



# AIR TRAFFIC BULLETIN PROCEDURES



A communication from the Director of Policy, Mission Support Services  
Federal Aviation Administration, U.S. Department of Transportation.

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## **\*E: Traffic Advisories, Safety Alerts and Positive Control**

ATPB 2022-1 discussed the importance of traffic advisories (TA), safety alerts (SA), and exercising positive control. TAs and SAs are consistently in the FAA's Top 5 list of safety concerns. Three recent incidents involving IFR aircraft with identified and unidentified VFR traffic from an En Route perspective indicate further need of illustrating the importance of this subject matter. *(please see page 2 for references related to this bulletin)*

**SCENARIO 1:** An ARTCC issued a climb clearance to an IFR commuter airliner through the altitude of an identified VFR aircraft at 14,500 feet that had been pointed out and was starting a descent. As a result of evasive maneuvers by the flight crew to avoid a collision, there were onboard injuries. *Closest proximity was .11 miles and 200 feet.*

**SCENARIO 2:** An ARTCC was providing approach control service to a towered, class D airport in a mountainous region. The radar controller cleared the IFR aircraft for an RNAV approach and issued a frequency change to the tower. The conflict alert was activated when the IFR arrival aircraft and unidentified VFR aircraft were 13 miles apart converging. The radar controller did not pass the traffic information to the receiving tower controller and the tower has no radar display. The IFR aircraft continued its descent to the airport and came in close proximity with the unidentified VFR aircraft at 10,200 feet. *Closest proximity was .96 miles and 500 feet.*

**SCENARIO 3:** An ARTCC accepted a handoff on an IFR aircraft from an underlying approach control climbing to 12,000 feet. The sector controller climbed the aircraft to flight levels and began a position relief briefing (PRB). During the PRB, the aircraft conflicted with an unidentified VFR at 11,500 feet. The flight crew of the IFR aircraft responded to a TCAS RA to avoid the VFR aircraft and reported the VFR aircraft in sight. It is not known if the approach control had the unidentified VFR aircraft depicted on their radar. *Closest proximity was .71 miles and 500 feet.*

VFR “see and avoid” does not alleviate the responsibility of controllers from issuing instructions, traffic advisories, or safety alerts to VFR aircraft. When conflicts arise between IFR and any VFR aircraft, controllers shall take action to maintain safety by providing information and positive control. The duties of the controller are to take action to keep aircraft separated, maintain positive control, and keep the pilots informed of other traffic, obstructions, and terrain.

A controller has the authority to assign VFR aircraft to a specific altitude (or range of altitudes) or assign a heading to avoid traffic. If the pilot cannot maintain VFR at the altitude or on the assigned heading or elects to take another course of action, the pilot must advise air traffic control.

#### **REFERENCES**

(FAA Order JO 7110.65, paragraphs, 2-1-1, 2-1-2, 5-4-5 (h)(1), 5-6-1, 7-6-1, 7-7-5, 7-8-2, 7-8-5, 7-9-2, 7-9-3, AIM 4-4-1, 5-5-6, 5-5-7, and 14 CFR 91.3) Listed below are the primary ATC responsibilities.

#### **FAA Order JO 7110.65, Para 2-1-1. (a) : ATC SERVICE**

The primary purpose of the ATC system is to prevent a collision involving aircraft operating in the system.

#### **FAA Order JO 7110.65, Para 2-1-2. (a) : DUTY PRIORITY**

Give first priority to separating aircraft and issuing safety alerts as required in this order. Good judgment must be used in prioritizing all other provisions of this order based on the requirements of the situation at hand.

#### **FAA Order JO 7110.65, Para 2-1-6, and AIM 5-5-7: SAFETY ALERT**

Issue a safety alert to an aircraft if you are aware the aircraft is in a position/altitude that, in your judgment, places it in unsafe proximity to terrain, obstructions, or other aircraft.

#### **FAA Order JO 7110.65, Para 2-1-21: TRAFFIC ADVISORIES**

Unless an aircraft is operating within Class A airspace or omission is requested by the pilot, issue traffic advisories to all aircraft (IFR or VFR) on your frequency when, in your judgment, their proximity may diminish to less than the applicable separation minima. Where no separation minima apply, such as for VFR aircraft outside of Class B/Class C airspace, or a TRSA, issue traffic advisories to those aircraft on your frequency when, in your judgment, their proximity warrants it.

