IFALPA

IFALPA's Views On RPAS

Official Position and Discussion Points

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IFALPA represents the international community of air line pilots;

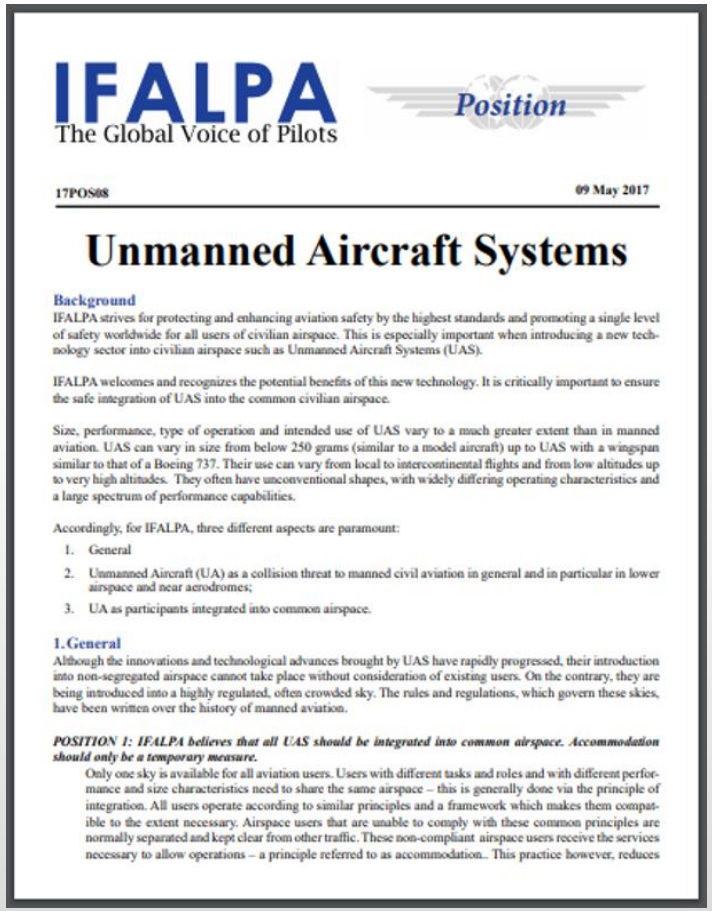
A Federation of nearly 100 National Associations

And over 100,000 Pilot Members

Driven by dedicated volunteers who seek to improve Aviation Safety

The Mission of IFALPA is to promote the highest level of aviation safety worldwide and to be the global advocate of the piloting profession; providing representation, services and support to both our members and the aviation industry.

Unmanned Aircraft Systems Position Paper



IFALPA
The Global Voice of Pilots

Position

17POS08 09 May 2017

Unmanned Aircraft Systems

Background

IFALPA strives for protecting and enhancing aviation safety by the highest standards and promoting a single level of safety worldwide for all users of civilian airspace. This is especially important when introducing a new technology sector into civilian airspace such as Unmanned Aircraft Systems (UAS).

IFALPA welcomes and recognizes the potential benefits of this new technology. It is critically important to ensure the safe integration of UAS into the common civilian airspace.

Size, performance, type of operation and intended use of UAS vary to a much greater extent than in manned aviation. UAS can vary in size from below 250 grams (similar to a model aircraft) up to UAS with a wingspan similar to that of a Boeing 737. Their use can vary from local to intercontinental flights and from low altitudes up to very high altitudes. They often have unconventional shapes, with widely differing operating characteristics and a large spectrum of performance capabilities.

Accordingly, for IFALPA, three different aspects are paramount:

1. General
2. Unmanned Aircraft (UA) as a collision threat to manned civil aviation in general and in particular in lower airspace and near aerodromes;
3. UA as participants integrated into common airspace.

1. General

Although the innovations and technological advances brought by UAS have rapidly progressed, their introduction into non-segregated airspace cannot take place without consideration of existing users. On the contrary, they are being introduced into a highly regulated, often crowded sky. The rules and regulations, which govern these skies, have been written over the history of manned aviation.

POSITION 1: IFALPA believes that all UAS should be integrated into common airspace. Accommodation should only be a temporary measure.

Only one sky is available for all aviation users. Users with different tasks and roles and with different performance and size characteristics need to share the same airspace – this is generally done via the principle of integration. All users operate according to similar principles and a framework which makes them compatible to the extent necessary. Airspace users that are unable to comply with these common principles are normally separated and kept clear from other traffic. These non-compliant airspace users receive the services necessary to allow operations – a principle referred to as accommodation.. This practice however, reduces

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IFALPA UAS Position Paper

19 position statements arranged under 3 aspects of UAS operations:

1. General;

2. Unmanned Aircraft (UA) as a collision threat to manned civil aviation in general, and in particular in lower airspace and near aerodromes; and

3. UA as participants integrated into common airspace
    a) Autonomous Aircraft; and
    b) Remotely Piloted Aircraft

IFALPA RPAS Position

General Consideration

All UAS should be integrated into common airspace. Accommodation should only be a temporary measure

It is not acceptable to change the rules and regulations for manned aviation in order to accommodate UAS integration

Every UAS should have at all times a responsible person in command, who is suitably trained and qualified

IFALPA RPAS Position

Currently, IFALPA does not believe that autonomous unmanned aircraft can be integrated into common airspace

IFALPA believes that UAS technology is not capable of replacing all necessary capabilities of a human pilot on board, particularly in complex time and safety critical situations

All UAS engaged in non-segregated public airspace should be certified and compliant with the provisions described hereafter before being allowed to operate

Integration of UAS into civilian airspace

Further discussion of integration of UAS into civilian airspace include:

- Licensing and duty time
- Design and operation
- Air traffic control
- Security
- Dangerous goods
- Ground operations – airport layout
- Safety management systems
- Legal

ATC and RPAS Integration

- RPAS ATC integration must move from accommodation to integration in shared airspace
- RPAS should behave like a manned aircraft and be subject to the Rules of the Air
- Each UAS should have a designated pilot-in-command at all times
- Delays due to data-link/communication transmission time are not acceptable
- UAS should be equipped to provide collision avoidance at all times in all airspaces

Summary

- RPAS Operation must move from accommodation to integration in shared airspace
- No new regulations for manned aircraft to accommodate RPAS
- Every UAS should have a responsible person in command at all times
- Command and Control Link must be reliable
- RPAS must be equipped a Collision Avoidance system that operates at all times
- IFALPA believes that UAS technology is not capable of replacing all necessary capabilities of a human pilot on board

Thank you

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Biography

Profession

- Senior First Officer Airbus A380-800, Thai Airways International
- A380 Test Pilot
- A380 Cockpit Procedure Training Instructor

Education

- MSc Aerospace Engineering : Salford University, UK
- BEng Mechanical Engineering : Chulalongkorn University, Thailand

Experience

- Aircraft Engineer : Technical Department, Thai Airways International