



WORKING PAPER

THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE A

Agenda Item 4: Implementing the global air navigation system and the role of planning and implementation regional groups (PIRGs)

Agenda Item 4.1: The economic benefits brought by aviation

THE IMPORTANCE OF GENERAL AVIATION IN GLOBAL AIR NAVIGATION PLANNING

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

EXECUTIVE SUMMARY

This paper addresses the issue of projected personnel shortages in the aviation industry and the vital role general aviation (GA) plays in personnel and other issues within the industry. It presents information on GA's role in enhancing sustainable development in aviation and underlines the need to focus not only on an end product – safe aviation operations - but equally importantly, to focus on the often-overlooked elements that make sustainable aviation growth possible. These elements necessarily involve a study of the role of GA in the global aviation community and a commitment by ICAO and States to take actions that support, rather than hinder, the health and growth of GA.

Action: The Conference is invited to agree to the recommendation in paragraph 3.2.

1. INTRODUCTION

1.1 ICAO's Next Generation of Aviation Professionals (NGAP) initiative addresses the growing personnel shortage in world-wide civil aviation. United Nations 2030 Sustainable Development Goals (SDGs), on the other hand, require a healthy personnel source, which itself can be realized only if the general aviation (GA) role, as a vital component to an adequate personnel pool, is understood and respected.

1.2 The GA airports that serve a fleet of some 400 000 GA aircraft contain the infrastructure to train pilots, mechanics and technicians. GA airports and their infrastructure support business and personal flying and transport; carry out a myriad of aerial work activities which include law enforcement, emergency response, medical evacuations, mercy flights, agricultural, survey, and patrol operations; and research and experimental operations. For each of these spheres, support personnel also are required.

1.3 General aviation and its GA airports have always been the entry point, training ground and personnel source for both GA and commercial operations and their attendant technical infrastructures.

1.4 The simplicity and flexibility of GA historically have enabled sustainable economic development and connectivity - particularly in remote areas throughout the world. As the GA sector weakens, so too do these assets weaken. Left to weaken further, safety concerns within both the aviation industry and within community services inevitably will be impacted.

1.5 GA's decline is the result of numerous factors – including aging pilot populations, urbanization around established airports (rising land values and noise concerns), increasing cost-wage gaps for services and equipment, and increased regulatory compliance costs. GA is often viewed through the lens of commercial aviation: it is assumed to have the same constraints as commercial aviation, and therefore is not being afforded regulations appropriately tailored to the risks and needs of the GA sector.

1.6 Some States' apparent inability to modify regulations typically aimed at commercial operations to suit the lower level of risk presented by GA operations is widely perceived to be a root cause of many of the factors depressing the GA sector today. Yet, if the goals of ICAO's NGAP initiatives are to be met, they will require the help of GA. The success of NGAP goals therefore requires that ICAO and States recognize the link between a healthy GA sector and a healthy civil aviation industry, and that they minimize the negative effects on GA of any regulations promulgated.

1.7 The European Aviation Safety Agency (EASA), through the publication of its 'Opinions' has recently acknowledged the importance of the GA sector and has urged the adoption of changes aimed at making regulatory requirements for GA proportional to their risk. These changes follow the creation of a 'GA Roadmap' and will, once adopted by the European Commission, include simplifications for the GA sector to Aircraft Certification ("CS 23 Light"), expected to ease manufacturing and maintenance burdens.

2. DISCUSSION

2.1 The economic impact of GA on the well-being of communities and airlines is rarely well understood.

2.1.1 GA's value to sustainable development is demonstrated by a recent Canadian Study – 'Economic Impact of General Aviation in Canada 2017' – which shows that GA in Canada supports 18,510 full time equivalents (FTEs). The GDP generated is \$2.2 billion and economic output is \$5.4 billion. Multiplier impacts in the infrastructure raise these values to 35 600 FTEs and nearly \$2.5 billion in wages. Total GDP generated by GA is estimated at \$4.2 billion and the economic impact is estimated as \$9.3 billion for Canada's 35 million population.

