# Aviation English Training for Native English Speakers: Challenges and Suggestions

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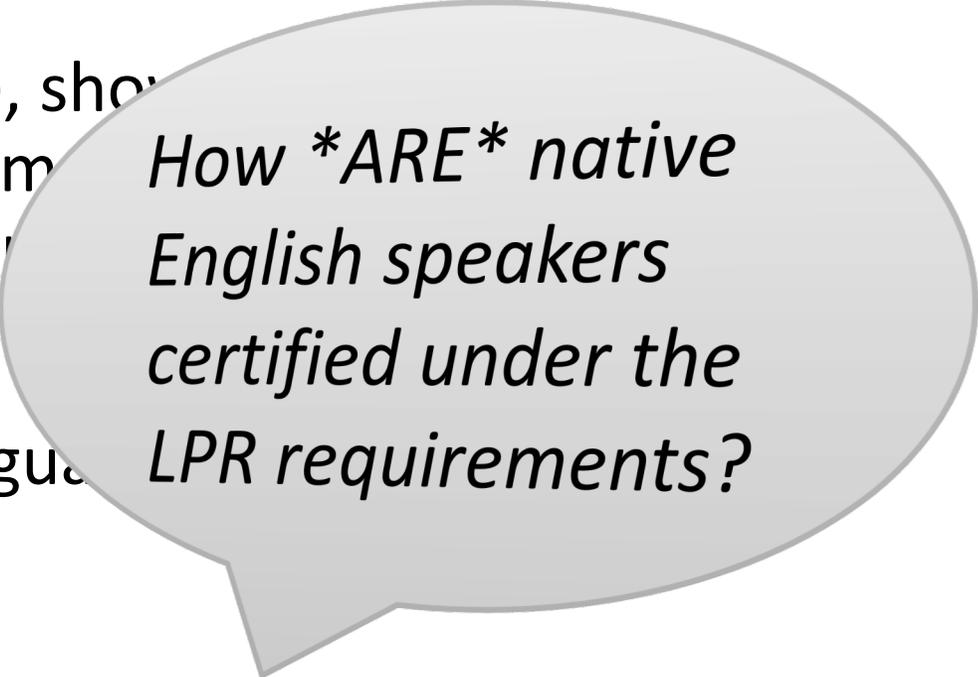
Australia

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# The issue

Studies, and plenty of anecdotal evidence, sho[...]
ATCs contribute to communication problem[...]
phraseology or, more worryingly, procedu[...]

Aviation English is not identical to the langu[...]
spontaneously.

> *How \*ARE\* native English speakers certified under the LPR requirements?*

Assessing a speaker as ICAO Level 6 does not guarantee correct use of phraseology.

# CAP 1375 (Barbara Clark, 2017)

Identified issues with NES:

- Deviation from standard phraseology

- Not adhering to ICAO number pronunciation

Recommendations (p.32):

- Native English speakers should think of English in the flight deck or over the radio as not English as they know it, but instead as a different 'language'.

- On-going language awareness training should be implemented.

- Language awareness training should emphasise the elimination of local slang and non-standard phraseology.

- Language awareness training should incorporate awareness of non-native English listeners in training.

[NES student (VH-MHF) on a navigation flight to Canberra (YSCB) (observed, 01/18)]

YSCB: *MHF, squawk 0435. Remain outside controlled airspace. Maintain 5500.*

MHF(student): *Squawk 0435. Outside controlled airspace. Maintain 5500. MHF.*

YSCB: *MHF. Identified. Direct to the field. Maintain 5500.*

*Do you have information Charlie? QNH 1013.*

[Student to instructor: "What was that?"]

[Instructor to student: "Tell her we do have the QNH. You need to maintain 5500"]

**MHF (student):** *Yes, we have the QNH.*

**YSCB:** *Say again, MHF.*

[Instructor to student: "AFFIRM, you should say AFFIRM."]

