A36-WP/183 TE/50 13/9/07 **English only**

ASSEMBLY — 36TH SESSION

TECHNICAL COMMISSION

Agenda Item 30: Other safety matters

LANGUAGE PROFICIENCY REQUIREMENTS DEFICIENCIES

(Presented by the International Aeronautical Federation and the International Council of Aircraft Owner and Pilot Associations)

EXECUTIVE SUMMARY

Input from a number of our worldwide affiliates and informal contact with State representatives at the recent ICAO Language Symposium indicate that some States will not be capable of testing and certifying all of their licenced pilots and air traffic controllers prior to the March 2008 deadline. Ignoring these facts will have significant safety implications for the aviation world which assumes full compliance with the ICAO language proficiency Standard.

Requiring the high level of language proficiency specified for air traffic controllers and airline pilots operating under instrument flight rules (IFR) is unrealistic and unnecessary for pilots operating under visual flight rules (VFR).

Action: The Assembly requests the Council to:

- a) delay implementation of the language proficiency requirement until such time that all applicable personnel within a clear majority of contracting States meet those requirements;
- b) publish States' status of compliance to all contracting States for information purposes. This service will provide an incentive for early compliance by all concerned; and
- c) reconsider the IAOPA petitions to modify the language proficiency Standards for VFR operations. Employ risk analysis techniques to properly consider the factors involved in the decision process.

Strategic Objectives:	This working paper relates to Strategic Objective A: Safety.
Financial implications:	Language training, testing and proficiency maintenance for an estimated 500,000 general aviation pilots who fly internationally is estimated to cost \$1.5 billion over the next three years.
References:	Annex 1, 1.2.9

1. **INTRODUCTION**

- On 8 March 2008, ICAO language proficiency Standards for pilots and air traffic controllers will become effective. International Aeronautical Federation (FAI) and International Council of Aircraft Owner and Pilot Associations (IAOPA) welcome these Standards for all flight operations under instrument flight rules (IFR) and in complex airspace; when implemented the high level of language proficiency will undoubtedly enhance safety and efficiency within the air traffic control system. However, for the new Standard to be truly effective all IFR participants and those operating in complex airspace must comply with the Standard. It will require just one participant with inadequate language proficiency, be it on the ground or in the air, to create an unsafe condition. Additionally, all pilots operating internationally will be required to comply with this Standard whether they fly under visual flight rules (VFR) or in less complex airspace.
- 1.2 IAOPA and FAI represent the interests of more than one million pilots and aircraft operators in 88 States worldwide. A significant number of these pilots operate their aircraft internationally for transportation, sport and recreational aviation pursuits. Virtually all of these individuals will be affected by the ICAO language requirements.

2. BACKGROUND

- 2.1 Input from a number of our worldwide affiliates and informal contact with State representatives at the recent ICAO Language Symposium indicate that some States will not be capable of testing and certifying all of their licenced pilots and controllers prior to the March 2008 deadline. If all pilots and controllers are not certified by the deadline, States, pilots and controllers will assume that all are in full compliance, creating the false assumption that essential personnel are qualified. This assumption will elevate operational risk levels without the knowledge of all concerned. Additionally, unprepared States may be tempted to rush the certification process, providing less than fully qualified personnel to operate within the air traffic control system.
- 2.2 In support of the above, two Air Navigation Bureau questionnaires to States regarding language proficiency compliance readiness failed to yield adequate responses from States. Importantly, the questionnaires did not ask whether private pilots would be tested and certified; this is potentially the largest group of pilots that will require certification.
- Additionally, IAOPA has twice petitioned (see attachments) the ICAO Secretariat to modify the language proficiency requirement for pilots operating under visual flight rules (VFR). The requirement for a pilot to meet the high levels of language proficiency specified in the new Standard while operating under VFR and in non-complex airspace is unnecessary for the safety and efficiency of the air traffic control system. The high costs and time required to meet this requirement cannot be justified for the few times a VFR pilot may be required to contact an air traffic control facility. Yet, the Secretariat has denied both of our petitions, based on anecdotal evidence presented by a few members of the Air Navigation Commission.

