







# The washback effect in Brazil: an investigation of Aviation English for pilots

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## My background

- ESL Teacher since 1996
- Aviation English Teacher since 2008 (technicians, flight dispatchers, flight attendant, pilots)
- 4 international aviation English Teacher and rater training courses
- ICAEA RG and GEIA member
- Teacher, Teacher trainer, material designer, rater, consultant
- MA 2015, PhD end of 2019





## Why am I here?

- Washback effect from training perspective (aligned with other researches)
- Data discussion
- Personal pursuit





### Washback effect (Scaramucci, 2004)

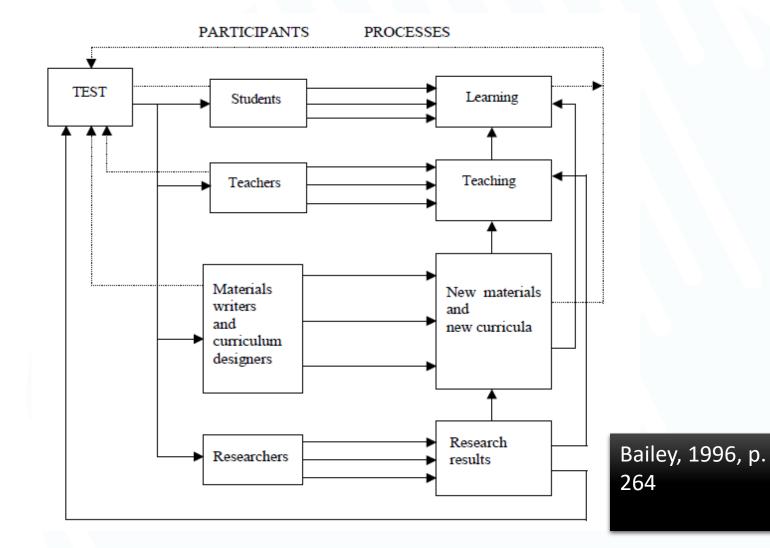
### Micro (classroom)

### Macro (educational system)

### Positive effect

### Negative effect









### Why high stakes?

C 🛈 Não seguro | www.tsb.gc.ca/eng/rapports-reports/aviation/2017/a17q0030/a17q0030.html

Media

Contact us

Accident in

Canada

being operated by a Cargair Ltd. pilot undergoing commercial training who was returning to CYHU from a solo flight in a local training area. C FGOI was being operated by a student pilot, also training at Cargair Ltd., who was departing CYHU for a solo flight in a local training area. At 1238 Eastern Daylight Time, the 2 aircraft collided at 1500 feet above sea level. C-GPNP was substantially damaged, and its pilot sustained serious injuries. C-FGOI was destroyed, and its student pilot was fatally injured.

Both aircraft were operating under visual flight rules in controlled airspace, and air traffic control had issued altitude restrictions to each aircraft: C-GPNP had been instructed to maintain an altitude of "not below 1600 feet" and C-FGOI had been instructed to maintain an altitude of "not above 1100 feet." The relative attitudes of the 2 aircraft suggest that when the pilot of C GPNP became aware of the impending collision with C-FGOI, which was approaching from the left, he made a right turn in an effort to avoid it. Neither pilot saw the other aircraft in time to avoid a mid-air collision, partly owing to the inherent limitations of the see-and-avoid principle.

The investigation found that the density and variety of operations conducted at CYHU increase the complexity of air traffic controller workload. The varying levels of flying skill and language proficiency among the student pilots at the 4 flying schools that are based at CYHU add to the complexity. In addition, inbound and outbound aircraft must follow the visual flight rules (VFR) traffic routes depicted on the VFR terminal procedure charts. The result is that VFR aircraft pilots with little experience converge with an altitude separation of 500 feet.