**MHF (student):** *Affirmative.*

**YSCB:** *(Pause) MHF, say again. I didn't quite get that last transmission?*

MHF (instructor): Affirm, QNH 1013. MHF.

[... ➜ Refresher on the ground about phraseology (*Yes/No – Affirm/Negative*)]

[UNSW student (airline pilot) on IFR flight from Gold Coast to Sydney (PC, 03/18)]
Understood "*Best rate to 80*" as "*Best rate 280*"

| | |
|---|---|
| Pilot: | XYZ. Passing 1500. Climbing 6000. |
| BN Approach: | XYZ. Identified. Cancel speed. Best rate to 80. |
| **Pilot:** | **(Pause) Flight level 280. Cancel speed. XYZ.** |

[... changed frequencies, now on BN Centre]

| | |
|---|---|
| **Pilot:** | **XYZ. Climbing Flight level 280.** |
| **BN Centre:** | **XYZ. Confirm level.** |
| **Pilot:** | **280.** |
| **ATC:** | **Climb amended 180.** |

[... ➜ Phone call from Airservices on the ground]

[VH-BWY requested taxi clearance from Bankstown Ground (observed, 05/12/15)]

ATC:                Holding Point A8, 29R, BWY.

**Pilot 1:**          **Cleared 29 BWY.**

**ATC:**              **Close but no cigar, BWY.**

**Pilot 1:**          **Cleared 29R**

**ATC:**              **No sir, it's 'Holding Point A8, 29R'. You must repeat all the instructions.**

**Pilot 1:**          **A8, BWY.**

**ATC:**              **Now this is how problems happen. Once again you must repeat all of the instructions. Holding Point A8, 29R.**

Pilot 1:         Holding Point A8, 29R, BWY.

[a few seconds later, VH-NRM is in the runup bay, same ATC]

**Pilot 2:**          **Bankstown Ground, We've solved the problem with the magnetos. Cancel previous request.**

ATC:                NRM, there is a car with maintenance on its way. You don't need it anymore?

Pilot 2:         No, she seems to be right now.

**ATC:**              **OK, so you're happy to roll the dice and have a go?**

**Pilot 2:**          **We'll roll the dice and have a go.**      *[Is that a request for taxi clearance…???]*

# ICAO Guidelines for Native English Speakers – ICAO 2010 (Doc 9835)

3.3.3 [...] users with high proficiency must *accommodate their use of language* so as to remain intelligible and *supportive to less proficient* users.

4.5.3 [...] e) Proficient speakers shall use a dialect or accent which is *intelligible to the aeronautical community*.

➔ **Production must be intelligible**

# ICAO Guidelines for Native English Speakers – ICAO 2010 (Doc 9835)

4.5.10 [...] native speech should not be privileged in a global context.

5.3.2.1 [...] the burden for improved communications should not be seen as falling solely on non-native speakers.

5.3.1.3 [...] Native speakers of English, in particular, have an ethical obligation to *increase their linguistic awareness* and to take special care in the delivery of messages.

➔ **Awareness of potential difficulties for EL2**

# ICAO Guidelines for Native English Speakers – ICAO 2010 (Doc 9835)

5.3.1.4 […]

b) native and other expert users of English can acquire *strategies to improve cross-cultural communications*;

c) native and other expert users of English can *refrain from the use of idioms, colloquialisms and other jargon* in radiotelephony communications and *can modulate their rate of delivery*; and

d) native speakers are under the same obligation as non-native speakers to ensure that their variety of English is comprehensible to the international aviation community.

# ICAO Guidelines for Native English Speakers – ICAO 2010 (Doc 9835)

5.3.3.2 In this context, native speakers aware of the challenges faced by speakers of English as a foreign language (EFL) can take greater care in their speech. Native and highly proficient speakers can, for example, focus on *keeping their intonation neutral and calm*, admittedly difficult at busy control areas, but a good strategy to calm the language anxiety of an EFL speaker. They can take particular care to be explicit, rather than indirect, in their communications and train themselves away from the use of jargon, slang and idiomatic expressions. They can ask for readbacks and confirmation that their messages have been understood. They can also attend more carefully to readbacks in cross-cultural communication situations, *taking greater care to avoid the pitfalls of expectancy*, where a pilot or controller expecting a given result unconsciously affects the outcome. Additionally, a slower rate of delivery seems to make speech more comprehensible; therefore, taking care to *moderate speech rate* is a common-sense approach to improving communications.

