As the leader of a team of language and aviation specialists in Russia that developed a tool for English proficiency evaluation, I know that non-English speakers in the aviation community are focused on getting English language proficiency endorsements. Because of differences in cultural, social and educational factors, methods of achieving this goal may vary from country to country, but in the rush to win the endorsement, the basics of aviation English must not be forgotten.

English language proficiency is a requirement of the International Civil Aviation Organization (ICAO), which initially established a March 5, 2008, deadline for airplane and helicopter pilots, air traffic controllers and aeronautical station operators to demonstrate their proficiency.

In recognition of the difficulties that many contracting states were having in meeting the March deadline, the ICAO Assembly has urged states to allow pilots and controllers to continue their work as usual, even without proficiency in English, as long as the state governments are proceeding according to a revised schedule for completion of language proficiency training. That new schedule calls for completion of the language proficiency requirement by March 2011.

Logical Chain

The logical chain of acquiring language proficiency begins with personnel selection and is influenced by the motivation, time, investment and commitment of everyone involved.

Our pilots are aging, and at least in this respect, Russia is like many other countries. Thirty or more years ago, when candidates’ health, skills and knowledge were checked to certify their ability to fly aircraft, nobody tested...
their English. Today, in the final years of their professional careers, they are being challenged to demonstrate an ability to speak and understand English — a development they never expected.

Some of them remember a time 30 years ago when even an interest in learning a foreign language was closely scrutinized. Several generations of pupils graduated from school after a six-year course in English with precise knowledge of the answer to only one question: “What's your name?”

Observation of pilots and controllers engaged in today’s language training process leads to the conclusion that about 20 percent of them, regardless of age, will never exceed Level 3 proficiency — defined by ICAO as “pre-operational,” or inadequate in some situations. ICAO's requirements call for pilots, controllers and aeronautical station operators to demonstrate at least Level 4 “operational” proficiency (Table 1).²

Vulnerable Process

The training process is vulnerable in a number of areas — teachers, students, programs, training materials, motivation, course authenticity and content relevance, among others. Training in aviation English also is hindered because there is almost no opportunity for on-the-job practice of the language that would be used in urgencies and emergencies. Unfortunately, many aviation students of English may think that, because the probability of an incident or accident is low, there is little reason to pay so much attention to learning English.

There are various forms of language learning — individually or within a group, in a non-English-speaking native country or an English-speaking country, in a classroom or online — but there is no magic wand, and nobody will wake up tomorrow to realize he or she is able now to speak and understand English. ICAO cautions aviation personnel to “understand that learning a language is more a function of time, effort and opportunity.”³

A pilot’s (or controller’s) age or a shortage of training time often is cited as a reason for having not reached Level 4 proficiency. However, linguists have proved that age is not a factor in language learning, except as an influence on pronunciation. In addition, five years — the time since ICAO introduced its English language proficiency requirements — has been long enough for my alma mater, Moscow State Linguistic University, to train thousands of interpreters, teachers and translators, who attend evening classes while they work five days a week. There is no doubt their employers expect much more from them than Level 4 proficiency.

Nevertheless, time was lost because, during the first two or three years after ICAO's adoption of the requirement, many people did not believe that language requirements would become a reality. The three-year “transition period” before the proficiency requirements take effect in 2011 will hardly change this attitude, as even now, the same disbelief is being expressed in Internet discussion groups.

Time and Money

Airline managers are reluctant to spend money for English language proficiency training as it is costly, lengthy and there is no guarantee — if it is conducted by a reliable school with objective standards — that all students will reach Level 4 proficiency. Airlines in remote areas are in the worst position because some cities do not have training centers or language schools, and the airline management must allocate additional funds for travel, accommodations and other expenses associated with attending classes.

Some airline CEOs and pilots assume that paying for a course in aviation English will automatically mean that the entire class of students will achieve Level 4 proficiency.