In 2008, the International Civil Aviation Organization introduced standards for aviation-specific language proficiency to help ensure that flight crews and controllers were proficient in conducting and comprehending aeronautical radiotelephony communications in English—the language used for aviation communications between aircraft and controllers worldwide. In response, Transport Canada (TC) amended the Canadian Aviation Regulations to include a provision on language proficiency, requiring applicants to obtain an operational or expert level in English, French, or both, before being issued a pilot's licence.





### Why high stakes?

Native speakers - accomodation

🗧 🔶 🖰 🧯 https://www.smh.com.au/business/workplace/the-fatal-consequences-of-miscommunication-betwe... 😭

BUSINESS WORKPLACE CAREERS

# Fatal consequences of miscommunication between pilots and air traffic controllers

By Anna Patty Workplace Editor October 2, 2016 – 7.23pm

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#### TODAY'S TOP STORIES

BOB HAWKE

Labor legend Bob Hawke dies aged 89 12 minutes ago

AUSTRALIA VOTES

Communication failures have been blamed for more than a thousand deaths in plane crashes, warns an Australian academic who has reviewed the language pilots and air traffic controllers use.

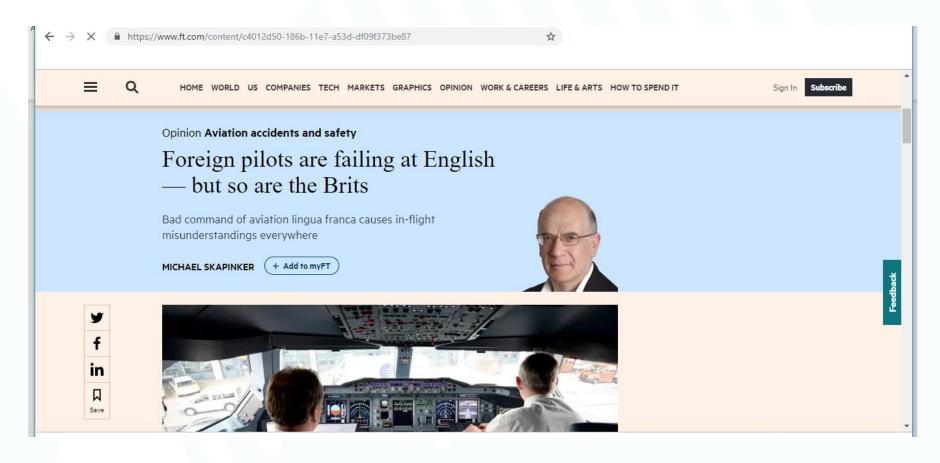
Dominique Estival, a Western Sydney University linguist, pilot and flight instructor has urged native English speakers to adjust their communication in the aviation industry to reduce the risk of misunderstanding by non-English speaking pilots.







### Why high stakes?







### Why high stakes?

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		CNN World	» Pilot accused of kidnapping and trying to deport Chinese flight student	Live TV  International Edition +	ନ ≡		<u>^</u>
			Turcson Map data @2019 Google, INEGI Terms of Use				_
			released by police after questioning, told the Record Searchlight newspaper that a why he was kidnapped. However, he had been banned from flying two months				
		ago, and susp	ected it was because of his English.				- 1
		"I can't speak Searchlight.	English well in life, but I can speak English well with air traffic control," he told the				
		Shi said that winteraction.	hen McConkey and Hoser arrived at his house, he decided to record the				
			cording Shi gave the Searchlight, a man's voice is heard saying, "You're going, t your luggage."				→
		A woman is al	so heard speaking Mandarin to Shi, before she switches to English and says,				
		"Speak English able to stay he	n, please! Can you speak English? If you cannot speak English you are not going to ere."				
			an tells Shi that he is in their custody, the male voice adds, "And the United States eeds you out of this country right now, you understand?"				





