AERODROMES PANEL (AP)

SECOND MEETING

Montreal, CANADA,

12 to 15 October 2010

Agenda Item 3: Rescue and Fire Fighting

General Aviation Exemption from Annex 14, Vol I Rescue and Fire Fighting Provisions

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

SUMMARY

Annex 14 rescue and fire fighting provisions create a significant financial burden for general aviation operations without providing noticeable benefits. This paper requests that Annex 14 RFF provisions be either, a) limited to larger aerodromes or, b) those certified for commercial air transport operations.

1. INTRODUCTION

1.1 This paper requests the modification of the provisions of ICAO Annex 14 (9.2.1) requirements providing for rescue and fire fighting (RFF) services at all aerodromes open to public use, in accordance with the requirements of Article 15 of the Convention (Annex 14, 1.2.2, 9.2.1). This proposal is submitted by the International Council of Aircraft Owner and Pilot Associations (IAOPA), which represents more than 470,000 general aviation pilots, owners and operators who are members of IAOPA's 68 world affiliates

2. DICSUSSION

2.1 RFF requirements create a significant burden for general aviation pilots and operators because of the aerodrome landing, parking and handling fees levied on these operations to fund aerodrome fire brigades. Additionally, the expense required to maintain a fire brigade at a small general aviation aerodrome frequently restricts the operating schedule for these facilities in an effort to avoid the associated RFF expenses. Annual expenses for maintaining a sunrise-to-sunset, partial week RFF capability at small general aviation aerodromes easily may exceed US$150,000 *[two fire fighters, equipment depreciation, training, supplies, etc.]* annually. When this expense is spread over only 40-50 daily operations (typical at many small general aviation aerodromes) the cost to individual pilot/operators becomes prohibitive.

2.2 Anecdotal evidence from IAOPA affiliates shows that the requirement has provided little benefit for general aviation personnel, primarily because the mass, takeoff and landing speeds and fuel capacity of small general aviation aircraft are insufficient to yield the type of takeoff or landing accident that would require a aerodrome fire brigade. This contention is supported by the fact that the most active general aviation States, Australia, Canada and the United States, have either filed a complete or partial Annex 14 difference with ICAO on this issue, relieving those States of the responsibility to provide RFF services at general aviation aerodromes. The United Kingdom has recently released guidance for smaller aerodromes that advocates risk assessment techniques in making a determination of RFF provisions.

2.3 General aviation operations do not require or desire the same level of protection as do commercial service operations. Annex 6, Part II, notes:

> *Level of safety.* The Annex should ensure an acceptable level of safety to passengers and third parties (third parties meaning persons on the ground and persons in the air in other aircraft). Also, as some international general aviation operations (typically under 5 700 kg) would be performed by crews less experienced and less skilled, with less reliable equipment, to less rigorous standards and with greater freedom of action than in commercial air transport operations, it was therefore, accepted that the passenger in international general aviation aircraft would not necessarily enjoy the same level of safety as the fare-paying passenger in commercial air transport. However, it was recognized that in ensuring an acceptable degree of safety for third parties, an acceptable level of safety for flight crews and passengers would be achieved.
>
> *Freedom of action.* The maximum freedom of action consistent with maintaining an acceptable level of safety should be granted to international general aviation.

Therefore, general aviation operators are willing to eliminate Annex 14 requirements for RFF services at their aerodromes.

Conversely, the passengers paying for commercial air transport services deserve a higher level of safety and care. Additionally, these operations normally involve larger, heavier, faster aircraft that give rise to more severe crash consequences.

2.4 Many aerodromes designated by States to provide services for international civil aviation operations do so on a prior permission, prior arrangements or lengthy notice basis for customs, agriculture or immigration services. While these aerodromes are listed in a State's Aviation Information System (AIS) documents as being international facilities, they are not truly capable of providing these services on a continuous basis. Therefore, requiring these aerodromes to maintain continuous RFF services may not be required as a function of international aerodrome operations.

2.5 A number of States often use ICAO standards for their own domestic civil air regulations, regardless of international applicability. This often imposes higher standards than necessary, especially for general aviation operations, infrastructure and facilities. Similarly, ICAO recommended practices are often adopted as standards in some States, compounding the heavy regulatory burden on general aviation. Therefore, all ICAO standards and recommended practices should be carefully considered prior to their

approval. It is especially important to differentiate between commercial and general aviation operations when developing standards. This is especially true for RFF requirements.

2.6 The trend toward performance-based standards rather than the more restrictive prescriptive standards has gained increasing popularity within the ICAO SARPS. This trend is often linked to a risk assessment process in which the probability that a hazard of defined severity may occur. The result of this calculation is a performance-based mitigation of potential hazards that accommodates a variety of factors specific to the case at hand. Perhaps performance-based techniques should be employed in determining RFF requirements for aerodromes.

