SAFETYREGULATION

New

call for increased

global

to improve proficiency in aviation English.

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he International Civil Aviation Organization (ICAO), while refusing to extend its official March deadline for compliance with English language proficiency requirements for pilots and air traffic controllers, is nevertheless urging a "flexible approach" toward governments that have yet to comply.

ICAO's stance has prompted calls from aviation safety advocates and specialists in aviation English for increased cooperation among governments and the aviation industry, as well as for a shift in corporate safety culture that recognizes the importance of English language training in improving safety.

The March deadline had been established by a vote of the 36th session of the ICAO Assembly in 2007, after it became apparent that many ICAO member states would miss the original March 2008 deadline for pilots and controllers to be proficient enough in the English language to conduct radio communications in English. The requirements also specify that English "shall be available on request at all stations on the ground serving designated airports and routes used by international air services." The 2007 vote also directed states that did not meet proficiency requirements by the original 2008 deadline to develop implementation plans by that date, including a timeline for compliance, and to post their plans on an ICAO Web site.¹

In October 2010, at its 37th session, the Assembly passed a resolution recognizing that, although the member states had made "substantial efforts" to comply with the requirements, some had encountered difficulty and wanted extra time. In response, the Assembly again urged member states to have their pilots and controllers use "ICAO standardized phraseology" in their communications.

But the resolution also urges member states to "assist each other in their implementation of the language proficiency requirements." It calls on those that have not complied with the language proficiency requirements to post on the ICAO Web site "their language proficiency implementation plans, including their interim measures to mitigate risk ... for pilots, air traffic controllers and aeronautical station operators involved in international operations."



Member states should "take a flexible approach toward states that do not yet meet the language proficiency requirements yet are making progress as evidenced in their implementation plans," the resolution says. It recommends the waiver, when necessary, of an ICAO requirement that calls for states to restrict their aircraft operators from entering the airspace of any countries where controllers and radio

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station operators have not met the English language proficiency requirements, "provided that those states have made their implementation plans available to all other contracting states and have notified ICAO of the differences pertaining to language provisions."

Flight Safety Foundation President and CEO William R. Voss said that the Assembly's willingness to give struggling states more time to meet ICAO's requirements "should not be taken as an indication that English language proficiency has become any less important.

Minimum Requirements

he aviation English proficiency rating scale established by the International Civil Aviation Organization (ICAO) encompasses six levels, ranging from Level 1 "preelementary" to Level 6 "expert." Pilots, air traffic controllers and aeronautical station operators must demonstrate at least Level 4 "operational" proficiency by meeting the following criteria:¹

- "Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding."
- "Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning."
- "Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete and work-related topics. Can often paraphrase successfully when lacking vocabulary in unusual or unexpected circumstances."

- "Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication."
- "Comprehension is mostly accurate on common, concrete and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users."
- "Responses are usually immediate, appropriate and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings by checking, confirming or clarifying."

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Note

 ICAO. Document 9835, Manual on the Implementation of ICAO Language Proficiency Requirements, Second Edition — 2010; Section 4.6, "Explanation of Rating Scale Descriptors." Montreal, 2010.

"Aviation English remains an important safety issue even though ICAO has had to soften some of the deadlines. This just reflects the fact that the world is understanding the enormity of the task."

'Momentous Endeavor'

Philip Shawcross, president of the International Civil Aviation English Association (ICAEA) and director of curriculum for Aviation English Services, a training provider based in New Zealand, said that the 2011 deadline always had been optimistic.²

"It was never feasible that such a momentous endeavor as fully achieving operational Level 4 [characterized by ICAO as the minimum level for language proficiency] for such a vast population of pilots and controllers could be achieved in much under a generation," Shawcross said (see "Minimum Requirements").

He assessed worldwide progress toward Level 4 proficiency as "outstanding" and added, "A greater pragmatism about the time scale required to achieve and then maintain proficiency, and the extent of regional differences, which should be the positive outcome of the recent discussions, could foster a more realistic and better informed approach to aviation English training and an awareness that language acquisition is a lifelong process."

The Assembly's approval of the resolution followed its review of papers submitted by representatives of several member states, including China, which had recommended extending this year's compliance deadline until March 2014, or adopting "other transition measures" to help ease the effort to ensure English proficiency. "China has consistently made unremitting efforts to implement ICAO requirements for English language used for radiotelephony communications," the paper said. "The majority of China's pilots engaged in international operations have met ICAO language requirements. ... However, due to the fact that a number of pilots are aging and their basic English language knowledge is limited, it still foresees some difficulties in the improvement of their language proficiencies within a short period of time."

China asked the Assembly to take into account "the specific difficulties currently existing in states where English is not the mother tongue."

For example, a paper submitted by Nepal discussed that country's difficulty in identifying people qualified to teach aviation English and to test language students to assess their proficiency.

When, in response to 2008 ICAO requirements, the country posted plans on ICAO's Web site describing how it would meet the English language requirements, the posting noted the "acute shortage of manpower." Since then, the country has identified three basic aviation English trainers.

A paper submitted by Russia also referred to "certain difficulties" in meeting the English proficiency requirements. The paper said that new language training programs have been developed for pilots, with classes being taught by 150 instructors at 30 certified aviation training centers. Classes also are offered for controllers, and of nearly 5,500 controllers who have been cleared to provide air traffic services in English, 88 percent have received language tests; of that number, 41 percent demonstrated at least Level 4 proficiency, the paper said.