## ICAO, 2010

- ✓ Native speakers grandfather rights
- ✓ Phraseology not to be assessed
- ✓ Radio communications scope multinationality crew / manuals / training???
- ✓ ANAC compliant Working Paper 2016







International Civil Aviation Organization

WORKING PAPER

#### ASSEMBLY - 39TH SESSION

#### TECHNICAL COMMISSION

Agenda Item 35: Aviation safety and air navigation standardization

#### THE NEED FOR REVISION OF ANNEX 1 LANGUAGE PROFICIENCY SARPS FOR PILOTS AND AIR TRAFFIC CONTROLLERS

(Presented by Brazil)

#### EXECUTIVE SUMMARY

The adoption of the Annex 1 Language Proficiency Standard and Recommended Practices (SARPs) in 2003 represented a considerable progress towards safer radiotelephony communications. However, applied linguists, language testing scholars and experienced test developers and assessors have identified in the past thirteen years some serious deficiencies in the ICAO language proficiency policy, which may significantly impact safety. For this reason, experts have recommended that the policy should be reviewed. This paper provides a brief discussion of the main weaknesses identified in the ICAO policy related to the language proficiency requirements for pilots and air traffic controllers (ATCs). It highlights the importance of having a clear definition of the abilities that should be assessed as well as the necessity of native speakers also being formally evaluated on their abilities to use the language effectively and to manage communication successfully.

Action: The Assembly is invited to:

 a) call on the Council to establish a study group to develop an ICAO rating scale and a set of holistic descriptors based on clear, explicit and relevant definitions of the specific language abilities which need to be assessed in this particular environment;

b) and on the group to consider environing the Annow 1 T any provide Deatisionary SADDs as a matter of

A39-WP/249 TE/97 23/8/16

> - Level 6 lifetime license

- Review Scale
- Native speakers

https://www.icao.int/Meetings/a39/Documents/WP/wp\_249\_en.pdf





Q62 Na sua opinião, qual foi o impacto da implementação dos requisitos de proficiência linguística na segurança das comunicações entre pilotos brasileiros e controladores estrangeiros?

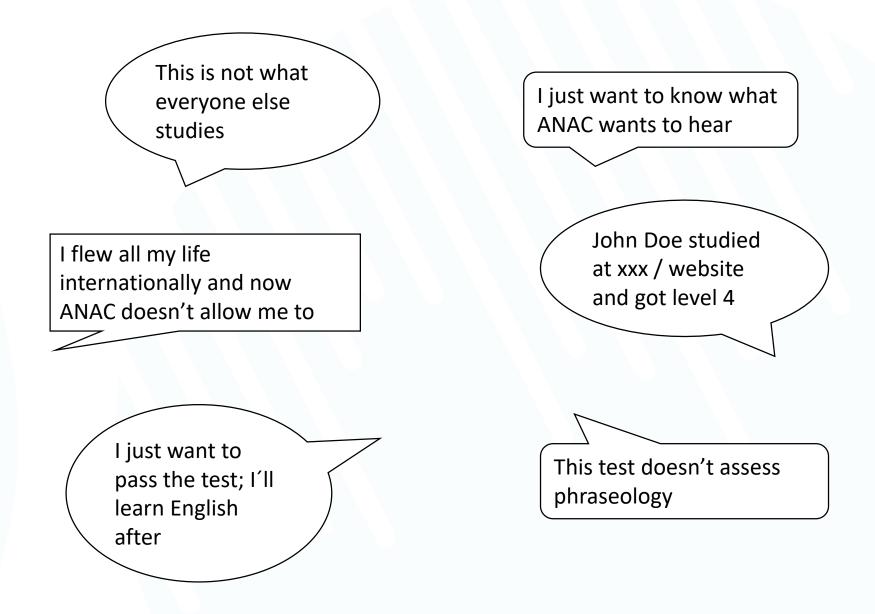


5857 - 1703 replies

http://www.anac.gov.br/assuntos/setor-regulado/profissionais-daaviacao-civil/processo-de-licencas-e-habilitacoes/proficiencia-linguistica-2/Resultadopesquisa2017divulgaoportalANAC.pdf











A comunidade aeronáutica, principalmente no Brasil, não está trilhando um caminho seguro em direção à proficiência do idioma inglês na radiocomunicação e, sim, um atalho. Busca-se um conhecimento mínimo necessário para passar nas bancas examinadoras em detrimento da proficiência plena. Mentalidade e comportamento precários para a realidade da atividade aérea.

