Since the events of 11 September 2001, COMLOSS has become a very sensitive security problem, since controllers are unable to distinguish between communication failure and potentially sinister causes. As a consequence, the number of unnecessary interceptions has increased and the statistics show that in recent years, around 90% of interceptions in Europe are attributed to COMLOSS situations.

An unnecessary interception is a disruption to the ATM system and also a waste of scarce national resources, having an impact on safety, security and finances for the military, civil aviation and airlines, including the pilot in command.

Best Practice

- Always wear a headset.
- Make sure that the volume of loudspeakers is sufficient.
- Be alert to the possibility of loss of communication and always follow standard procedures for copying, setting and cross-checking the radio telephony frequency (RTF).

Pilots

- A prolonged period without communication between ATC and pilots should be considered an abnormal situation.
- Expect possible frequency changes when crossing borders/changing ATC areas of responsibility.
- Always read back assigned frequencies. Use standard radio telephony phraseology.
- Check radio equipment settings, including volume.
- Carry out a radio check if you have the impression that you have lost contact.
- Continuously monitor 121.5 MHz.
- If you are in doubt about possible loss of communication, call ATC on 121.5 and/or squawk 7600.
- If you are not successful, use other frequencies appropriate to the position.
- Use other aircraft in your vicinity as a relay station.
- Monitor ACARS.
- In the event of radio communication failure, follow standard ICAO procedures and squawk A7600.

Controllers

- Provide clear instructions for frequency changes to pilots using standard radio telephony phraseology.
- Listen carefully to the read-back.
- Follow published data link procedures if applicable.
- In the event of COMLOSS, try to get in contact with the company to instruct/advise the pilot via ACARS or other means of compliance.

Regulations concerning 121.5 MHz

- Commission Implementing Regulation (EU) No 923/2012.

- SERA.8035 Communications:
  - An aircraft operated as a controlled flight shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and establish two-way communication as necessary with, the appropriate air traffic control unit, except as may be prescribed by the relevant ANSP in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.

- ICAO Annex 10 Volume II:
  - Aircraft shall continuously guard the VHF emergency frequency 121.5 MHz in areas or over routes where the possibility of interception of aircraft or other hazardous situations exist, and a requirement has been established by the appropriate Authority.
  - The user of the air-to-air VHF communications channel shall ensure that adequate watch is maintained on designated ATS frequencies, the frequency of the aeronautical emergency channel, and any other mandatory watch frequencies. The requirement for an aircraft to maintain an air-ground voice communication watch shall remain in effect when CPDLC has been established.

Reference material and more information

- European Action Plan for Air Ground Communications Safety:
  https://skybrary.aero/bookshelf/books/114.pdf

- Our work on ATM security:
  https://www.eurocontrol.int/civil-military

- Voluntary ATM incident reporting:
  https://www.eurocontrol.int/articles/eurocontrol-voluntary-atm-incident-reporting-evair

More info:

CommLoss = Risk

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