#### **FAA Order JO 7110.65, Para 5-4-5 (h)(1): TRANSFERRING CONTROLLER HANDOFF**

Prior to transferring communications: Resolve any potential violations of adjacent airspace and potential conflicts with other aircraft in your area of jurisdiction.

### **What's my legal responsibility?**

One in three close proximity events in which a traffic advisory and/or safety alert was NOT issued was an IFR/VFR traffic mix.

What you need to know:

- ATC has the legal responsibility, authority, and duty to issue control instructions, traffic advisories, and safety alerts to VFR aircraft. ATC instructions include headings or general directions to fly, turns, and altitude assignments.
- Except in an emergency situation, as outlined in 14 CFR FAR 91.3, pilots flying in controlled airspace must comply with all ATC instructions regardless of whether the pilot is flying VFR or IFR.

If you think an unsafe situation may develop, issue traffic advisories or exercise positive control by issuing a heading or an altitude restriction to resolve the conflict. If you feel that you are becoming overloaded in your area of responsibility, notify your Supervisor/CIC and request assistance.

### **\*R,\*T: Arrival Departure Window (ADW)**

On July 1, 2013, The National Transportation Safety Board (NTSB) issued a safety recommendation to the Federal Aviation Administration (FAA) to establish separation standards where arriving or departing aircraft flight paths may intersect. The NTSB investigated numerous events in which air carrier aircraft executing a go-around maneuver came within hazardous proximity of other landing or departing aircraft. These events occurred at airports where, at the time, air traffic control (ATC) procedures permitted independent takeoff and landing operations on nonintersecting runways with intersecting arrival or departure paths. The lack of procedures covering this runway configuration, for arriving and departing aircraft, required flight crews performing a go-around, to execute evasive maneuvers at low altitudes to avoid a collision with another aircraft.

The NTSB Safety Recommendation A-13-024 reported that controllers involved in these events stated that tower-applied visual separation was being employed. However, this was determined to be an improper use of tower-applied visual separation. Here is an excerpt from the NTSB report:

*Because of the nature of the geometry of the encounters and the unexpected nature of the go-arounds, it was not possible for the ATC tower controllers to issue effective control instructions to ensure that the airplanes avoided each other. Therefore, visual separation procedures could not be successfully applied or asserted as an adequate means of resolving the conflicts.*

*The NTSB concludes that the lack of specific separation standards, similar to those defined in paragraph 3-9-8 of FAA Order 7110.65, "Air Traffic Control," applicable to departing aircraft and aircraft conducting a go-around from nonintersecting runways where flight paths intersect, facilitates hazardous conflicts and introduces unnecessary collision risk.*

The FAA responded to the systemic problem in the National Airspace System (NAS) by establishing a new separation requirement (FAA Order JO 7110.65, Para 3-9-9, Nonintersecting

Converging Runway Operations) to mitigate the potential operational hazards that may be associated with these operations.

Additionally, to assist with Nonintersecting Converging Runway Operations (CRO), FAA deployed the Arrival Departure Window (ADW) tool. The ADW provides an excellent visual reference to help the controller mitigate potential flight path conflict in the event of an aircraft go around. The ADW is an effective tool adapted to individual airport configurations that assist the controller where nonintersecting CRO risks are present. The widespread implementation of the ADW tool resulted in the ATO receiving IHS Jane's Runway Award in 2015 for the proactive SMS response to the NTSB report.

At facilities where the ADW is implemented, a STARS or ASDE display will depict a "no go" box or identification mark on the converging runway final approach course that indicates to the controller a heightened risk of collision exists between an arriving and departing aircraft should the arriving aircraft execute a go around. ADW facilities have implemented mitigation procedures that define the conditions for clearing aircraft for takeoff, and the position and/or speed of the conflicting arrival aircraft. If there is compliance with the ADW procedures, the risk of an arrival go-around or rejected landing conflicting with a departure is significantly reduced.