2.1.2 New employees in the aviation industry are given training in their respective fields - such as pilot, maintenance and air traffic controller training. Given that the graduation success rates for trainees is low it is financially advantageous to the company employers to use the personnel source from the pre-selected and pre-trained population out of GA, thereby minimizing the overall failure rate and reducing companies' training time and costs.

2.2 As commercial aircraft cockpits become increasingly automated, the degradation of pilot skills becomes an issue of increasing importance. For example, upset recovery training in simulators is somewhat limited. Commercial pilot programs tend to focus on other more operational aspects of the job and automation monopolizes most of the curriculum. Further, in actual flight, commercial pilots tend to

choose automation whenever possible. Consequently, when automation fails, the basic flying skills – which have become increasingly at risk (de-skilled) over time – may not be insufficient available. A healthy GA sector can and should provide the training and development environment in which commercial pilots can maintain and arguably further develop their basic flying skills. Furthermore, it can do so at a fraction of the cost.

2.3 On the maintenance side, similar benefits by GA to commercial operations can be realized. New generation aircraft are increasingly modular and require parts changers rather than strong technical skills. Yet the need for strong basic technical understanding and skills remains to assure safe operations. GA provides for the development of strong basic skills as next generation aircraft slowly redefine the new skills needed.

2.4 The aviation training available at many small and dispersed GA airports, rather than focussed only in the single large hubs of commercial operations, has benefitted both urban and remote community infrastructures as well as airline operators in all countries where GA is active.

2.5 The number of GA airports (and, therefore, training grounds for aviation personnel) is a function of the number of aircraft owners and operators who are willing and capable of owning and operating aircraft. As the number of aircraft owners and operators are discouraged by any negative factors, including inappropriate regulation, so will the number of available airports and training grounds diminish.

2.6 Efforts to address problems such as a diminishing personnel supply would be facilitated if a more meaningful discussion than currently has been attempted could be undertaken by ICAO and States on the economic and social impacts of regulatory activities on the GA community. Such a discussion would include identifying any unintended consequences in the regulations, particularly those that negatively impact strategic considerations such as the availability of trained pilots, technicians and the support infrastructure of airports and repair facilities.

2.7 If GA is to thrive it is important that States implement risk-based regulations for GA that are proportional to the level of risk presented by GA operations. The resulting regulations would not only reduce regulators' and operators' costs, but would help eliminate other impediments to GA growth, thereby enabling a positive environment for the realization of NGAP goals.

2.8 States would benefit if they examined factors as diverse as, for example, urban planning around GA airports and unnecessary medical, maintenance and training requirements for GA activity.

2.9 Member States would do well when considering their sustainable goals to establish a strategic aviation policy that aims to ensure a thriving GA sector that continues to supply aviation personnel and economic development.

3. CONCLUSION

3.1 It is clear that any shortage of trained personnel will limit the realization of States' SDGs and negatively impact the global aviation industry. The ICAO NGAP initiative is insufficient to address the growing deficit without the help of GA. Since GA has long served as a proven source of aviation personnel it is to the advantage of States to assure that any impediments to GA's continued strength and existence should be minimized.

3.2 Therefore, the Conference is invited to agree to the following recommendation:

Recommendation 4.1/xx – State national development plans:

That the Conference:

- a) request ICAO to encourage States to:
 - 1) recognize and use the diverse assets inherent in general aviation (GA) to help States fulfil the SDGs; and
 - 2) enact measures to build and/or rehabilitate their GA sector;
- b) request ICAO to proffer, and States to implement, differentiated regulations proportional to the risks presented by GA versus commercial air transport;
- c) request ICAO to urge States, as the latter develop new aviation regulations for new technology airspace users, to assure that existing aviation operators are not impacted negatively from either an economic or a safety standpoint; and
- d) request ICAO to encourage States that have a national Aircraft Owner and Pilot Association (AOPA) to consider using their AOPA as an industry consultative body on GA matters.

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