



Language, culture and effective
radiotelephony communications:
Analysing case studies from aviation
stakeholders' perspectives

Ana Lúcia Tavares Monteiro
ICAEA Workshop – Dubrovnik, Croatia
April 25, 2017

Workshop Purpose

- This workshop aims to explore cultural differences in international pilot-air traffic controller radiotelephony communications and to better understand how culturally influenced factors may impact the safety of air-ground communications.



In this intercultural and occupation-specific context, would a wider range of knowledge, skills and attitudes be required for **effective RT communications?**

Our practical activity: addressing cultural diversity

- Participants will be divided in groups, each including ideally at least one representative of each stakeholder category: an operational participant (pilot or ATCO), a teacher/material developer, an examiner/test developer, a researcher, etc.

- In light of:

- The taxonomy of intercultural factors;
- The model of intercultural RT communications;
- The AE, ELF, ICA and IC overlap...



- ... each group will analyze a case study (a pilot-ATCO interaction involving NS-NS, or NS-NNS or NNS-NNS), guided by a few questions (30 minutes) and then will share their comments and responses with the presenter and the other groups (30 minutes).

You are all welcome to participate in this multicultural activity!!!

Case Studies

Case 1: NS x NS

(Available at <https://www.youtube.com/watch?v=uWg7IpphPc8>)

With 8 in sequence for runway 28 at Dublin, a British Airways pilot flying an A319 interacts with a female tower controller at Dublin at its peak, mid-day.

Case 2: NS x NNS

(Available at https://www.youtube.com/watch?v=2t_NT7aUrE0)

Kennedy Ground control and tower interacts with SingCargo 7997 (PILOT 1) and Avianca 020 (PILOT 2), at JFK International Airport.

Case 3: NS x NNS

(Available at <http://www.planecrashinfo.com/cvr900125.htm>)

Avianca aircraft was put in a series of extended holding patterns as it approached New York. The crew informed APPR they were running out of fuel but did not declare an emergency and were cleared to land. After a missed approach and during a go-around, the plane ran out of fuel and crashed in a wooded area (73 out of 158 aboard were killed).

Note: Only the most relevant excerpts of each case have been selected for discussion, not the complete transcriptions.

Case Studies (cont.)

Case 4: NS (?) x NNS

(Available at <https://www.youtube.com/watch?v=ZWOOKQIEe5s>)

JFK Ground controller, in New York, interacts with two pilots: one from Etihad 503 (United Arab Emirates) and the other from Asiana 222 (South Korea).

Case 5: NNS x NNS

(Available at <https://www.youtube.com/watch?v=P9WzQRxf3uM>)

Air France pilot interacts with the air traffic controller at Ezeiza International Airport, Buenos Aires, in a situation that generated an operational limitation to the aircraft regarding fuel endurance.

Case 6: NS x NS

(Available at <https://www.youtube.com/watch?v=ZWOOKQIEe5s>)

A pilot requests assistance to an air traffic controller at John Wayne Tower, California.

Case 6b: NS x NS

(Available at <https://www.youtube.com/watch?v=UCtcpXvsuiM>)

JFK Ground controller interacts with two pilots: one from Cactus (US Airways) and the other from American Airlines (US).



Filling in the form

Example: A group of six participants

Group 1: Please write the number of each type of participant in your group.

If anyone has overlapping roles, include him/her in the option that best represents his/her main activity:

(1) pilots (1) ATCOs (1) aviation English teachers

(2) examiners/test developers (1) researchers

() regulators () other: _____

How is your group composed of in terms of language background?

(2) native speakers of English

(4) non-native speakers of English

Questions to guide your discussions:

- 1) Is communication effective? How do pilots and/or ATCOs assess this interaction?
- 2) How does the cultural background of interlocutors affect the outcome of this communication?
- 3) How might the interaction have been improved, in terms of awareness, knowledge, skills, and attitudes?
- 4) How could the identified awareness, knowledge, skills, and attitudes be addressed in terms of teaching and learning activities aiming at more effective and safer communications?
- 5) Are all identified awareness, knowledge, skills, and attitudes aligned with the current ICAO testing policy?
- 6) How could they be operationalized into Aviation English test design?