A paper submitted by Cuba said that compliance with the proficiency requirement involved "a significant investment of time and financial resources by license holders, air transport operators, air transport service providers, training centers and the national economy," along with the Institute of Civil Aeronautics of Cuba and the country's Civil Aviation Authority. The paper characterized the results of the effort as "encouraging," noting that, of the "target population" of 309 pilots and 247 controllers, 99.02 percent of pilots and 98.78 percent of controllers tested at Level 4 or better.

"At this stage, we are prioritizing periodical refresher courses in English for aeronautics, which are taught annually to each license holder involved ... so that they may practice and refresh their English periodically and thereby maintain the requirement for operational level proficiency or achieve a higher level," the paper said.

A report presented to the Assembly by the Council of ICAO said that 147 member states have provided information on ICAO's Flight Safety Information Exchange Web site about their plans for achieving compliance with the language proficiency requirements; 42 states did not provide implementation plans or statements of compliance with the requirements. By July 2010, some 54 states reported that they were in compliance and 106 said that they would be compliant by March 2011.

"It is recognized that the implementation of language provisions has been challenging, in part because the aviation language training and testing industry is unregulated," the Council said. "Data gathered thus far, however, indicates that significant progress has been achieved and that a majority of states expect to be compliant by 5 March 2011."

Testing Endorsements

ICAO officials and aviation English specialists have for several years criticized the lack of standards for aviation English instruction and testing. The ICAEA and other organizations have worked with ICAO to develop an endorsement process for aviation language proficiency tests. ICAO said in late 2010 that the goal is to "provide a pool of testing systems of appropriate design and content and which additionally meet well-defined standards of good practice from which states can then choose."³

ICAO, in a discussion of the testing endorsement plan, noted that development of the plan

'A majority of states expect to be compliant by 5 March 2011.' was prompted by reports of substandard testing practices.

Under the new plan, ICAO said, "testing providers will generally be subject to a two-phase process consisting of an initial review and, if needed, a final review. Endorsement will be granted only if recommendations made during the initial review have been implemented by the test provider."

Participation in the endorsement process, which will include feedback to test providers about how to improve their exams, will be voluntary, ICAO said, adding that the process is "expected to gradually but durably enhance and extend standards of good practice across the board."

Also in 2010, ICAO published the second edition of its *Manual* on the Implementation of ICAO Language Proficiency Requirements, elaborating on the 2004 first edition's guidance for achieving operational proficiency.⁴

New Landscape for Training

Elizabeth Mathews, a specialist in applied linguistics who led the international group that developed ICAO's English language proficiency requirements, said the standards have "changed the landscape" for all aviation training — not just aviation English training.

"The ICAO language standards ... are impacting aviation training in a fundamental way that the industry will not be able to go back on," said Mathews, now a consultant, in a presentation prepared for Flight Safety Foundation's International Air Safety Seminar, held in November 2010 in Milan, Italy.

"Whether it takes us three years or six years or a dozen years, the ICAO [language standards] have set the industry on an inevitable march toward continuous improvement in aviation communication safety."

To acquire more data on the role of language in aviation accidents and incidents, she recommended that accident investigation reports be more specific in their descriptions of what often is referred to simply as a "breakdown in communication."

She added, "If we do not have the tools and training to appropriately investigate the possible role of language in aviation incidents or accidents, then we cannot know the extent of any problem. At a minimum, investigators should note [whether a breakdown in communication involves] inadequate plain language proficiency, incorrect or careless use of ICAO phraseology, pronunciation issues, grammar issues or lack of comprehension."

Mathews called on the aviation industry and government regulators to perform a three-part "course correction" to enhance aviation English training and testing.

First, she said, increased regional cooperation is needed to establish test-assessment programs, compare training programs and host teachertraining workshops. Some of these programs already are being implemented, especially in Europe, but more are needed in other parts of the world, she said.

Second, a shift is needed in corporate culture as to "how English training is perceived, conceived and implemented," she said. "English [has] long been thought to be a standalone item that could be covered by one or two four-week stints in a training program." However, she added that this is a "false conception of how language acquisition happens." A crucial factor that sometimes is lacking is corporate commitment to long-term efforts for Englishlanguage learning by pilots, controllers and aeronautical station operators, she said.

The third element, Mathews said, is industry leadership to press for continued progress in improving language proficiency training and testing programs.

"Commercial efforts can only take us so far," she said, "and in the unregulated language industry, a purely commercial solution is not wholly effective."

Notes

- The information is available at ICAO's Flight Safety Information Exchange (FSIX) Web site at <www.icao.int/fsix/ lp.cfm>.
- ICAEA. A Word From the President. <www.icaea.pansa.pl>.
- ICAO. "ICAO to Endorse Testing for Language Proficiency." *ICAO Journal* Volume 65 (No. 4–2010): 30–31.
- ICAO. Document 9835, Manual on the Implementation of ICAO Language Proficiency Requirements, Second Edition — 2010; Section 4.6, "Explanation of Rating Scale Descriptors." Montreal, 2010.

Further Reading From FSF Publications

Mathews, Elizabeth; Gill, Alan. "Can They Talk the Talk?" *AeroSafety World* Volume 3 (November 2008): 34–37.

Werfelman, Linda. "Language Barrier." Aero-Safety World Volume 3 (August 2008): 41-43.

Melnichenko, Sergey. "Do You Speak English?" *AeroSafety World* Volume 3 (July 2008): 23–27.

Werfelman, Linda. "Speaking the Same Language." *AeroSafety* World Volume 2 (November 2007): 25–29.

Werfelman, Linda. "Simplifying the Technicalities." *AeroSafety World* Volume 2 (August 2007): 16–21.