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### IMPORTANCE OF PROPER COMMUNICATION IN AVIATION

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**Introduction** Accurate and proper communication is crucial fact in aviation because it is necessary for ensuring safe and efficient operations. Miscommunication can be the cause or a key contributory factor in emergency situation. As aviation involves a complex system of communication between pilots, air traffic controllers, ground staff, and other personnel any breakdown in communication can lead to confusion, errors, and potentially catastrophic accidents. When pilots and controllers are communicating effectively it provides stress redundancy and mistakes avoidance on both sides of the microphone.

### Material and methods

This research was being held at the National Aviation University in Ukraine during the 2022 - 2023 academic year. In this study, we aim to emphasise the importance of accurate communication between pilot and ATC in aim to provide safety of flights based on our observation, collecting and analysing data.

Results A definite number of flights can be performed without ATC (Air Traffic Control) management, but only under certain conditions and with appropriate precautions in place. This is known as flying in uncontrolled airspace. However, all passenger air transportation is provided under ATC (Air Traffic Control) management. ATC is responsible for thorough organization the flow of air traffic, ensuring the safe and efficient movement of aircraft, and preventing collisions in the air and on the ground. To provide safety of all operations both pilots and ATCs use not only equipment but language to communicate and establish contact and agreement between them. The language they use is international language which is used in aviation regulation known as Aviation English. ATCs and pilots who operate international flights have to be certificated with at least level 4 due to the ICAO requirements [1]. It means both interlocutors are able to provide accurate information to each other thus supply safe operation.

As ATCs issue clearances for takeoff and landing, direct aircraft on their flight path, and provide separation between aircraft they ensure smooth regulation. Pilots have to understand the instructions and be ready to request ATC to give them any information if they need throughout the flight, and after receiving clearance they can follow established procedures of takeoff, landing, and in-flight operations. Both ATC and pilots must work together to provide the safety of flights. This involves effective communication and collaboration, as well as adherence established rules and procedures. In the event of an emergency or unexpected situation, ATC and pilots must be able to work together to quickly and effectively address the situation and ensure the safety of the passengers and crew.

Pilots typically communicate with ATC using two-way radio communications on specific frequencies assigned to the airport or airspace they are operating in. They must follow established procedures for communicating with ATC, including using proper phraseology and adhering to specific protocols for transmitting and receiving information. Pilots must be able to listen carefully to ATC instructions and respond in a timely and accurate manner. In addition, they must be able to communicate effectively with ATC in the event of an emergency or unexpected situation. Overall,

communication with ATC is a key part of safe and effective flight operations, and pilots must be trained to communicate effectively with ATC controllers throughout the flight.

Here are a few general rules for pilots when communicating with air traffic control:

- Speak clearly and concisely: When communicating with air traffic control, it's important to speak clearly and concisely.
- Use standard phraseology and avoid using slang or jargon that may not be understood by the controller
- Follow instructions promptly: Air traffic controllers provide instructions to pilots for the safety of all aircraft in the airspace. It's important to follow their instructions promptly and accurately.
- Use correct call signs: Use the correct call sign when communicating with air traffic control. This helps the controller to identify your aircraft and provide you with the appropriate instructions.
- Report any changes: If there are any changes to your flight plan, such as altitude or heading changes, inform air traffic control as soon as possible.
- Maintain a professional tone: It's important to maintain a professional tone when communicating with air traffic control.
- Avoid using inappropriate language or making unnecessary comments that could distract the controller from their duties.

The main reason why all of participants of air traffic must use plain English and standard phraseology is to avoid any serious accidents which can happen due to misunderstanding between pilots and air traffic controllers.

The brightest example of misunderstanding which caused the serious crash had happened on March 27, 1977 at Tenerife. The crew one of the Boeing's 747 had misunderstood the instructions from controller and began to take off when there was another passenger board at the end of the runway. Due to very high speed and thick fog neither crew was able to prevent the collision. As a result, 551 passengers and 23 crew members of both aircraft were killed.

# Conclusion

To sum up, having necessary 4 level of aviation English is very important. Because the persons who have this operational English level are ready to communicate effectively and will never have misunderstanding while communicate on job related topic performing work duties and as a result there will never happen such kind of serious accidents in future.

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