# ICAO Guidelines for Native English Speakers – ICAO 2010 (Doc 9835)

5.3.3.7 While accent can sometimes be difficult to control, speakers can control intelligibility by *moderating the rate of speech*, *limiting the number of pieces of information per utterance*, and *providing clear breaks between words and phrases*.

5.3.5.2 […] While communication errors will probably never completely go away, disciplined use of ICAO standardized phraseology, compliance with the ICAO language proficiency requirements, alert awareness of the potential pitfalls of language, and an <span style="color:red">understanding of the difficulties faced by non-native English speakers</span> will enable pilots and controllers to more readily recognize communication errors and work around such errors.

# Workshop Questionnaire

1. What do you think are the most important requirements for NES regarding communication between NES and EL2 in the aviation context?
2. Examples of NES interacting with EL2: failures and successes
3. Teaching NES to the guidelines
   a) Are they taught?
   b) Which ones?
   c) Where, and by whom?
   d) How are they taught?
4. How should the ICAO requirements for NES be taught? Tips and suggestions
5. Should there be other requirements for NES in addition to those in ICAO Doc 9835? If so, what are they?

# Q1. What do you think are the most important requirements for NES regarding communication between NES and EL2 in the aviation context? [15/15]

| | |
|---|---|
| Strategies for accommodation [8], e.g. simplification [14], speech rate [11], accent [6], paraphrase [3], cross-cultural strategies [3] | 44 |
| Awareness of the need to adapt in the international environment | 10 |
| Stick to the Standards, Procedures and to Standard Phraseology | 7 |
| Attitude: professionalism and patience | 4 |
| Training of instructors; Testing; Reviews | 4 |

# Q2. Examples of NES interacting with EL2: failures [14/15]

| | |
|---|---|
| Lack of training in phraseology for NES, deviations from standard phraseology (e.g. "follow the greens"; "twelve ninety five") | 6 |
| Use of slang/jargon/colloquialisms/idioms (e.g. "kill the rabbit") | 5 |
| Attitude: lack of sympathy, lack of patience, culture of superiority towards EL2, non-supportive behaviour, arrogance | 4 |
| No exposure to different cultures, lack of awareness of cultural issues | 2 |
| Non-compliance with standards, non-compliance with rules | 2 |
| NES speech too fast | 2 |
| Too much information in the same message (more than 3 pieces); sometimes irrelevant information | 1 |
| Rote learning/checklists | 1 |

# Q2. Examples of NES interacting with EL2: successes [2/15]

| | |
|---|---|
| Standard RT + Confirm, Clarify, Check | 1 |
| Innovative creation in unusual situation: "the earth going up and down" to express "earthquake" | 1 |

# Q3. Teaching NES to the ICAO guidelines
## a) Are they taught? [10/15]

| | |
|---|---|
| No | 9 |
| **Yes** | **0** |
| Sometimes | 1 |

**Since the 2018 workshop, no one from the US, UK, or AUS reported that NES student pilots are taught to be understandable by NNES (pilots or ATCs).**

**Q4.**

| |
|---|
| 1. Standard Phraseology classes for NES, which should include: teaching accommodation skills by analysing samples of real life R/T communications, with breakdowns, with NES and NNES. |
| 2, NES could be exposed to a variety of accents and there could be some tasks in which they had to understand and role play interactions with NNES. |
| 3. They should be taught how to be aware, communication strategies. |
| 4. Case studies |
| 5. Native English speakers could start to learn other languages so they better understand the challenges |
| 6. Listen to themselves |
| 7. Clean up speech (Hesitations) |
| 8. Teach on the ground first (vocabulary), then intersperse with flight training |
| 9. Phraseology should be re-tested:<br>    Level 4 every 3 years<br>    Level 6 every 6 years |
| 10. Textbooks based on ICAO for Pilots and ATCs |
| 11. For ATC: classroom theory; online qualification |
| 12. Phraseology refresher course |
| 13. Phraseology testing as part of ground school |
| 14. Workshop to raise awareness on limiting NES use of idiomatic and figurative in plain language interaction. |
| 15. Simulator:    Competency checks should involve a language element |

