



INTERNATIONAL COUNCIL OF AIRCRAFT OWNER AND PILOT ASSOCIATIONS

What is General Aviation? What Does It Need?

When the name "general aviation" is mentioned most members of the public conjure up a mental image of a small single-engine piston-powered aircraft, operating for recreation out of a small rural aerodrome. This image is correct for only about one-quarter of worldwide general aviation and aerial work activities. The other three-quarters of the roughly 30 million annual general aviation flight hours are occupied with flight instruction, business travel, agricultural application, emergency medical services and other gainful pursuits. In fact, the diversity of general aviation is so great that ICAO defines it by exception: those flight activities not involving commercial air transportation or aerial work. Similarly, aerial work may only be generally defined as operations used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial development, etc.¹

In sheer numbers GA/AW is impressive: Approximately 370,000 aircraft and 1,300,000 pilots are involved in these activities worldwide. On balance, roughly 40,000 aircraft and 600,000 pilots are employed in commercial air transportation (including cargo and charter).

The significance of general aviation becomes greater when it is realized that every airline and military pilot must begin their journey to professional competence in the cockpit of a general aviation aircraft. Further, the essential services provided to the public by general aviation for police, emergency medical services and search and rescue make all of our lives safer and more productive. Aerial survey, agricultural application and pipeline/powerline patrol add significantly to many aspects of the economy. And, for the many remote areas of the world, life and civilization would not be possible without the benefits provided by general aviation operations.

General aviation activities globally create hundreds of thousands of jobs and tens of billions of dollars for the countries these activities serve. Without this activity essential transportation functions would be eliminated and the opportunities associated with them would be lost to the economies they potentially serve. Therefore, general aviation needs and desires should be taken seriously as a worldwide economic engine.

¹ ICAO Annex 6, *Operation of Aircraft, Definitions*.

Evolution

General aviation has come a long way since the first airplane of this type, the Wright Brothers Flyer. From the fragile creations of old movies and photographs the general aviation aircraft has made great strides over the past century. While post-WW I aviation was limited to daredevil exhibitions and avid amateurs, the post-WW II era established general aviation's position as a legitimate form of transportation. The major technological strides brought by war paved the way for safe and reliable small aircraft and stimulated the interest of a generation of young men and women returning from war.

The late '40s and '50s saw great growth in general aviation worldwide. The good economic times in the decades following the war permitted a new generation of aviation enthusiasts to seek their fortune in the skies. Single-engine aircraft production soared worldwide to meet the requirements of the new breed of aviator; flying schools and airports struggled to meet demand.

Aeronautical advancements of the 60's and 70's enabled GA/AW to become an all-weather, utilitarian form of transportation. The growth of affordable communications and navigation radios along with a more capable air traffic control structure gave rise to an increasing number of business ventures built around light aircraft operations. Finally, general aviation could effectively compete with the airlines on trips under 500 miles.

The final decades of the twentieth century saw a consolidation and strengthening of the earlier post-war gains in general aviation. More pilots became instrument rated to take advantage of the utilitarian benefits of all-weather transportation and flight training organizations rose to meet the increased levels of sophistication required to provide that level of training. general aviation had finally arrived as a desirable alternative to airline travel now fraught with delays, cancellations and poor service.

Larger and developing countries have reaped the greatest benefits from general aviation because of their dependence on a small aircraft's ability to rapidly access remote or lightly traveled areas. Yet, smaller, well-established countries also benefit from the efficiencies and flexibility arising from general aviation activities. All gain from the public safety and utilitarian aspects provided by small aircraft.

Sharing the System

The world's aviation infrastructure was put into place principally to support the airlines and military aviation. general aviation requires very little unique infrastructure and is a minority user of those facilities and services provided for larger commercial activities. The single exception to this statement is that general aviation thrives through the use of local and regional airports. Indeed, it is through these smaller airports that general aviation derives its greatest advantage.

The majority of airline travelers begin and end their journeys at a small fraction of available airports, as few as one percent of available airports in some countries. In doing

so airline travelers are subjected to lengthy ground trips to access major hub airports; lengthy delays are often associated with operations at these airports. Conversely, general aviation operators enjoy a variety of conveniently located small airports from which to operate.

But, if general aviation operations are to take advantage of their unique utility and flexibility they must occasionally use metropolitan area airports. In doing so they share the increasingly scarce resources of available runways and overlying airspace. The complexity of operations in these areas also requires a variety of expensive equipment to be installed in all aircraft, not just airliners. The combination of scarce runways and airspace combine with expensive equipment to create access barriers for general aviation.

In reality, the special performance characteristics of general aviation aircraft and their ability to stay beneath tightly controlled airspace allow these aircraft to avoid constraints imposed on larger, higher performance aircraft. For instance, a single-engine piston-powered aircraft can easily operate out of a 1,000 by 15 meter runway, one-third the size required by airliners. And, by staying low and within carefully designed corridors expensive surveillance and navigation equipment may be omitted from small aircraft.