Figure 1 is an example of the ADW window at DFW involving arrivals to RWY 13R and RWY 18L departures. In this example, once the arrival is inside 2.8NM from the RWY 13R threshold, RWY 18L departures must be held unless their departure roll has already started. The RWY 18L departure may not begin its departure roll until the RWY 13R arrival has passed the RWY 13R threshold by 0.3NM.

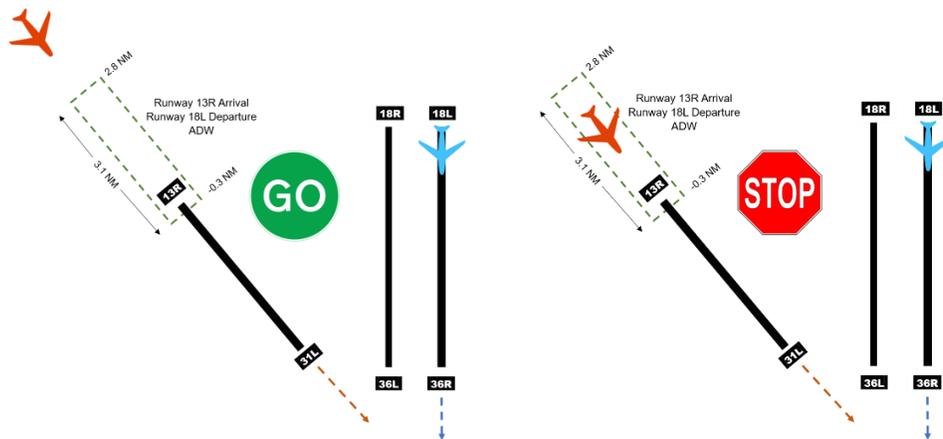


Figure 1: Example of the ADW for RWY 13R/RWY 18L at Dallas Fort-Worth International Airport

It cannot be over-emphasized that for the ADW to be effective, the established procedures must be consistently followed to ensure the safe and efficient operation of the NAS. Moreover, the ADW is an aid to the ATC decision-making process and is not a substitute for controller actions

to ensure separation. Controllers must use their best judgment and issue instructions based on the current traffic situation to provide positive control. Additionally, aircraft type, performance, weather, and runway conditions are factors to consider when employing the ADW during nonintersecting converging runway operations.

A review of a recent air traffic incident where two aircraft came within hazardous proximity of each other (0.2 miles lateral and 400 ft. vertical) highlights, once again, the importance of that NTSB recommendation and the need for adherence to ADW procedures. The ADW noncompliance events have placed aircraft in close proximity and required flight crews to perform the same evasive actions identified in the 2013 NTSB report. The ADW procedures and mitigation efforts were developed to focus on relieving conflict that may arise from Arrival/Departure nonintersecting CRO.

It is important to note that nonintersecting CRO conflict also extends to Arrival/Arrival traffic whose flight paths may cross in the event of a go-around.

Managers are encouraged to review FAA Order JO 7210.3, Facility Operation and Administration, paragraph 10-3-15 c1-3, which requires facility-specific procedures and tools to be established to mitigate risks associated with nonintersecting converging runway operations. The ADW, Virtual Runway Intersection Points, and Cutoff Points are all valid procedural tools that may be deployed at the facility level. A review of these procedures is paramount to ensure that established mitigation efforts reflect the current fleet mix, airport configurations, and operational parameters.

*Reference - FAA Order JO 7110.65, Air Traffic Control, para. 3-9-8, Intersecting Runway/Intersecting Flight Path Operations, paragraph 3-9-9, Nonintersecting Converging Runway Operations, and local facility directives and FAA Order JO 7210.3, Facility Operation and Administration, para. 10-3-15, Go Around/Missed Approach.*

*The Air Traffic Procedures Bulletin (ATPB) is a means for headquarters to remind field facilities of the 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 office of primary responsibility with approval at the group level or above. Articles may be submitted throughout the year.*

*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.*

*For additional information concerning the ATPB, reference FAA Order JO 7210.3, Facility Operation and Administration, paragraph 2-2-9.*

*Archived ATPB issues are available online: [https://www.faa.gov/air\\_traffic/publications/](https://www.faa.gov/air_traffic/publications/)*