Both pilots and management also hate spending much time on training, but as is true of any new activity, language learning requires practice. Some experience gained in language teaching indicates that to progress from Level 2 “elementary” proficiency to Level 3 proficiency requires about 50 percent more training time than a course that enables the student to move
| Level 6 | Expert | Pronunciation | Stress, rhythm and intonation, though possibly influenced by the first language or regional variation, are well controlled. | Both basic and complex grammatical structures and sentence patterns are consistently well controlled. | Vocabulary range and accuracy are sufficient to communicate effectively on a wide variety of familiar and unfamiliar topics. Vocabulary is idiomatic, nuanced and sensitive to register. | Able to speak at length with natural, effortless flow. Varies speech flow for stylistic effect — for example, to emphasize a point. Uses appropriate discourse markers and connectors spontaneously. | Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties. | Interactions are immediate, appropriate and informative. Manages the speaker/listener relationship effectively. |
| Level 5 | Extended | Pronunciation | Stress, rhythm and intonation, though influenced by the first language or regional variation, rarely interfere with ease of understanding. | Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with errors which sometimes interfere with meaning. | Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete and work-related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic. | Able to speak at length with relative ease on familiar topics but may not vary speech flow as a stylistic device. Can make use of appropriate discourse markers or connectors. | Comprehension is accurate on common, concrete and work-related topics and mostly accurate when the speaker is confronted with a linguistic situational complication or unexpected turn of events. Is able to comprehend a range of speech varieties (dialect and/or accent) or registers. | Responses are usually immediate, appropriate and informative. Manages the speaker/listener relationship effectively. |
| Level 4 | Operational | Pronunciation | Stress, rhythm and intonation and pronunciation are influenced by the first language or regional variation and frequently 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. Can make limited use of discourse markers or connectors. Fillers are not distracting. | 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. When the speaker is confronted with a linguistic situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies. | Responses are usually immediate, appropriate and informative. Manages the speaker/listener relationship effectively. |
| Level 3 | Preoperational | Pronunciation | Stress, rhythm and intonation and pronunciation are influenced by the first language or regional variation and frequently interfere with ease of understanding. | Basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning. | Vocabulary range and accuracy are often sufficient to communicate on common, concrete or work-related topics, but range is limited and the word choice often is inappropriate. Is often unable to paraphrase successfully when lacking vocabulary. | Produces stretches of language, but phrasing and pausing are often inappropriate. Hesitations or slowness in language processing may prevent effective communication. Fillers are sometimes distracting. | Comprehension is often accurate on common, concrete and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. May fail to understand a linguistic or situational complication or an unexpected turn of events. | Responses are sometimes immediate, appropriate and informative. Can initiate and maintain exchanges with reasonable ease on familiar topics and in predictable situations. Generally inadequate when dealing with an unexpected turn of events. |
| Level 2 | Elementary | Pronunciation | Stress, rhythm and intonation are heavily influenced by the first language or regional variation and usually interfere with ease of understanding. | Shows only limited control of a few simple memorized grammatical structures and sentence patterns. | Limited vocabulary range consisting only of isolated words and memorized phrases. | Can produce very short, isolated, memorized utterances with frequent pauses and a distracting use of fillers to search for expressions and articulate less-familiar words. | Comprehension is limited to isolated, memorized phrases when they are carefully and slowly articulated. | Response time is slow and often inappropriate. Interaction is limited to simple routine exchanges. |
| Level 1 | Pre-elementary | Performs at a level below the Elementary level. | Performs at a level below the Elementary level. | Performs at a level below the Elementary level. | Performs at a level below the Elementary level. | Performs at a level below the Elementary level. | Performs at a level below the Elementary level. | Performs at a level below the Elementary level. |

1. Assumes a dialect and/or accent intelligible to the aeronautical community.
2. Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task.

from Level 1 “pre-elementary” proficiency to Level 2 proficiency. The progression of additional time is almost the same if we compare the training time required to enable someone with Level 3 abilities to progress to Level 4.

Robert Chatham of the ICAO Proficiency Requirements in Common English (PRICE) Study Group says that any measurable improvement requires several hundred hours of training. However, there is no guarantee that a pilot will achieve Level 4 proficiency in a 200-hour training program. Progress in learning a language depends on many factors, including the learner’s starting point.

Absent Syllabus

The absence of a modern syllabus to satisfy ICAO requirements has been recognized by teachers, students and industry managers. Attempts to develop reliable programs have failed, probably because of some teachers’ incomplete knowledge of the topic and the absence of subject-matter experts among course developers.

The decision to send some aviation personnel, mostly controllers, for training in English-speaking countries was welcomed as a panacea. Has it helped? No, for several reasons, among them that, although groups of language students were sent to English-speaking countries for classes, the students spent much of their time together, using their native language.

In addition, the training period depended not on the time needed to achieve Level 4 proficiency but rather on the time available for the stay — typically four weeks but sometimes eight weeks. Although English was taught, the aviation context was missing because teachers often were unaware of the way controllers and pilots use the language. Instead, their students were drilled in such activities as discussing an airline business class menu. Four months after the course, sometimes sooner, the students regressed to the same level of English proficiency that they had before the trip.

Russian pilots who have passed new type-rating courses abroad — even in non-English-speaking countries — make more progress with language proficiency even if they are not simultaneously enrolled in English language courses. This may mean that the results of language training abroad depend primarily on whether subject-matter experts play leading roles in English language course development and the authenticity of a course’s aviation content.

