

A New Aviation English Test Speaks Of Pilots' Voices And Aviation Safety

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In addition to the development of various tests in response to the ICAO's language proficiency requirement, a new test has been designed using flight simulators, in consideration of both the test takers and the ICAO's fundamental focus on aviation safety. The test provides a familiar and work-related testing environment to pilots, an efficient and cost-effective test system to airlines, and international credibility and valid evaluation tools to states, while fully covering both aviation and plain English assessment needs.

Background

In September 2004, the ICAO symposium was held for the first time with intense regard to the requirements of language proficiency for aeronautical communication. Since then, ICAO also published Doc 9835 and clarified that the existing English proficiency tests widely used for assessment were not appropriate for the assessment of pilots and controllers (ICAO, 2004). In order to meet the language requirements, states, organizations and testing providers have developed various language tests in association with linguistics experts and test development specialists. However, it is still hard to say, without a doubt, that the aviation industry has found the ultimate answer to aviation English assessment. Many issues still remain controversial; such as the discussion on the most appropriate proportion between plain and aviation English in testing.

Apart from the testing development perspective, it is also significant to think about the test takers' point of view in regard to aviation English testing. This has been made clear according to the ICAO policy on language proficiency testing: "Because of the high stakes involved, pilots and controllers deserve to be tested in a context similar to that in which they work and test content should therefore be relevant to their roles in the work-place" (ICAO, 2007). Different from other English proficiency tests which merely focus on the evaluation itself, aviation English test is directly related to a person's occupational opportunity. If so, what should be done to design a reliable test that satisfies the test takers, effectively reflecting their language proficiency, while complying with the ICAO requirements?

A new, but familiar test for all

In consideration of a reliable test, it is essential to recollect that the ICAO language proficiency requirement stems from the idea of the preservation of aviation safety. Aviation safety can be preserved by keeping the communication between pilots and controllers clear and effective without jeopardizing safe operations, not so much by making everyone native English speakers. In other words, it would be one of the most desirable solutions if the test can effectively assess a pilot's language proficiency necessary for the aforementioned circumstance, which would satisfy everyone including pilots, ICAO, and ultimately the airlines.

In that sense, perhaps the best testing environment could be actually being on an aircraft to exchange actual radio communications. Unfortunately, this would be impractical and unrealistic; instead, modern technology has granted us with a highly sophisticated reproduction of flight operations called a "flight simulator". Flight simulators provide extremely realistic flight experiences, including various flight operations such as take-off, landing and emergency management, and airline pilots are required to have recurrent training sessions in the flight simulator every six months.

Due to such characteristics of the flight simulator, it has great potential to be used as a testing tool for pilots. Although there are slight variations depending on airlines or states, simulator training generally

covers practices on normal, abnormal and emergency operations, in which pilots are actually required to conduct radio communications necessary for the given situations. It provides the most authentic circumstances where pilots' practical communication skills are demonstrated (which is almost perfect for testing purposes), and where aviation English proficiency is required for aviation safety, according to the ICAO requirements. Ultimately, the test is new to the industry, but quite familiar to the test takers – the pilots.

Test arrangement

With regards to the above-mentioned concerns on aviation English testing, the new test development was basically a collaboration of three parties. A group of aviation English testing specialists, flight simulator instructors with decade-long experience in airlines, and language testing experts have worked on the structure, interview questions, administration and rating of the test while cross-checking with each other's expertise. Also, opinions from airline pilots and personnel were reflected in the test development.

In terms of test administration, the role of flight simulator instructors is critical. During the test, instructors perform as the facilitator who delivers the test via interviewing test takers with predetermined sets of items and conducting the radio communication in the simulator session. By virtue of the extensive experience and technical expertise as an airline pilot and an instructor, they are fully eligible for being the facilitators of this test. However, it is also crucial that they should not be involved with rating of test takers because they are neither linguistic experts nor trained raters. Instead, the speech samples of test takers are directly sent to external raters who are trained and qualified, and flight instructors must have an examiner training to perform as a qualified facilitator. This system assures more fair and accurate assessment for test takers, due to the complete separation of test takers and raters with no bias and expertise in language proficiency rating.