In essence, general aviation operates at the margins of an infrastructure designed specifically for the airlines. The smaller aircraft take advantage of the unused capacity of the larger system, effectively increasing the overall efficiency of a complex infrastructure.

Principles of fairness and equity should govern use of the aviation infrastructure within each State. Efforts must be made to accommodate all types of operators.

Paying the Way

Many countries of the world fund their aviation infrastructure development through user charges. While airlines pass these costs through to passengers, general aviation must bear this burden as a direct operating cost. More importantly, most countries levy taxes associated with fuel consumed, yet few of these monies flow back to the aviation infrastructure. Therefore, general aviation is often double-charged for the services they receive. Additionally, a hidden “tax” is imposed on small aircraft in the form of expensive equipment mandated for operations in increasingly complex airspace.

Financing basic aviation infrastructure should be accomplished by the State, using excise taxes derived from either fuel tax revenues or passenger ticket taxes. Where privatized or corporatized providers are involved, conventional private or subsidized capitalization schemes may be employed. And, since basic civil safety and order functions are involved in providing aviation services, a portion of the State's general revenues should also be used to create a safe and efficient infrastructure.

Once the capital, research and development and future improvement costs of operational services have been accommodated, operational costs may be recovered through similar methods or a system of graduated user charges. The use of excise taxes and other levies to fund system operations and maintenance are preferable due to the ease of collection of revenues and the lack of need for a complicated accounting system. Yet, operators who do not use certain services should not be charged for those services.

If direct user charges are employed, a graduated system of fees should be used that recognizes value for services received. Since the infrastructure is designed primarily for airline and military interests, general aviation and aerial work activities should be viewed as marginal users of the system and charged accordingly. Ideally, very marginal users such as gliders, ultralights and light-weight homebuilts with little or no avionics and that typically only fly locally should be exempt from any charges.

Charges for services must not discourage use of the system, as this would encourage unsafe practices. For instance, requiring a private pilot to pay a significant fee for meteorological and NOTAM briefings and for filing a visual flight rules (VFR) flight plan may actually contribute to unsafe operations. This is because pilots may choose to omit these essential safety services in an effort to avoid the associated charges. Therefore, consideration must be given to providing essential services using general government funds in support of safe operating practices.

The existing guidance provided for Air navigation services charging systems contained in ICAO Document 9082/5 provides succinct and appropriate counsel:

The charges levied on international general aviation should be assessed in a reasonable manner, having regard to the cost of the facilities needed and used and the goal of promoting the sound development of international civil aviation as a whole.

All taxes, fees and charges associated with airport and air navigation services must be established as a cooperative effort between government regulator, service provider and service user. Only a joint effort of this nature will yield a workable, safe and effective aviation infrastructure and avoid the “double taxation” that can occur if the service provider and the government collect fees and taxes from users. Dictated funding systems or those biased for or against any user segment may cause users to subvert the system in an effort to avoid unwanted charges. Finally, once planning and use mechanisms are put into place an ongoing dialog is necessary to preserve the system.

The Future

As the world economy broadens and becomes increasingly intertwined, safe, rapid and accessible transportation will become more important than ever. For, while improvements in communications technology bring us closer together, the need to be face-to-face is increasing, too – witness the recent rapid growth of airline travel. Air

travel has become an accepted feature of the modern world; this acceptance insures its future growth.

While commercial air carriers have not reached their capacity limits, each additional flight, especially in or near major cities, meets with increasing uncertainty about its on-time performance or viability. Delays at hub airports have become a way of life and will likely be aggravated as air travel growth continues.

General aviation and aerial work offer an alternative to this bleak picture of future airline travel. The ability of small aircraft to operate at suburban and rural airports in airspace not used by the airlines presents enticing alternatives. The promise of future intercity transportation lies in alternative forms of transportation; general aviation operations open a door to but one form of fast and efficient transportation.

For this to become a reality enlightened governments must accept and embrace general aviation as a credible and attractive transportation alternative. In doing so they must enact fee structures favorable to small aircraft operations, ensure that smaller airfields are protected and encouraged and provide for fair and equitable access to airspace and infrastructure resources, recognizing that general aviation operators are marginal users of a system developed for and primarily serving the airlines.

The extraordinary advantages provided by general aviation places it in a category that defies the adjective “general.” Because this unique form of transportation contributes significantly to national economies and provide much needed flexible transportation, it deserves a more descriptive term – why not “special” or “personal” aviation?

The International Council of Aircraft Owner and Pilot Associations (IAOPA) represents the interests of more than 470,000 pilots and aircraft operators who are members of 66 national affiliates around the world. The principal objectives of the association are to promote and protect the interests of general aviation and aerial work operators engaged in international aviation.

**INTERNATIONAL COUNCIL OF AIRCRAFT OWNER AND PILOT ASSOCIATIONS
421 AVIATION WAY
FREDERICK, MARYLAND 28405 USA
WWW.IAOPA.ORG
+1 301 695 2220**