



## English: The International Language of Aviation

As its name suggests, the ICAO language proficiency programme was introduced to improve the language proficiency of pilots and controllers worldwide. One of the main criticisms of the programme has been the degree to which English is promoted as the language of international civil aviation. The question may be framed succinctly: is the aim of the ICAO programme to improve *language* proficiency or *English* proficiency?

ICAO has faced language problems before, as disputes over language have been part of the organization's history since its inception at the Chicago Convention in 1944. MacKenzie (2010) recorded how English was the dominant working language in the early years of ICAO, despite the efforts of other nations to promote French or Spanish as a counterbalance. As he observed: "Language was a problem that never went away" (MacKenzie, 2010, p. 87).

Since ICAO's founding there has been a phenomenal increase in civil aviation. Airline passenger numbers were boosted by the start of the jet age in the 1950s, the introduction of wide-body jets in the 1970s, and the deregulation of regional markets that started in the USA in 1978. Advances in aircraft technology have been instrumental in the growth of civil aviation. When ICAO was established in the 1940s, a typical airliner such as the Douglas DC-3 carried a maximum payload of a few dozen passengers less than 1,000 kilometres. In the modern age, Boeing 777s routinely fly trips of 11,000 km with several hundred passengers, crossing entire regions en route. Air transportation is now truly global and there is a strong common-sense argument that it requires a common language to operate smoothly and safely.

### Pros and Cons of English in Aviation

The case for English to be adopted as the official language of international aviation may be expressed as two propositions. Firstly, communication would be simpler and safer if all pilots and controllers spoke the same language. Secondly, English is the obvious choice as it is already in widespread use in aviation, and is the *de facto* language of international business.

The reasoning put forward to support the first proposition is as follows. If all pilots and controllers in a particular airspace communicate in a common language, everyone can understand all radio transmissions. In this situation, pilots listening to messages between air traffic control (ATC) and other aircraft (on the "party line") can maintain situational awareness about their location and potential hazards in their vicinity, including other planes.<sup>1</sup> However, if **code switching** occurs and one speaker changes to a different language, other pilots in the same airspace might not understand the communication. As a result an important source of information may be lost with significant implications for safety (Borins, 1983; Estival et al., 2016; IATA, 2011; Orasanu et al., 1997).<sup>2</sup>

The opposite position was outlined by Borins (1983) in a detailed study of the bilingual ATC conflict that took place in Quebec in the mid-1970s. He reported two arguments in favour

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<sup>1</sup> This argument may be undermined in the future if **data link** technology significantly reduces the importance of party line information.

<sup>2</sup> Code switching was a factor in each of the following accidents: the 1976 mid-air collision near Zagreb, the 2000 runway collision in Paris, and the 2001 runway collision in Milan.



of using more than one language for pilot-ATC communications. Firstly, when controllers use another language instead of English (eg: French in Quebec), safety is enhanced for local pilots (who may be unilingual francophones). Secondly, this reduces the workload and anxiety of controllers as they can simply issue an instruction once in the other language rather than repeating it several times in English to ensure comprehension. It is probable that air traffic controllers have in the past averted accidents by switching languages to help pilots who could not understand English instructions, but there does not appear to be any research evidence to support this hypothesis.

The second proposition is that English is the leading candidate to be the official language of international aviation. The linguists Kachru and Nelson (1996, p. 96) labelled English “the cross-cultural medium of choice”. They noted it “has become – or at least is perceived as – indispensable in many areas of international business and for such special purposes as air and sea traffic control”. Many English-speaking pilots regard English as “the universal language” of aviation (Estival et al., 2016, p. 5). The Acting Deputy Director of ICAO’s Air Navigation Bureau addressed this issue at a regional workshop held in Bangkok. Other languages – such as Spanish, Russian or French – are used in certain regions of the world, but he noted that English allows pilots to fly further and with more route flexibility. He stated that English is the only language used throughout the aviation world and concluded: “The fact is that English is the international language of aviation” (Lamy, 2008).<sup>3</sup>

A strong case can be made for English as the international language of aviation, but it is not the universal language of aviation. English is not widely spoken in China or South America, which are both significant aviation markets. The lack of trained personnel with the necessary language skills seems to preclude the worldwide imposition of a single language policy based on English. Document 9835 acknowledges “there are significant national, cultural, economic and organizational impediments that make such a move impractical” (ICAO, 2010, p. 4-3).

Furthermore, the implication that there is a single English language is misleading. Kachru and Nelson (1996) listed 45 countries in which English had official status. Many of these countries have distinctive varieties of English, such as Indian English or New Zealand English. Mutual intelligibility between speakers of different varieties of world Englishes is a critical issue in international aviation. Seiler (2009, p. 47) discussed phonological distinctions between these varieties in the aviation context, making the salient point that mutual intelligibility requires a certain amount of mutual exposure and time before speakers can tune into “unfamiliar dialects or accents/pronunciations”.

## The Position of ICAO

The issues surrounding aviation language and aviation English are complex, and perhaps unsurprisingly ICAO seems to have adopted a compromise position. As stated in Annex 10: “air-ground radiotelephony communications shall be conducted in the language normally used by the station on the ground or in the English language” (ICAO, 2007, p. 5-3). The language

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<sup>3</sup> Some pilots and language instructors objected to the ICAO language proficiency requirements during the implementation phase of the programme. At the Bangkok regional workshop, the Acting Deputy Director mentioned French pilots being told by airline management that if they resisted they might be reassigned to smaller and less prestigious aircraft (Lamy, 2008).



used by a ground station may be the national language or a regional language (eg: Spanish in the Central American region or large parts of South America). There is an important additional requirement: “The English language shall be available, on request from any aircraft station, at all stations on the ground serving designated airports and routes used by international air services” (ICAO, 2007, p. 5-3). In other words, pilot-ATC communications can be conducted in national or regional languages, but English must be available at all ground stations that serve international air routes.

The actual position of ICAO, as reflected in official documents, is subtly different. English plays a dominant role in the language proficiency programme. Document 9835, which is the official guidebook for the programme, states that “proficiency in English will be the major preoccupation in the implementation of the requirements” (ICAO, 2010, p. viii). Document 9835 refers in general terms to *language* proficiency but contains multiple specific references to *English* proficiency. Here are some examples (with emphasis added):

- page vii – Assembly Resolution A32-16 was formulated in 1998 “to consider, with a high level of priority, the matter of English language proficiency”;
- page vii – the Proficiency Requirements in Common English Study Group (PRICESG) was set up to review all aspects of pilot-ATC communications;
- page vii – Assembly Resolution A36-11, “Proficiency in the English language used for radiotelephony communications”, was adopted in 2007 to initiate implementation of the proficiency programme;
- page 1-1 – all four accidents cited in the document to justify the programme were caused in part by “insufficient English language proficiency”;
- pages 3-4, 3-6, 3-9, 3-10, etc – all examples of pilot-ATC exchanges cited in the document are in English;
- pages B-13 to B-16 – the Glossary of Basic and Complex Structures in Appendix B contains only English grammatical structures.

## In Summary

Modern flight operations take place in a transportation system of tremendous scale and technological complexity. English plays a vital role in international aviation, but it is important to acknowledge that aviation language encompasses a complex web of languages, language varieties and codes. These are used by a variety of operators in many different contexts within the global air transportation system. The fundamental problem is not new. It may be traced back to the Tower of Babel story from the Book of Genesis in the Old Testament. The essential question is this: How to overcome language and cultural barriers so that teams of workers can communicate safely and effectively?

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