3. CONCLUSION

3.1.1 Meeting participants are encouraged to either:

a) Change Annex 14, paragraph 9.2.1 to read, "Rescue and fire fighting equipment and services shall be provided at aerodrome*s designated Class 3 and higher in Annex 14, Table 9-1."*

or,

b) Orient the change to commercial air transport operations, which would read, "Rescue and fire fighting equipment and services shall be provided at aerodrome*s designated to provide scheduled passenger-carrying commercial air transport operations."*

— END —

International Civil Aviation Organization

WORKING PAPER

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ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 45: Next Generation of Aviation Professionals

RECOGNITION OF NEXT GENERATION OF LIGHT AIRCRAFT (NGLA) AND PILOT LICENCING FOR AVIATION TRAINING PURPOSES

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

EXECUTIVE SUMMARY

The ICAO Next Generation of Aviation Professionals Symposium highlighted a significant shortage of pilots and aviation maintenance personnel forecast for decades to come. While a number of proposals were submitted to mitigate this shortage the expense involved in attaining professional aviation licences was not covered. A low cost alternative is available that will significantly lower training and certification costs.

Action: The Assembly is requested to issue a resolution, as described in paragraph 5.1, that will direct the Council to determine the value of:

a) creating a new Next Generation Light Aircraft (NGLA) certification category;
b) establishing a new pilot licence category for this type of aircraft, a Next Generation Pilot Licence; and
c) using the principle of proportionality when creating new standards and recommended practices for the general aviation community to reduce regulatory burden in recognition of the key role it plays in creating new pilots and aviation technicians.

Strategic Objectives:	This working paper relates to Strategic Objective A: - *Enhance global civil aviation safety*
Financial implications:	Additional Air Navigation Bureau tasking due to new work programme. IAOPA will provide in-kind support as needed.
References:	Annex 1 – *Personnel Licensing*

1. INTRODUCTION

1.1 Commercial air transportation is facing a crisis that could seriously hamper its ability to serve as the primary means of long-distance world transportation. The Next Generation of Aviation Professionals (NGAP) Symposium in March 2010 predicted significant worldwide shortages of hundreds of thousands of pilots and maintenance personnel within the next two decades.

1.2 Such shortages will seriously arrest commercial and personal growth patterns worldwide. The lack of adequate air transportation to facilitate growth of commerce and industry will seriously affect global economic conditions and restrict lifestyle choices of individuals.

1.3 If adequate numbers of well-motivated and qualified future aviation professionals are unavailable to provide a pool of candidates from which to choose, compromises will inevitably be made to fill personnel gaps. While the resulting cadre of employees may meet minimum qualifications they may not be the best and brightest available. Of greatest importance will be the potential loss of a safe operating environment for air travellers. Therefore, all concerned must seek ways to facilitate the early selection of eager, well-motivated and talented individuals to fill the ranks of those who will carry on the tradition of the safest form of transportation.

2. SELECTING AND TRAINING AVIATION OPERATIONAL PERSONNEL

2.1 Selecting individuals to undergo a lengthy and rigorous training process that will produce tomorrow's pilots and aviation technicians is done in several different ways throughout the world. At a minimum, interested individuals undertake their own training program, largely funding their own training to achieve basic certification in their desired occupational field. At the other end of the spectrum States and large commercial operators select prospective pilots and mechanics through a rigorous vetting process. Selectees then undergo a highly structured training program leading to licensing as commercial pilots or aviation technicians. While the latter process is designed to produce individuals qualified to operate in and support scheduled commercial air transportation it does little to produce qualified candidates for other commercial aviation operations.

2.2 Pilots and technicians needed for regional air carriers, on-demand air transportation (charter) and all types of aerial work (including flight training) must self-fund their training and licensing activities. The air transportation and aerial work industry relies on individuals to self-select themselves in support of these activities and then begin an expensive process of training and experience building to qualify for these often low paying entry level jobs. However, since commercial pilot and aviation technician training/qualification can easily cost $100,000 and $30,000, respectively, candidates face a daunting decision to embark on the journey to professional aviation career.

2.3 A major portion of flight training costs are in the purchase and operation of training aircraft. The purchase price of a new training aircraft is between $200,000 and $500,000, which will cost students $125-250 per flight hour. However, a new type of aircraft is available that will reduce pilot and aviation technician training costs by half.