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3. IMPACT OF LANGUAGE PROFICIENCY REQUIREMENTS

- 3.1 The impact of this new Standard, if left unmodified, will have a significant negative impact on the general aviation community. Most of our members operate under VFR and will have their activities severely restricted if they cannot readily cross national borders, especially within Europe. Qualifying for Level 4 language proficiency will require hundred of hours and thousands of dollars in training and costly testing for each of the hundreds of thousands of pilots who may only occasionally use language in their brief international flights as required by the ICAO Standard. Language training, testing and proficiency for an estimated 500 000 general aviation pilots who fly internationally is estimated to cost \$1.5 billion over the next three years.
- 3.2 In many States the health and well-being of commercial air transport is heavily dependent on general aviation for supplying it high-quality pilots and support personnel. Requiring excessively high levels of language proficiency for pilots engaged in personal transportation and air sports will likely prove a significant deterrent for prospective general aviation pilots. This deficit will be passed on to commercial air transport due to insufficient numbers of pilot candidates available for their operations.

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APPENDIX A

International Council of Aircraft Owner and Pilot Associations

PETITION TO MODIFY ICAO LANGUAGE PROFICIENCY REQUIREMENTS FOR LIGHT GENERAL AVIATION AIRCRAFT OPERATORS

20 April 2006

1. **INTRODUCTION**

- 1.1 In March 2003 ICAO issued Amendment 164 to Annex 1 which imposed language proficiency requirements on pilots and air traffic controllers. Specifically, these personnel "shall demonstrate the ability to speak and understand the language used for radiotelephony communications." Rather vaguely, the Standard for aeroplane and helicopter pilots is necessary for those who "are required to use the radio telephone aboard the aircraft". These requirements become effective in March 2008.
- 1.2 The International Council of Aircraft Owner and Pilot Associations (IAOPA) affiliates in 63 States, comprising more than 470,000 pilots and aircraft operators, are quite interested in this subject.
- 1.3 IAOPA has twice commented on this subject stating, in essence, that the required proficiency level will prove difficult and costly to both attain and maintain. While this requirement may be justified for those using the IFR ATS system, it is difficult to justify for the casual VFR user.

2. BACKGROUND

2.1 The language proficiency requirement was triggered by a resolution generated by the 32nd ICAO Assembly in September 1998. Resolution A32-16: *Proficiency in the English language for radiotelephony communications*, urged the ICAO Council:

to direct the Air Navigation Commission to consider this matter with a high level of priority, and complete the task of strengthening the relevant provisions of Annex 1 and Annex 10 with a view to obligating Contracting States to take steps to ensure that air traffic control personnel and flight crews involved in flight operations in airspace where the use of the English language is required, are proficient in conducting and comprehending radiotelephony communications in the English language.

2.2 I believe that the operative phrase here is, *flight operations in airspace where the use of the English language is required.* Unfortunately, neither the letter nor intent of this phrase has been incorporated in the Annex 1 Standard, 1.2.9.1.

3. **DISCUSSION**

- 3.1 The framers of the resolution correctly realized that there were specific locations and situations that required precise and comprehensible communications between pilots and air traffic controllers. Yet, this fact is not conveyed to the Standard. Instead, a vague requirement is levied on pilots "who are required to use a radio telephone aboard an aircraft." Does this mean that language proficiency is required of pilots who may *ever* be required to use the radio telephone or just for a specific flight? And, when is radio telephone communication actually required for airport advisory services? For closely-controlled airspace? For IFR communications?
- 3.2 Thus, the actual requirement stated in the Standard is vague and indistinct, creating doubt regarding the actual requirement.
- 3.3 Annex 11 states that the primary purpose of air traffic control service is to *prevent collisions*. Secondarily, it is for *expediting and maintaining an orderly flow of air traffic*. And, control is exercised to separate air traffic only in certain types of airspace. Namely, separation services are provided between all types of aircraft in Class A, B and C airspace.

4. **IMPACT**

- 4.1 More than one million pilots worldwide potentially will be affected by this standard. Compliance with this Standard will involve months of training and the equivalent of thousands of dollars for each individual attempting to achieve Level 4 language proficiency.
- 4.2 The great majority of pilots, regardless of licence level, (perhaps as much as 80 percent) will never fly under IFR nor penetrate closely controlled airspace. Therefore, the blanket requirement to impose a language proficiency requirement for all pilots is unnecessary.

