Subject: Altitude and Speed Constraints in Area Navigation (RNAV) Procedures.

Purpose: This InFO emphasizes that separation and sequencing of airplanes by air traffic control (ATC) depends on uniform performance by pilots with respect to published altitude and speed constraints, especially when conducting RNAV procedures.

Background: Adherence to published altitude and speed constraints is essential in conducting conventional (non-RNAV) procedures. But adherence has taken on additional importance with the widespread implementation of RNAV procedures, which generally involve more constraints. Published constraints are shown on charts and may be amended by Notices to Airmen (NOTAMs).

Discussion: ATC clears pilots to fly departure, arrival, and approach procedures using phraseology such as “join”, “resume”, “proceed via”, “descend via”, and “climb via.” Pending more explicit language to be included in an upcoming revision to the Aeronautical Information Manual (AIM) pilots should understand the following key points regarding published altitude and speed constraints in order to fully comply with the intent of ATC clearances.


   • **Altitude Constraints.** Cancellation of one or more altitude restrictions will normally include the use of “maintain” and/or “except” phraseology, which does not cancel published speed constraints associated with the procedure.

   • **Speed Constraints.** Cancellation of published speed constraints will be indicated by the use of “speed your discretion” or “cancel speed restriction(s)/constraint(s)” phraseology. The use of “except” phraseology may also be used, for example, “except cross MAVVS at 250 knots.”

2. **Resume Normal Speed.** The phraseology “resume normal speed” does not cancel published speed constraints; rather, per Air Traffic Order 7110.65, Air Traffic Control, it cancels speed constraints previously issued by ATC and returns the aircraft to the published speed for the procedure.
3. Speeds between Waypoints with Published Speed Constraints.

- **Departure and Missed Approach Procedures.** Pilots should not exceed published speed associated with a waypoint until passing that waypoint.

- **Arrival and Instrument Approach Procedures (Excluding Missed Approach Procedures).** Pilots should plan to cross waypoints with a published speed restriction in accordance with the published speed and should not exceed this speed after passing the associated waypoint unless authorized by ATC or published note to do so.

For more information regarding the content of this InFO contact Mark Steinbicker, Aviation Safety Inspector, Flight Technologies and Procedures Division, AFS-400, 202-385-4613

**Recommended Action:** Directors of safety, directors of operations, fractional ownership program managers, and pilots should cooperate in ensuring that the practices described in this InFO are clearly understood and uniformly applied in flight operations.