environment for proficiency level elevation.

Keywords: Aeronautical English, Hybrid Learning, New Training Tools, Gamification.

### 7. Microlearning on the fly: Aviation English via Instagram

Natália GUERREIRO (CRCEA-SE - Regional Center of Southeast Airspace Control, São Paulo, São Paulo, Brazil. English language expert at Languages Section; nataliaguerreironcg@fab.mil.br.)

Stephanie FARIA (1° GCC – First Group of Communications and Control, Rio de Janeiro, Rio de Janeiro, Brazil. Air Defense Controller and English teacher; stephaniefariasfr@fab.mil.br.)

Thalita DINIZ (CRCEA-SE - Regional Center of Southeast Airspace Control, São Paulo, São Paulo, Brazil. ATCO and English teacher at Languages Section; thalitadiniztdsm@fab.mil.br.)

Thiago SILVA (DTCEA-GL – Galeão Regional Air Space Control Section, Rio de Janeiro, Rio de Janeiro, Brazil. ATCO and English teacher at Instruction Section; thiagotvts@fab.mil.br.)

In most of the world, the COVID-19 pandemic helped further the transition into online education modes. It was no different with CRCEA-SE, the Brazilian Air Force organization responsible for approach and tower controls roughly in the states of São Paulo and Rio de Janeiro. Not only were we unable to proceed with face-to-face training, but we also had the unprecedented condition of more free time among our air traffic controllers in what is usually the busiest airspace in South America. Along with commander support, those favorable winds propelled our team to increase Aviation English microlearning opportunities online, especially on our Instagram profile @an.eye.on.you. In this session, we briefly go over the history of this initiative and, more importantly, the lessons learned from the experience of making Instagram posts and managing continuous online learning of Aviation English. The best practices we will discuss involve knowledge from various fields, mostly design, social marketing, language teaching, and microlearning in corporate education.

Keywords: Aviation English, online learning, microlearning, social media, corporate education

### 8. Being Present in the Asynchronous Aviation English Classroom

Lena ELLINGBURG (ERAU – Embry-Riddle Aeronautical University – Worldwide, Daytona Beach, FL, USA. Aviation English Specialist, Department of Aviation English; ellingbe@erau.edu)

Rachel HERMAN (ERAU – Embry-Riddle Aeronautical University – Worldwide, Daytona Beach, FL, USA. Aviation English Specialist, Department of Aviation English; hermanr5@erau.edu)



Michele VON MERVELDT (ERAU – Embry-Riddle Aeronautical University – Worldwide, Daytona Beach, FL, USA. Aviation English Specialist, Department of Aviation English; vonmervm@erau.edu)

Jennifer ROBERTS (ERAU – Embry-Riddle Aeronautical University – Worldwide, Daytona Beach, FL, USA. Program Coordinator, Department of Aviation English; roberj62@erau.edu)

In ESP contexts, course outcomes should support the specific needs of the target population, regardless of the delivery modality. In Aviation English, an important outcome is the development of speaking and listening skills which can be challenging to address in asynchronous courses. This presentation will explore how an intentionallycrafted teacher presence, simulated immediate feedback, and opportunities for flexible interactions can maximize learner progress in an asynchronous course. First, it will highlight how the principled and practical approaches of the traditional classroom teaching can inform the design of asynchronous courses. Additionally, it will discuss various techniques and practices teachers can use to create teacher presence and learning opportunities that strive to engage students and promote successful learning. Specifically, teachers can use strategies to engage students through submitted student videos as teaching tools, enabling students to listen and learn from their own recorded speech. The presenters will discuss how screen casting can be used for delayed immediate feedback as one of these strategies. Finally, providing optional, flexible activities outside of the learning platform, such as virtual open office hours and conversation exchanges through video conferencing, will be explored as a way to facilitate more interaction opportunities.

Keywords: asynchronous course design, Aviation English, virtual interaction.