3. NEXT GENERATION LIGHT AIRCRAFT

3.1 In 2005 a new type of entry-level aircraft became available to meet the demand for less expensive and simpler recreational flying, known as the light sport aircraft (LSA) in the United States. Later, the European Union designated a similar aircraft as the European Light Aircraft (ELA). These are two-seat aeroplanes with a maximum takeoff mass of less than 600 kg. and cruising speeds below 120 knots. This class of aeroplane does not meet the ICAO definition of aircraft (at least 700kg) and are therefore not subject to Annex 8 certification and airworthiness requirements. However, several thousand of these aeroplanes have been built in more than 60 States, some by recognized aircraft manufacturers (Cessna and Piper). Certification has been largely accomplished through standards set by the industry through recognized national or international standards organizations, such as ASTM International.

3.2 Pilot and repairman licences have been developed by States in support of the LSA/ELA movement. These licences are not covered under ICAO Annex 1 – *Personnel Licensing*.

4. NEED FOR RECOGNITION

4.1 Many States and regional authorities, including the European Union, Australia, New Zealand, United States and others have accommodated the LSA/ELA movement. Trans-border arrangements have been made between States in recognition of the importance of aircraft type and their operations. Yet, only limited official recognition has been afforded to the training experience or flight time accumulated in these aircraft. Because of the promise they bring to the next generation of aviation professionals we have chosen to name them Next Generation Light Aircraft (NGLA).

4.2 The NGLA is an ideal training platform, combining all the best features of more conventional training and touring aeroplanes with an economy of capital expenditure and operating costs fully one-half of conventional aircraft. However, recognition for the training and flight time experienced in the NGLA has either not been allowed or permitted only in limited amounts. Significantly, older fully certificated training aircraft that have stood the test of time may be categorized as light sport aircraft because of their compatible characteristics. These include the venerable Piper Cub, Aeronca Champion and Luscombe Model 8.

4.3 An added inducement to pilots seeking a career in aviation will be to create a pilot licensing category that affords fewer privileges than the current Private Pilot Licence (PPL) but will be easier and less expensive to obtain. This Next Generation Pilot Licence (NGPL) would be restricted to NGLA aeroplane operations but should be permitted to cross State boundaries.

4.4 Full recognition of training, flight and maintenance time experienced in these aircraft is considerably more economical for new pilots and aviation technicians to progress toward commercial aviation licences. The basic experiences are substantially identical to those experienced in small certificated training aircraft.

4.5 At its June 2010 World Assembly, the International Council of Aircraft Owner and Pilot Associations (IAOPA), representing more than 470,000 pilots and aircraft owners in 68 States, affirmed the following resolution:

"IAOPA, at its 25th World Assembly resolves to:

a) call upon the International Civil Aviation Organization (ICAO) to review the need for high level certification standards for LSAs; and

b) call upon ICAO to review the current Annex 1 Licenses to assess the need for the establishment of LSA pilot licensing standards; and

c) emphasize the need for any future licensing and/or certification standards to follow the concept of proportionality to reduce the burden of any future regulatory requirements on the industry and the operators; and

d) call upon the States to establish the regulations in accordance with any future ICAO standards as a means to promote uniformity and the recognition of certificates and licenses for LSA."

5. CONCLUSION

5.1 The Assembly is requested to issue a resolution as follows:

Resolution 45/xx: Support of the Next Generation Light Aircraft Concept

Whereas the expenses associated with operating training aircraft have grown to the point where the cost of training the next generation of aviation professionals is prohibitively expensive;

Whereas these costs will limit the number of students that could afford to learn to fly, as well as those owners and pilots that could continue to fly;

Whereas there are no aeroplanes on the market that are lower in cost to operate and these aeroplanes are a growing segment of general aviation;

Whereas recognizing that these new aeroplanes, or next generation light aircraft (NGLA), are now highly capable, and have the capacity to meet the need for lower cost general aviation aeroplanes; and

Whereas recognizing that the production and certification of NGLAs is not globally harmonized and that in accordance with Article 33 of the Convention of International Civil Aviation that this may place a barrier on the recognition of the pilot's license and certificates of airworthiness;

Recognizing that the lack of international regulatory framework to support the multi-national recognition of NGLAs and associated pilot licenses may raise the cost of operation of NGLAs and the resulting cost to operators, pilots and trainees;

The Assembly:

Directs the Council to determine the value of:

a) creating a new Next Generation Light Aircraft (NGLA) certification category;

b) establishing a new pilot licence specifically for the NGLA, nominally a Next Generation Pilot Licence (NGPL); and

c) using the principle of proportionality when creating new standards and recommended practices for the general aviation community to reduce regulatory burden in recognition of the key role it plays in creating new pilots and aviation technicians.

— END —