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*О.М. , Vasiukovych, Lecturer*

*( National Aviation University, Ukraine, Kyiv***)**

**AVIATION SAFETY IN THE CONTEXT OF EMERGENCY SITUATIONS**

*The article deals with the issue of communication between pilots and air traffic controllers as an integral part of aviation safety in emergency situations*

Aviation safety is and will remain the central concern of our era, for all people living all over the world. Unpublished and intra-sector data demonstrate that communication problems have indeed cost lives or provoked major incidents. Comprehensive studies of the role of communication in aviation incidents are limited, but they demonstrate how incident data provide insights to accident causes. Incidents are violations of instructions or legal parameters that may or in fact affect the safety of operations. US Federal Aviation Administration (FAA) anonymous Aviation Safety Reporting System (ASRS) reveals over 60% communication problems, in reported cases [1 ].

Communicating effectively via the radio in General Aviation (GA) is a challenging task for most pilots.

The most important linguistic factor for aviation communication is the choice of lexical items or phrases. This has long been standardised – to a greater or lesser degree in different countries depending on the country (e.g. foreign pilots sometimes complain that US pilots do not use the ICAO standards they are used to) and the type of operations (commercial or GA) – and all pilots are trained in the use of R/T (radio-telephony) procedures, i.e. the correct use of calls and readbacks. Australian pilot training organisations with overseas students have also long been aware of the problems caused not only by accents or dialectal differences, for instance between Australian English and Indian English, but also by the conversational use or interpretation of aviation terminology [ 2].

Acording to our sample survey thirty seven authentic episodes were chosen for the radio exchange analysis. The authentic episodes dealt with different emergency situations and induced air traffic controllers and flight crew members to use plain English in the aviation context . It is shown that plain English in aviation makes up 19% of the total amount of words. On the basis of analysis, it is shown that the standard phraseology can not completely foresee actions in emergency situations. Knowledge of general English is an integral part of radiotelephony communication.

Plain English examples in the context of emergency situations :

1)P:ABC four five five, we are now radar heading three three zero, we have pressurization problem…pressurization, we starting emergency descent

C: ABC four five five, say again please

P: ABC four five five, X

C: ABC four five five, sir, we are starting emergency descent , due to pressurization problem

This emergency situation is closely connected with the pressurization problem and emergency descent.

2)С: X six nine X X, what kind of problem, report, please

P: OK, no problem for us, we have a only…only information mass on check

C: Information about?

P: And on runway we see bird flocks, on runway was birds

P: Now already, X six nine X X

C: X six nine X X, advise please, did you use extremely breaking?

P: On the right we see on birds, X six nine X X , it was problem for us. Now we are ready for departure, X six nine X X

In this emergency situation the problem was due to the bird strike on the runway.

3)C: X X three two X X, say again please, your problems

P: We have avionics problems, X X three two X X

C: Roger, X X three two X X

C: X X three two X X, turn right, heading zero one zero, descend altitude six thousand feet, please

P: Right, heading zero one zero, descending altitude six thousand feet, X X three two X X

P: And , this is PAN-PAN X X three two X X. We have a problem with heading indicator on ILS, we can`t to maintain altitude and heading final, just keep, please.

This emergency stuation shows the problem with heading indicator on ILS.

The plain, non-formulaic language used by flight crews and controllers to handle situations andinformation that, while related to flight operations, cannot be completely managed using standardized phraseology [ 3].

It is well-known that in routine situations, the information can be largely and most properly transmittedusing standard phraseology. However, in non-routine, unusual or abnormal situations mentioned above, there will be a need for plain language to clarify, paraphrase or provide additional information, for example, to describe a system failure, apassenger’s state of health or an obstacle on the runway .

“ICAO standardized phraseology shall be used in all situations for which it has been specified. Only when standardized phraseology cannot serve an intended transmission, plain language shall be used ” [ 3 ].

Both standardized phraseology and plain language are used in radiotelephony communications. Furthermore, they are commonly included in a single transmission.

Standardized phraseology should not be the essential focus of aviation English training in the context of the current ICAO Language Proficiency Requirements. For example [ 3]:

“Descend to Flight Level 2-8-0” or “Resume own navigation” are examples of standard phraseology.

“Are you going to put me back on course?” or “There is oil on the taxiway” are expressions of plain language.

**Conclusion**

Communication in aviation safety, particularly between air traffic controllers and pilots plays a significant role.

Standardized phraseology, however, cannot address all of the non-routine, abnormal or, occasionally, emergency situations that occur, nor is it sufficient to convey additional information about any situation such as: reasons for a delay, the state of a sick passenger, the weather situation, the nature of a failure, or an obstacle on a taxiway. These are all circumstances where plain language is frequently required. It is this use of plain language that was the focus of ICAO’s Proficiency Requirements in Common English Study Group (PRICESG) [ 3].

**Literature**

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