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BULLETIN
PROCEDURES

A communication from the Director of Air Traffic Procedures, Mission Support Services
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Phraseology, Use of Active Runways-Memory Aids, Hot Spots, Fix Balancing and ATCSCC Notification of Traffic Flows

PHRASEOLOGY

TERMINAL, EN ROUTE, FSS

Radio communication is a critical link in the Air Traffic Control (ATC) system that we depend upon to accurately issue and receive instructions and information. Many factors affect 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 the use of 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 in 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 nonstandard phraseology is appropriate. FAA Order JO 7110.65, paragraph 1-2-5g, 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.*

Paragraph 1-2-5h 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.
>
> ***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 affect 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 two."

Other key words that help the receiver know what to expect include "traffic," "contact," "point out," 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.

USE OF ACTIVE RUNWAYS-MEMORY AIDS

TERMINAL

When authorizing aircraft to land on, take-off from, Line Up and Wait on, or cross a runway, or authorizing a vehicle/pedestrian to proceed on/across a runway, many things can happen in a short

period of time to cause us, as controllers, to forget about that aircraft or vehicle. Day in and day out, we do a remarkable job of remembering where aircraft, vehicles, and pedestrians are on movement areas. However, we are human and we can become distracted. As much as we try to reduce them in the workplace, distractions happen. Air Traffic Managers, in compliance with FAA Order JO 7210.3, paragraph 10-1-7, must issue facility directives that contain procedures to "ensure the efficient use of runways, positive control and coordination of aircraft/vehicles, on or near active runways." Facility directives must make provisions for the mandatory use of approved memory aids at appropriate operational positions. Procedures have been put into place requiring facilities to use mandatory approved memory aids for:

1. Runway Status;
2. Runway Crossing;
3. Vehicle, personnel or equipment on active runway/s;
4. Land and Hold Short Operations (LAHSO);
5. Line Up and Wait (LUAW);
6. Landing Clearance.

The list of approved memory aids is maintained in the Runway Safety Memory Aid Toolbox. If facilities have developed their own memory aids that are not on the "approved" list of memory aids, facilities may have those memory aids approved by Air Traffic Services (AJT-2) at FAA Headquarters and added to the toolbox.

Aircraft that are arriving and departing are in a high energy, low maneuverability phase of flight. A misstep at this critical time can have very serious consequences. Memory aids are put into place to do exactly what their name indicates, aid our memory. What tools are in place at your facility to help ensure safe and orderly operations on runways?

HOT SPOTS

TERMINAL

A "hot spot" is a runway safety related problem area or intersection on an airport. Typically, it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. A confusing condition may be compounded by a miscommunication between a controller and a pilot, and may cause an aircraft separation standard to be compromised. The area may have a history of surface incidents or the potential for surface incidents. This may be due to any mix of causes:

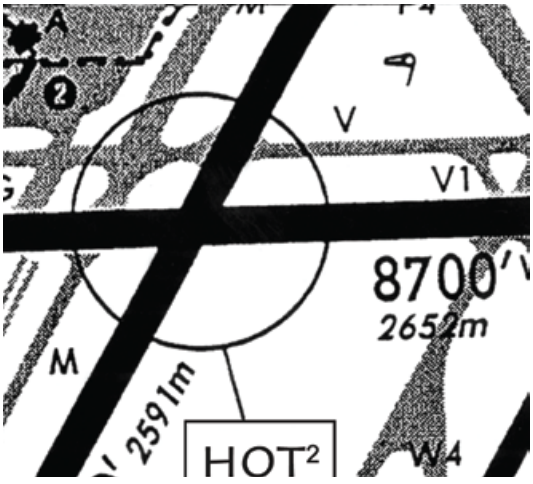

Figure 1 - Hot Spot at a runway intersection

- Airport geometry

- Ground traffic flow
- Markings, signage, or lighting
- Human factors

Why should you be concerned about a particular "hot spot"? If the aircraft separation standard is likely to be compromised, then the probability of a collision with another aircraft, vehicle or person is increased. Your Facility Management needs your input to identify the areas on the airport requiring special emphasis. Pilot input is particularly useful. It is better to report a potential safety problem than to overlook it and have an accident occur.