# 9. ESP for aircraft maintenance personnel: corpus analysis as a guide for pedagogical activities

Daniela TERENZI (IFSP - Federal Institute of Education, Science and Technology, São Carlos, SP, Brazil. ESP teacher in undergraduate and technical programs; daniela.ifspsaocarlos@ifsp.edu.br)

Maria Claudia Bontempi PIZZI (IFSP - Federal Institute of Education, Science and Technology, São Carlos, SP, Brazil. English and Portuguese teacher in undergraduate and technical programs; mclaudiapizzi@ifsp.edu.br)

Studies based on corpora have significantly contributed to foreign language learning and teaching considering genres, grammatical structures and/or lexicon. This type of research is usually developed by a linguistics researcher as a dissertation/thesis project. However, this type of analysis can also be done by the language teacher in order to choose contents for classes and to better understand linguistic aspects of the language used in a certain area, such as aeronautical maintenance. In this scenario, a corpus analysis of aircraft maintenance manuals can be helpful for both the language teacher and the students to deal with English queries. The idea is to present real examples selected considering students' questions, such as "when should we use 'make' and 'do'?", and how corpus analysis is useful to not only provide examples but also to better



explain usage based on use patterns, as translators and dictionaries sometimes have limitations concerning meaning nuances.

Keywords: ESP, Aircraft maintenance, Corpus analysis, Teaching activities.

### **10. Test preparation issues in the aeronautical context in Brazil**

Ana Lígia B. de C. e SILVA (Unicamp – University of Campinas, Campinas, São Paulo, Brazil. Ph.D. Candidate at the Department of Applied Linguistics. analigiasilva7@gmail.com)

Natalia de ANDRADE (DECEA – Department of Airspace Control, Rio de Janeiro, Rio de Janeiro, Brazil. Aeronautical English Teaching and Assessment Coordinator. nandraderay@gmail.com)

For safety reasons, language training for pilots and air traffic controllers (ATCOs) should go beyond test preparation and provide the practice that is necessary in aeronautical communications. In other words, the aim of aeronautical English training should rather be safety than merely passing a test. However, considering the high stakes involved, test preparation is constantly sought by test takers. Scholars have argued that test preparation has the potential to be positive if it leads to meaningful test scores and is learning-oriented (PLAKANS; GEBRIL, 2015). Based on this premise, this presentation aims at discussing the potential positive and negative aspects of aeronautical English test preparation for ATCOs and civil pilots, both on teachers and students, in the Brazilian scenario.

Keywords: test preparation, aviation, language training, language assessment.

Thursday - November, 11th

Invited Speaker 3:

### The ICAO scale and language testing for ab initio cadets: Is there a fit?

Maria TREADAWAY (UoA – University of Auckland, Auckland, New Zealand. PhD student, School of Languages, Cultures and Linguistics, Faculty of Arts; m.treadaway@auckland.ac.nz)

Currently, there is no research-based language requirement for entry on to ab initio flight training programmes conducted in English. Rather, organisations adopt their own admissions criteria, resulting in a wide variety of assessment practices and standards. In response, this study developed a language assessment aligned with the ICAO rating scale but contextualised to the specific linguistic needs of NNES ab initios entering English-medium flight training. The test has a diagnostic function, classifying candidates into three levels of 'readiness': Ready, Minimally ready and Not ready. These levels are inferentially linked to indicative ICAO levels. This presentation addresses the implications of using the ICAO scale. Specifically, I examine the methods used to investigate the reliability of using the scale within a training context and for a diagnostic testing purpose as well as the procedures undertaken to link the



objectively scored test components to the levels of the ICAO scale, using subject matter experts (SMEs). Findings suggest that the ICAO scale is not finely grained enough to distinguish levels of linguistic readiness among ab initio pilots, nor does it adequately reflect the knowledge, skills and abilities valued by SMEs within this domain, suggesting that a domain specific scale may be needed.