**Q4.**

| |
|---|
| 16.  CRM/TRM should include language as an element of training |
| 17. For written manuals: expose authors to learning situation of readers/ mechanics |
| 18. When doing line checks pilots should be evaluated. ICAO requirements should be added to line check |
| 19. Built into training - initial and recurrent |
| 20. Video, on line learning |
| 21. Role-playing and open-ended scenarios |
| 22. NES should be held accountable |
| 23. Regulation |
| 24. Initial training + recurrent training |
| 25. Part of checklist on which you are assessed. |
| 26. Case studies of risky situations |
| 27. Role-play: on a sim position<br>    Switch pilot-controller<br>    Pilot-controller synergy training |
| 28. Impossible to enforce unless it is regulated<br>   → All aviation authorities must impose RT training (refresher) and testing |
| 29. It should be a requirement |
| 30. Something like a short course like Dangerous Goods or Aviation Safety. Once per 2 years. |

# Q5. How should the ICAO requirements for NES be taught? [11/15]

| |
|---|
| 1. NES shouldn't be automatically rated level 6 but they should undergo testing in Aviation English and Standard Phraseology, in which they would have to prove their ability to apply accommodation skills. If there are reports for communication problems, they should be re-tested. |
| 2. It should be included in the testing policy (NES should be tested). |
| 3. Training could also be a requirement (mandatory training) |
| 4. Should be tested (S.P. for NES) |
| 5. Incorporated as other task? |
| 6. Level 6 never gets retesting. Recommend recurrent testing for level 6. |
| 7. If the ones in 9835 now were adhered to, probably no need for more! |
| 8. And these requirements should appear in the documents that pilots/controller read:<br>   - Manual of RTF (Doc 9432, 2007) (ICAO, 2007)<br>   - FAA Pilot/Controller Glossary AIM (FAA, 2018)<br>   - Doc 4444 (ICAO, 2016b)<br>   - Annex 10, vol II (ICAO, 2016a) |

# What is being done in English-speaking countries

❑USA, [Federal Aviation Administration (2017)](#)

❑UK, UKCAA – refers to EU FCL.055 Language proficiency

  Examiners should treat speakers who use English as their first-language as 'probable expert users'. However, examiners should be aware that ' first-language English speaker' does not necessarily mean 'Expert Level 6' user.

  Speakers who use English as their first-language may lack the vocabulary to discuss certain themes or may speak with a regional accent that is an impediment to intelligibility for those from outside that region. They may fail to use appropriate language or may not interact effectively; consequently should not be assessed as Expert Level 6.

  Speakers who use English as their first-language who fail to demonstrate proficiency in all aspects of the Level 6 descriptors in the ICAO Rating Scale should not be assessed as Expert Level 6.

❑AUS, CASA ('Blue Book')

❑NZ, CAA

# Obstacles and Issues

- Preconceptions about what Aviation Communication is
- Preconceptions about the pre-eminence of English
- Disregard or ignorance of phraseology
- Feeing of superiority (NES over NNES)
- Pilots with the 'wrong attitude' ('cowboys')
- Pilots who only fly locally and don't care about the wider world
- Hostility towards foreigners (NNES)

# What works

o Appeal to professionalism ("learn the lingo").

o Pointing out examples where a wrong word or misuse of phraseology caused a safety issue or delay

o Need to start very early in the training (i.e. ab initio).

o Need to educate the old generation of local pilots
   **including instructors… and ATC!**