Daniel Calazans, 2014, AeroMagazine

https://aeromagazine.uol.com.br/artigo/provapara-ingles-ver\_1506.html













ANAC'S WEBSITE – LIST OF SCHOOLS + GOOGLE SEARCH

#### YOUTUBE VIDEOS – COMPETITION FOR MARKET

TEACHER EXPOSES HIS / HER KEY POINTS 27 SCHOOLS, 25 WEBSITES, 11 CHANNELS





### Data analysis

- 6 websites do not mention aviation / 1 under maintenance / 1 no website
- 6 websites also offer Phraseology / other courses 4 have 'training for the test' courses
- 8 websites only offer *mock interview, simulados, mock tests,* rehearsal activities to train to SDEA





Training is conducted through mock interviews, addressing and practicing answers to the most frequent questions of the exam

Simulations to all steps of the test

We focus, through test format simulations, on the abilities which are necessary, so the pilot is prepared to take the ICAO / ANAC test

Our classes are directed towards the 4 parts of the ANAC test

Interactive audios very similar to the ones you will find in the test

We follow the dynamics based on the real structure of the test

With constant feedback from the exam centers, you will be updated on the questions made by the examiners





### Discussion

- Wide range of vocabulary and grammar
- Do not use technical terms
- The examiner is not a pilot
- Far-fetched English
- Confusion between plain English x general English





### Some phrases from videos...

- An aircraft with a blue tail and [company] livery
- In the background I can see some trees
- I think a spotter took this photo
- The well preserved airframe is still afloat, as it slowly sinks
- The crew members demonstrated dexterity
- You only need the second conditional in the test
- Phraseology is wrong, don't make intentional mistakes





## Others...

- First and foremost, first of all // from my perspective from my point of view I think // however but // so therefore...
- If I were the pilot in this situation I would continue the takeoff then I would request an area to dump fuel.... Does your acft have a fuel dumping system? No my acft no have.







Work-related Phraseology as input Objective and clear language

+++ needs assessment, communicative approach, CBTL





the students reaching the end of their training not only are in a position to pass the licensing test, but also have effectively acquired the kind of practical proficiency that is required of them to handle nonstandard, abnormal and emergency situations (ICAO, 2009, p. 20)





### Kim, 2018

The analysis revealed that although the Russian pilot was viewed as having limited English proficiency, the strategies he used to make himself understood were evaluated positively as fulfilling the requirements of the professional role. By contrast, the Korean air traffic controller, although not evaluated as having limited proficiency, was criticized for his lack of professional **knowledge**. The discourse analysis and the feedback given by these expert informants highlight not only the nature of the miscommunication arising in unexpected situations, but also the multiple factors that may contribute to it. While language proficiency is clearly an issue, there are many other sources of miscommunication that emerge during the exchange. These findings are used to **critique** the narrow, language-focused oral proficiency construct as articulated in the holistic descriptors and the rating scale stipulated by the International Civil Aviation Organization (ICAO, 2010) as the basis for tests of aviation English worldwide.





## MONTEIRO, 2019

Intercultural communications in aviation require a broader view of communicative competence, including **specific purpose language ability** and **background knowledge (AE)**, the need to speak **English as a lingua franca** and to adjust to the communicative needs at hand (ELF), to **accommodate** and negotiate sociocultural differences and to **solve misunderstandings** between members of different cultures, while at the same time **sharing responsibility** for successful communication.





### Conclusions

- This is a one-sided investigation there needs to be more (other participants / products)
- Principles cannot be narrowed down to the test reflections on needs, syllabus design and \*HOW\* to teach (transfer control over the curriculum to the agency which controls the exam) (WALL, 2012)
- Current research and authentic material (reliable sources)





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