**Keywords:** aviation test development, ab initio flight training, ICAO rating scale, test validity.

#### Presentations

# 11. Reconsidering the measurement of proficiency in pilot and air traffic controller radiotelephony communication: From construct definition to task design

Ana Lúcia Tavares MONTEIRO (ANAC – National Civil Aviation Agency, Rio de Janeiro, RJ, Brazil. Aviation English test developer and examiner at the Language Proficiency Assessment Coordination; ana.monteiro@anac.gov.br)

The high-stakes context of international radiotelephony (RT) communication, in which pilots and air traffic controllers (ATCOs) use aviation English (AE) as a lingua franca, requires a robust testing policy that is clear and fair to all stakeholders. The ICAO Language Proficiency Requirements have been criticized for their lack of fit with pilots' and ATCOs' real-life communicative needs, for both native and non-native speakers of English (Douglas, 2014; Kim, 2012). This paper reports on a multiphase mixed methods study that investigated the proficiency construct (awareness, knowledge, skills, and attitudes) in pilot-ATCO intercultural RT, following Fulcher and Davidson's (2007) test development framework. Drawing on theoretical and empirical studies in the domains of Aviation English, English as a Lingua Franca, Intercultural awareness, and Interactional competence, the communicative demands of pilots and ATCOs involved in intercultural RT communications and how they can be specified within a construct framework and operationalized as test tasks were explored. Integration of findings underscored the value of a broader view of professional communicative competence for intercultural RT communication and the importance of giving voice to aviation stakeholders in all phases of the test development process.

**Keywords:** aviation English, construct specification, English as a lingua franca, intercultural awareness, interactional competence.

### **12.** The listening construct: theories and implications for the assessment of pilots and ATCOs

Angela C. de M. GARCIA (Carleton University, Ottawa, Ontario, Canada. PhD student, School of Linguistics and Language Studies; angelagarcia@cmail.carleton.ca)



This presentation discusses the main theories that have informed the definition of the listening construct in language testing. The main characteristics of the listening construct on a theoretical level are presented, as well as some possible approaches to construct definition (e.g., Bachman, 2007). The main characteristics of the listening construct on a theoretical level are presented, as well as some possible approaches to construct definition (e.g., Bachman, 2007). Some implications for the testing of pilots and air traffic controllers' listening comprehension are taken consideration. Also, issues related to the operationalization of the listening test construct are addressed, including some promising frameworks to be followed (e.g., Field, 2019). Additionally, other theories that might help with the definition of the listening construct in an English for Specific Purposes (ESP) context are mentioned (e.g., Douglas, 2000; Knoch & Macqueen, 2020). The presentation concludes with some implications for the validity of the inferences that can be drawn from test scores and for ongoing test validation.

Keywords: listening, construct, ICAO, language proficiency test, aeronautical English

# 13. Creating a Rubric for Placement Tests for Aviation English Programs

Ashleigh COX ((GSU - Georgia State University, Atlanta, GA, USA. GTA in the Department of Applied Linguistics and ESL; acox27@gsu.edu.) Mehrnoush KARIMI (GSU - Georgia State University, Atlanta, GA, USA. Graduate teaching assistant in the Department of Applied Linguistics and ESL; mkarimi3@gsu.edu.)

Ever since the United Nations International Civil Aviation Organization's (ICAO) decision to require English proficiency for pilots to fly internationally, a key question that researchers have been investigating is how to assess Aviation English proficiency (Moder & Halleck, 2012). Although there is a growing body of Aviation English assessment literature, there is a need for assessment tools that are designed specifically to be placement tests for programs training English learners who are not yet at operational level 4 (Friginal et al., 2019). To work towards addressing this need, a speaking placement test rubric was developed using qualitative case study data. Recordings of 4 aviation students learning English as a second language were analyzed. In the recordings, the students were answering questions and completing a task to demonstrate their ability to carry out pilot-ATC dialogues. Their mistakes and miscommunication repairs were observed and analyzed in light of communicative ability, aviation safety, and the ICAO proficiency descriptors. Based on these observations, a rubric was created as a tool for placing aviation students into different levels of ESL classes that are all below operational level 4. Exploratory findings, implications for pedagogy and assessment, and future directions will be discussed.

Keywords: Aviation English, Assessment, L2 pedagogy.