It may take a considerable length to time to fix or improve a "hot spot." Nevertheless, identification of and communication about the problem is important. Following notification to Facility Management, dissemination of the "hot spot" situation can occur via various methods including:

- Issuance of a local "hot spot" notice
- A flyer or brochure for distribution to airport users
- A safety briefing on the problem area for local pilots and ground vehicle operators

If you should become aware of any locations on an airport that warrant extreme caution because of complex airport geometry and/or potential pilot disorientation, do not hesitate to inform Facility Management. We need your participation to reduce airport surface incidents, particularly runway incursions.

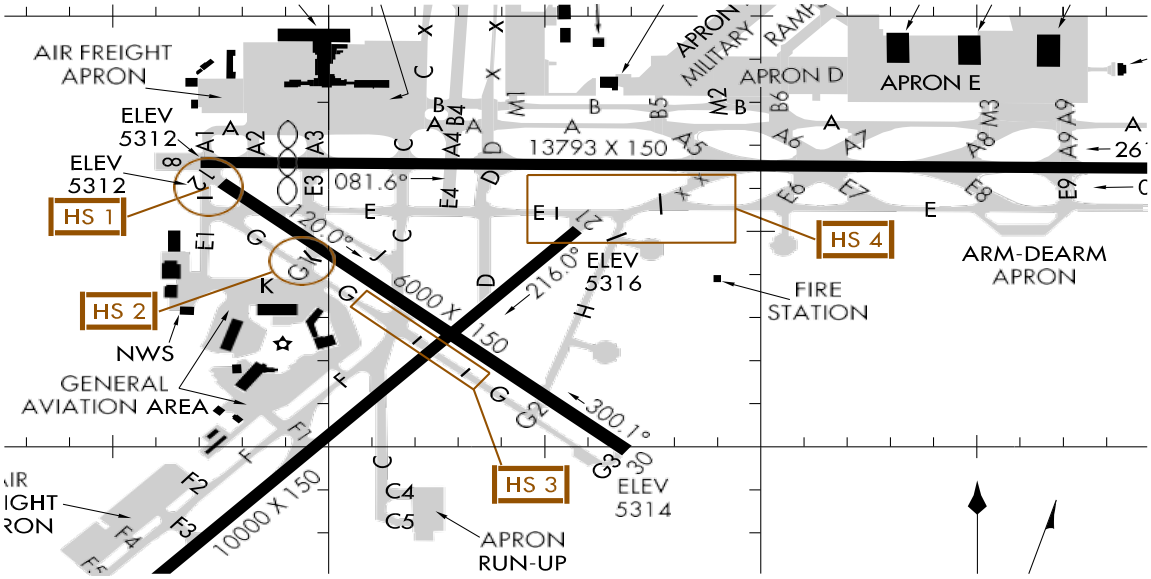

Figure 2 - Airport diagram with four hot spots

FIX BALANCING AND ATCSCC NOTIFICATION OF TRAFFIC FLOWS

TERMINAL, EN ROUTE

Field facilities are reminded of FAA Order JO 7210.3, paragraph 17-2-4, requirements to actively coordinate and communicate traffic management actions with adjacent TMUs through the Air Traffic Control System Command Center (ATCSCC) to optimize traffic flows throughout the NAS.

Traffic management techniques of reaching back to departure points outside of a facility's intrafacility jurisdiction have the potential to create unnecessary reroute workload, disruptions to fix balancing, and stakeholder confusion in the NAS.

These reach back reroutes do not take into account national level activity the ATCSCC is working or the potential for additional flights to be moved due to other system constraints.

There is a change submitted to paragraph 17-5-4, Traffic Management National, Coordination Responsibilities, to reiterate the required verbal coordination from field facilities to the ATCSCC when requesting interfacility traffic flow initiatives.

(Submitted by AJR)

The Air Traffic Procedures Bulletin (ATPB) is a means for headquarters to remind field facilities of proper application of procedures and other instructions. It is published and distributed on an as needed basis.

Articles must be submitted electronically in Microsoft® Word by the offices of primary responsibility with approval at the group level or above. Articles may be submitted throughout the year.

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