

Loss of Communication with ATC

BACKGROUND

The tragic events of 11 September 2001 have drastically changed the way in-flight security incidents are managed. National security authorities are now much more reactive to any indication that could lead to a security concern. One such indication is the prolonged loss of radio communication with ATC, also known as COMLOSS.

In many countries, unnecessary interceptions of aircraft triggered by COMLOSS have more than doubled, even reaching up to 90% of the total number of interceptions in some Regions. Interception procedures are costly, they disrupt the Air Traffic Management (ATM) system, and have the potential to decrease the safety of the flight, the aircraft, and its occupants.

REASONS FOR COMLOSS

Some instances of COMLOSS in recent years have indeed been associated with a security threat. However, the vast majority were due to other reasons, including RTF/ground-based equipment failures, atmospheric conditions, human error, and unintentional crew actions, such as switching to a wrong radio channel or setting the radio to very low volume.

In today's complex airspace, flight crews and air traffic controllers are facing a high radio communication workload. They must switch between many congested frequencies and deal with similar-sounding aircraft call signs, noise interference, simultaneous transmissions, and varying accents, to name a few issues. In this very busy environment, mishearing a frequency assignment, or not receiving it in time, is not unusual.

BACKGROUND USE OF 121.5 MHZ

Pilots would normally tune one radio on the ATC-assigned frequency for primary communication, and monitor the aeronautical emergency frequency, 121.5 Mhz. on the other available radio. However, this other radio is also used for secondary communication, such as contact with the company or handling agent and weather monitoring.

In these situations, it won't be tuned on 121.5 Mhz. Further, 121.5 MHz is frequently used for non-emergency purposes in certain Regions, such as testing of operational equipment (fire services, transmitters, Emergency Locator Transmitters), practice position fixes for general aviation, or inter-pilot communication. As a result, pilots often turn down the volume on this frequency to avoid unnecessary cockpit noise and cluttering of their primary frequency, rendering 121.5 MHz useless as a back-up means of communication.

IFALPA believes that 121.5 MHz should be **monitored at all times**, and that this frequency should only be used for **emergency communications**.

ATC RESPONSE

ICAO Doc 4444, Chapters 8 (*ATS Surveillance Services*) and 15 (*Procedures related to Emergencies, Communication failure and Contingencies*) contain clear guidelines for ATC actions related to aircraft radio transmitter failure. In particular, if two-way communication is lost, the controller should determine whether or not the aircraft's receiver is functioning by instructing the aircraft on the channel so far used to either:

- acknowledge by executing a specified manoeuvre (which would then be observed on radar);
- operate IDENT;
- or make SSR code and/or ADS-B transmission changes.

If unsuccessful, ATC should repeat this process on any other available channel on which it is believed that the aircraft might be listening.

Subsequent actions, if necessary, should include a request for further assistance to other aircraft on the last assigned frequency and/or to the COMLOSS aircraft's dispatch/operations office, using company voice or aircraft datalink communications channels or satellite phone, if available. An interception should only be considered as a last resort, once all other methods have been attempted and it has been established that the aircraft represents an actual security threat.

POSITION

IFALPA is extremely concerned that some States are taking the wrong approach to solving the extreme complexity of today's radio communications. Instead of following the above guidelines, they have begun to hold airlines and flight crews legally and financially responsible for COMLOSS by accusing them of so-called 'administrative offenses' and

sending them fines to compensate for some of the interception costs, without any proper study of the related COMLOSS event.

The Federation considers this behaviour to be unacceptable, counterproductive, and detrimental to flight safety. Blaming airlines, flight crews and/or controllers for COMLOSS situations will not solve the problem.

Whilst COMLOSS can sometimes represent a security concern, most of these situations are false alarms that do not justify interceptions. They are clearly not security-related but rather result from other factors, as described above. They should never lead to punitive measures.

IFALPA calls for the recognition of the systemic nature of COMLOSS events and strongly supports a detailed investigation and analysis of each COMLOSS event and actions taken to establish the contributing factors.

States should also ensure the implementation of a positive safety culture environment which will encourage individuals to report these events without fear of punishment. This will enable valuable lessons to be learned from these incidents and minimize the chance of reoccurrence.