Taxonomy of intercultural factors (Monteiro, 2016b)

THEME	CATEGORIES	SUB-CATEGORIES
Intercultural factors in international pilot-ATCO communications	Power Distance	
	Face-work strategies	
	Conflict management	
	Communication styles	
	Non-collaborative behavior	
	Collaborative behavior	



Taxonomy of intercultural factors (Monteiro, 2016b)

THEME	CATEGORIES	SUB-CATEGORIES
Intercultural factors in international pilot-ATCO communications	Power Distance	Power relations
		Deferential role
	Face-work strategies	Self-face concern
		Mutual-face concern
	Conflict management	Conflictual direction
		Neutral direction
		Expectancy violations
	Communication styles	Directness
		Indirectness
	Non-collaborative behavior	Unprofessional tone
		Unprofessional attitude
		Non-compliance with rules
	Collaborative behavior	Professional attitude
		Supportiveness



References

- Baker, W. (2012). From cultural awareness to intercultural awareness: Culture in ELT. *ELT Journal*, 66(1), 62–70.
- Bieswanger, M. (2016). Aviation English: Two distinct specialized registers? In C. Schubert & C. Sanchez-Stockhammer (Eds.), *Variational Text Linguistics: Revisiting register in English* (pp. 67-85). Retrieved from <http://site.ebrary.com/lib/oculcarleton/reader.action?docID=11214985&ppg=25>
- Brown, P. & Levinson, S. (1987). *Politeness: Some universals in language use*. Cambridge: Cambridge University Press.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Clevedon: Multilingual Matters.
- Culpeper, J. (1996). Towards an anatomy of impoliteness. *Journal of Pragmatics*, 25, 349-367.
- Douglas, D. (2014). Nobody seems to speak English today: Enhancing assessment and training in aviation English. *Iranian Journal of Language Teaching Research*, 2(2), 1-12.

References (cont.)

- Estival, D. & Farris, C. (2016). Aviation English as a lingua franca. In D. Estival, C. Farris & B. Molesworth (Eds.), *Aviation English : A lingua franca for pilots and air traffic controllers* (chapter 1). Retrieved from <http://site.ebrary.com/lib/oculcarleton/reader.action?docID=11139932&ppg=16>
- Farris, C. (2016). ICAO language proficiency requirements. In D. Estival, C. Farris & B. Molesworth (Eds.), *Aviation English : A lingua franca for pilots and air traffic controllers* (chapter 3). Retrieved from <http://site.ebrary.com/lib/oculcarleton/reader.action?docID=11139932&ppg=16>
- Gudykunst, W.B., Lee, C.M., Nishida, T., & Ogawa, N. (2005). Theorizing about intercultural communication: An introduction. In W.B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 3-26). Thousand Oaks, CA: Sage.
- Hazrati, A. (2015). Intercultural communication and discourse analysis: The case of Aviation English. *Procedia - Social and Behavioral Sciences*, 192, 244-251.
- Helmreich, R. L. (1994). Anatomy of a system accident: The crash of Avianca Flight 052. *International Journal of Aviation Psychology*, 4, 265-284.



References (cont.)

- Helmreich, R. L., & Merritt, A. C. (1998). *Culture at work: National, organizational, and professional influences*. London: Ashgate.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London: McGraw- Hill.
- ICAO (2010). *Manual on the implementation of ICAO language proficiency requirements* (2nd ed.). Montreal: International Civil Aviation Organization.
- Kecskes, I. (2014). *Intercultural pragmatics*. doi: 10.1093/acprof:oso/9780199892655.001.0001
- Kim, H. (2012). *Exploring the construct of aviation communication: A critique of the ICAO language proficiency policy*. Unpublished doctoral thesis, University of Melbourne, Melbourne, Australia.
- Kim, H. (2013). Exploring the construct of radiotelephony communication: A critique of the ICAO English testing policy from the perspective of Korean aviation experts. *Papers in Language Testing and Assessment*, 2(2), 103–10.
- Kim, H. & Elder, C. (2009). Understanding aviation English as a lingua franca: Perceptions of Korean aviation personnel. *Australian Review of Applied Linguistics*, 32(3), 23.1–23.17.

References (cont.)

Monteiro, A. L. T. (2012). Radiotelephony communications: threats in a multicultural context. *Aviation in Focus*, 3(2), 44-66.

_____ (2016a, March). *Pilot-air traffic controller interactions and intercultural communicative competence: An issue for non-native speakers alone?* Poster session presented at the 11th Annual Graduate Symposium of the Society of Applied Linguistics and Discourse Studies, Carleton University, Ottawa, Canada.

_____ (2016b). *Exploring intercultural factors in international pilot-air traffic controller communications: Validating a taxonomy using mixed methods research*. Unpublished manuscript in ALDS 6102, Carleton University, Ottawa, Canada.

_____ (2016c). *Exploring the role of intercultural awareness and interactional competence: The case of aviation English as a lingua franca*. Unpublished manuscript in ALDS 6109, Carleton University, Ottawa, Canada.

Read, J. & Knoch, U. (2009). Clearing the air: Applied linguistic perspectives on aviation communication. *Australian Review of Applied Linguistics*, 32(3), 21.1-21.11.

Thank you for your participation!

anatavareshmonteiro@cmail.carleton.ca

ana.monteiro.icaea@gmail.com