Too much radiotelephony?

Due to the fact that there has been long discussions on deciding on the ideal proportion between plain and aviation English, it might not be too strange to think that there might be too much radiotelephony, referring to 'aviation English', in a test involving the use of a flight simulator. Certainly it is very technical and more aviation-specific than any other English tests conducted for pilots due to its initial purpose of 'flight training'. However, according to the structure of simulator training program, it actually does cover quite sufficient plain English speaking activities as well.

In fact, although the simulator session itself is full of radiotelephony communication, abnormal and emergency situations are more focused on plain English communication than radiotelephony and phraseology use. In emergency situations, it is critical to explain the nature of the emergency and to communicate to handle the situation given, and every simulator session must include at least one emergency maneuver.

Moreover, there are pre-briefing and de-briefing sessions before and after simulator sessions for information and discussion on the simulated flight between pilots and the flight instructor. During these sessions, pilots are to comprehend and express themselves in the English language. Especially for language assessment purposes, there can be more questions added during the pre-briefing session. However, the topics should be work-related and aviation-specific because it is meaningless to test pilots outside their occupational spectrum as per the ICAO requirements: "The descriptors for Vocabulary and Comprehension for ICAO Operational level 4 refer to 'work-related topics'" (ICAO, 2007). Also, pilots can be given questions regarding the procedures and actions taken during the simulator session in the de-briefing session; however, such questions should not be aiming for specific aviation knowledge or technical information, but for facilitating speaking about the given situation or information in English.

Good for all?

In the meantime, how is the test from the viewpoint of other parties concerned? Besides the test takers and ICAO, regulatory bodies of each member state and airlines are also subjected to the ICAO language proficiency requirements and greatly influenced by the testing output. Specifically, states are obliged to abide by international agreements, and airlines are to maintain a certain percentage of qualified (minimum ICAO level 4) pilots in order to continue international operations.

With regard to such concerns, the test has some merits. First, for airlines, it saves the initial cost of putting aside extra time for language testing. This is due to the fact that the test is conducted during the mandatory recurrent simulator training program required for each pilot every six months. The training is scheduled twice a year ahead of their flight schedules. In such cases, airlines can avoid both spending extra funds and altering their current operations schedules. For states, it is also beneficial in terms of administrative and credibility aspects. In the case of introducing a high-stakes test, the stake holders' resistance is usually inevitable, but it is also possible to minimize such complaints by using a more effective and user-friendly test while complying with the ICAO requirements. This would ultimately contribute to securing international credibility as an ICAO member state.

Conclusion

Since the ICAO Aviation Language Symposium in 2004, the aviation community, including government authorities, test takers, and airlines, has been searching for the 'perfect answer' to the aviation English requirement issue. However, the industry also understands that there is no such answer, and now the mutual task is to find the most realistic solution – one which cannot be perfect, but can be possibly one of the "best answers."

The test mentioned in this article should be addressed in line with the same connotation. It cannot be the perfect solution for everyone, but it does provide the potential to bring mutual satisfaction to the aviation industry as one of the best answers. It is not too long a way to go, if the aviation community continues to give careful consideration to the primary purpose of the ICAO language requirements as well as test takers' viewpoints.

Meanwhile, there will be a trial run of the test in association with Korean Air, scheduled for April. The results will be available before the 2007 ICAO symposium. It is not to evaluate how many pilots pass or fail the test, but to observe how sufficiently the test reflects the test takers' voices, while confirming whether the concept of aviation safety is practically applied. The results will hopefully contribute to the pursuit of the ultimate goal: a test for the good of the members of the industry and aviation safety.

Reference

- ICAO. (2004). Manual On The Implementation Of ICAO Language Proficiency Requirements, 1st Edition, ICAO, Montreal, CANADA.
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