5. **RECOMMENDATION**

- 5.1 With this as a background it is reasonable to assume that radio communications only should be required in conjunction with the primary objective of air traffic control, that of collision prevention through the provision of separation services. If so, then ATC radio communication should only be required in Class A, B or C airspace.
- 5.2 Therefore, to realize the initial objective of resolution A32-16 the wording of Annex 1, paragraph 1.2.9.1 should be changed to read,

Aeroplane and helicopter pilots and those flight navigators whose flights will operate under IFR or VFR within Class A, B or C airspace shall demonstrate the ability to speak and understand the language used for radiotelephony communications.

Or,

Only those pilots...who have demonstrated the ability to speak and understand the language of radiotelephony communications shall be permitted to operate under IFR or VFR within Class A, B or C airspace.

APPENDIX B

International Council of Aircraft Owner and Pilot Associations

ICAO LANGUAGE REQUIREMENTS

13 June 2005

1. **INTRODUCTION**

- Amendment 164 to ICAO Annex 1 created language proficiency Standards that will be required of international pilots and air traffic controllers by March 2008. These Standards hold the promise of increased safety and efficiency for international air transportation by facilitating communication within the air traffic control system. However, as with many major issues of this nature, the details associated with the implementation of these Standards must be carefully devised to achieve the desired result.
- 1.2 Many of our affiliates have explored the implications associated with this new Standard to determine the impact on their members. While some countries have done little to prepare to accommodate the language provisions, others have. What follows are some of their findings and concerns:
- 1.2.1 <u>Interpretation of the Standard.</u> The required level of proficiency for pilots, Level 4, initially appears attainable until some of the attendant details are uncovered. For instance, proficiency concepts shown in the appendix to Annex 1 are subject to wide variations in interpretation:
 - a) communicate on common, concrete and work-related topics with accuracy and clarity;
 - b) use a dialect or accent which is intelligible to the aeronautical community; and
 - c) vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete.
- 1.3 All of these descriptors may be interpreted differently, given the liberal nature of the Annex 1 Appendix statement establishing testing agencies, in a "...manner acceptable to the licencing authority...". Some States will scrupulously follow the letter of the Standard while others will employ a more permissive interpretation. The result will be States in which pilots and controllers who will be effectively penalized by their State's zeal for compliance while other will be effectively "let off" by their less attentive regulators.
- 1.3.1 <u>Proficiency Level.</u> Level 4 proficiency may be correctly required for IFR operations in major terminal areas by both pilots and controllers. The pace and criticality of operations in those areas demand a higher level of language proficiency. However, operations outside all the busiest TMAs do not appear to demand as high a level of proficiency, especially for VFR operations.

- 1.3.2 Achieving Level 4 proficiency in many States will require a high level of effort for many applicants. Moreover, this proficiency level will prove expensive and time consuming. For the VFR pilot flying between France and Germany, for instance, proficiency in the other State's language or English may prove insuperable, greatly restricting the activities of general aviation and aerial work operators.
- 1.3.3 <u>Availability of Examiners.</u> While examiners and their facilities may be readily available in smaller States, pilots in larger countries like Brazil, Russian Federation and Australia will find it difficult to readily access examiners. Some States, like Germany, currently require a rudimentary English language test for pilots to prove their ability to speak and understand ATC phrases; this already a burden, even at this most basic level. Going beyond this to higher proficiency levels will significantly increase the burden on pilots.
- 1.4 While IAOPA supports the concept of effective communications in air traffic control systems, we continue to have concerns regarding the implementation of the ICAO language proficiency program. They are:
 - a) the level of proficiency required of pilots must be commensurate with operational ATC requirements;
 - b) examiners and facilities providing the testing must be readily available to pilots;
 - c) cost associated with the testing process must be minimized; and
 - d) language testing personnel and facilities have not yet been adequately defined and standardized.
- 1.5 Left unmodified, ICAO language proficiency requirements will have a significant negative economic on GA/AW activities, already beset with rapidly increasing operational costs and fees. Moreover, these Standards will have little effect on safety and efficiency, given that the majority of GA/AW operations are conducted VFR and outside major TMAs. Ultimately, these Standards will unnecessarily restrict the growth and vigor of our constituents' aviation activities.
- 1.6 Because of our continuing concerns we strongly recommend the following:
 - a) delay the March 2008 effective date for implementing ICAO language proficiency until the full impact of this Standard has been assessed;
 - b) re-evaluate the proficiency level requirement for pilots operating both VFR and outside major TMAs;
 - c) establish a system to standardize language proficiency testing agencies to a uniform level of competency; and
 - d) simplify the testing procedures as much as possible.