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Phraseology

***TRF** Radio communication is a critical link in the ATC system that we depend upon to accurately issue and receive instructions and information. There are many factors affecting this communication link, but one of the most important is the use of standard phraseology. This allows us to convey information accurately and quickly and sets a standard for all ATC facilities within the NAS. Pilots from all over the world are trained to expect us to use specific and precise words, making our communication process universally understood. The use of standard phraseology and reasonable speech rates are especially critical when communicating with flight crews whose primary language is not English.

The use of standard phraseology enables us to communicate very precise information despite differences in language, reducing the opportunity for misunderstanding. Standard phraseology also increases the accuracy of the readback/hearback process so that any error can be quickly detected and corrected.

In many aircraft accidents or incidents, the use of nonstandard phraseology is one of the links of the error chain leading to the event. During the review of these events, it is common to find that the use of standard phraseology could have significantly altered the event and likely prevented the occurrence. There are times when the use of non-standard phraseology is appropriate. FAA JO 7110.65, Paragraph 1-2-5, states:

The annotation *PHRASEOLOGY* denotes the prescribed words and/or phrases to be used in communications.

NOTE-

Controllers may, after first using the prescribed phraseology for a specific procedure, rephrase the message to ensure the content is understood. Good judgment must be exercised when using nonstandard phraseology.

The paragraph also differentiates between required phraseology and examples of phraseology used throughout FAA JO 7110.65.

The annotation *EXAMPLE* provides a sample of the way the prescribed phraseology associated with the preceding paragraph(s) will be used. If the preceding paragraph(s) does (do) not include specific prescribed phraseology, the *EXAMPLE* merely denotes suggested words and/or phrases that may be used in communications.

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NOTE-

The use of the exact text contained in an example not preceded with specific prescribed phraseology is not mandatory. However, the words and/or phrases are expected, to the extent practical, to approximate those used in the example.

Trying to eliminate certain key words is a common shortcut used that may create a problem. The elimination of these words can result in less clarity in the message and effect the way a pilot processes the message. For example, if we use "two three zero," the numbers have an ambiguous meaning unless they are connected to another word or phrase, such as "knots," "heading" or "flight level." Another key word that is frequently eliminated is "runway." For example "cross two" is less specific than "cross Runway 2."

Other key words that help the receiver know what to expect include "traffic," "contact," "pointout," and "handoff." These key words can play an important part not only in radio communication but also during coordination. The elimination of these words may seem inconsequential, but they play an important role in providing clarity to our message and preventing erroneous interpretation.

Background: This article is printed periodically, responsive to NTSB Safety Recommendation A-00-71, to highlight the importance of this subject.

Pre-Departure Clearance (PDC)

***T** Some changes are coming to the Pre-Departure Clearance (PDC) application of the Tower Data Link Services (TDLS). The goal of the initiatives described below is to reduce potential controller-pilot miscommunication, reduce opportunities for confusion along the route of flight, with a primary focus to enhance safety.

First, ARTCC and terminal facilities with PDC have been tasked to analyze and reduce the amended routing assigned by automation. In the tower, this routing is presented on the departure flight progress strip (or automated strip display) between plus signs (+). This type of automated routing amendment has many names such as Pref Route, PDR, and others. When plus routings appear in the tower, they also appear in the cockpit. The pilot must often interpret where and how the filed route and the assigned route merge. Based on automation, this is sometimes very confusing. More importantly, this is an area where disagreements in interpretation may exist between pilots and controllers.

Routings assigned by automation have proliferated over the many years PDC has been in place. It has become a routine practice to assign routings via automation. To date, up to half of all departure clearances have routine changes. It may sound obvious, but consider that a pilot is very aware of the routing "as filed." There is not much room for ambiguity in a clearance that gives the pilot what he/she asked for. Although plus sign routes will always be necessary, the effort to reduce the assignment of automated routes is an attempt to make the filed route and ATC route agreed upon as practical.

Next, FAA Order 7110.113C, Procedures for Issuing Automated Clearances, is being amended. Changes to the order will standardize how PDC information is delivered to service providers and the cockpit. Currently, among the more than 70 TDLS facilities nationwide, PDC formatting is non-standard and varies from facility to facility. PDC recipients look for ways to make their presentations standard and consistent. Their task is continuous because the formatting and order of PDC elements is not standardized.

To alleviate much of the potential for pilot confusion, several PDC Option Fields will be assigned specific information. For example, if a Standard Instrument Departure (SID) is assigned to an aircraft, it must be in Option Field 1. Regardless of filed route or routing assigned by automation, all aircraft cleared via an SID must receive it via Option Field 1 of the PDC. Option Fields 2 through Field 4 will also have specific requirements. This initiative may require tower TDLS Application Specialists (TAS) to revise PDC formatting. It may also require facilities to amend local PDC directives.

The PDC is a valuable tool for both ATC and National Airspace System users. It provides real savings in workload, time, and money. These efforts will keep the system viable into the future and rectify some very important safety issues of PDC.

The Air Traffic Bulletin (ATB) is a means for headquarters to remind field facilities of proper application of procedures and other instructions. It is published and distributed quarterly, with special issues published as necessary.

Articles must be submitted electronically in Microsoft[®] Word by the offices of primary responsibility with approval at the group level or above. Quarterly articles must be received by the end of November, February, May, and August of each year. Targeted publication dates for the ATB are: January, April, July, and October.

In this publication, the option(s) for which a briefing is required is indicated by an asterisk followed by one or more letter designators, i. e., *T – Tower, *E – ARTCC, *R – TRACON, or *F – FSS.

(*Reference FAA Order JO 7210.3, Facility Operation and Administration, paragraph 2-2-9) Archived ATB issues are available online: <u>www.faa.gov/air_traffic/publications/</u>*