Varying Professionalism

As may be the case everywhere, the professionalism of aviation English teachers in Russia varies. Larger airlines capable of running their own training centers usually have well-trained teachers who frequently attend workshops on language issues and are capable of developing interesting and helpful training materials.

In other institutions, often state-owned enterprises, teachers still do not have computers or Internet access. At most, they receive a relatively short refresher course once every five years in another state-owned training institution with similar problems.

While training in English five years ago was limited to radiotelephony (RTF) learning, today some courses neglect RTF to focus instead on achieving a particular proficiency level. Courses range from a surprisingly low 60 hours to 220 hours per level. This disparity indicates that English has not been taught in accordance with English for Specific Purposes (ESP) principles and — in comparison with impressive achievements in English for medicine, business, travel,
metallurgy and other fields — the academic research in ESP aviation English is simply missing in Russia.

Fortunately, quite a few new teachers have joined aviation English training in recent years. They are hardworking and industrious, with an aptitude for developing new training materials and a zest for teaching.

However, because of a lack of serious research, the few books on aviation English that have been published in Russia are weak, and their authors obviously neglected to determine what actually needed to be taught. These books reflect their authors’ anticipation of what radio-telephony could be, not what it shall be, according to ICAO standards discussed in Annex 10, Aeronautical Telecommunications, and Document 4444, Procedures for Air Navigation Services: Rules of the Air and Air Traffic Services.

Computer-based training is widely used by major airlines but is rare in other aviation settings. Without computers or an Internet connection, teachers are unaware of the wealth of Web resources that can be used for training. But probably the greatest shortcoming is the absence of ICAO documents. Some managers do not want to invest in what they mistakenly believe is not an ICAO standard but a recommended practice — a common attitude among medium-level aviation chiefs.

A 2001 Eurocontrol research project determined that only 20 percent of radio communications correspond to standard ICAO phraseology, although controllers and pilots involved in the research said they almost always complied with the standard. This finding makes clear that ICAO documents regarding standard phraseology should be more thoroughly studied during the training process. Each classroom should have a reminder of the ICAO prescription that “in all situations for which standard radiotelephony phraseology is specified, it shall be used.”

For its part, ICAO should be more attentive to the content of some documents. It is difficult to explain to meticulous students why “verify” — a word excluded several years ago from “Standard Words and Phrases” in Annex 10 — is still used in Document 9432, Manual on Radiotelephony. The same problem applies to some other words, and this violates the “one word—one meaning” principle.

**Proficiency Maintenance**

Attaining Level 4 proficiency is not the final goal for aviation personnel. Those who have Level 4 proficiency must work to retain it or to achieve a higher proficiency level. Language skills deteriorate without practice, and adequate practice may be difficult to obtain. On-the-job practice may well be limited to ICAO standard phraseology, although in accordance with ICAO language requirements, pilots and controllers should be able to demonstrate their ability to adequately interact in urgencies and emergencies.

Nevertheless, daily exposure to the English language is limited because English-language television programs are available only via satellite, English-language movies are dubbed into Russian, and there is a scarcity of English-speaking foreigners with whom to practice the language. Thus the ICAO recommendation of a three-year period between refresher courses for Level 4 proficiency may need to be shortened.

The aviation community in Russia is fully aware of ICAO language requirements; the country has four approved tests of English proficiency, more than 500 aviation English teachers and about 60 raters. In 2007, the civil aviation authority in Russia adopted federal regulations specifying the minimum English proficiency of flight crews, as well as their ab initio and refresher language training.

More airlines have recognized that ICAO’s English language proficiency requirement has become a standard, and they are training crews for compliance. Russia also has begun inviting well-known foreign aviation English specialists to train its teachers.

Though noncompliant with the initial 2008 deadline, Russia has received the message and acknowledged it. Time will show whether the message was taken seriously.

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**Notes**

1. The tool is TELLCAP, the Test of English Language Level for Controllers and Pilots, which is aimed at ensuring the valid evaluation of aviation personnel in line with ICAO’s English language proficiency requirements.

2. ICAO’s language proficiency rating scale describes six levels of language proficiency, ranging from Level 1 “pre-elementary” to Level 6 “expert.” Minimum requirements are for aviation personnel to demonstrate at least Level 4 proficiency. Criteria for achieving Level 4 proficiency include, among other qualities, a sufficient vocabulary and comprehension to communicate effectively on “common, concrete and work-related topics,” along with an ability to initiate and maintain verbal exchanges “even when dealing with an unexpected turn of events.”


4. ESP programs are English courses designed for workers in specific industries, including aviation; their goal is to provide the workers with language skills required for particular aspects of their jobs.