

numbers is restricted to turbojet aircraft with Mach meters.

c. Pilots complying with speed adjustments are expected to maintain a speed within plus or minus 10 knots or 0.02 Mach number of the specified speed.

d. When ATC assigns speed adjustments, it will be in accordance with the following recommended minimums:

1. To aircraft operating between FL 280 and 10,000 feet, a speed not less than 250 knots or the equivalent Mach number.

**NOTE-**

1. On a standard day the Mach numbers equivalent to 250 knots CAS (subject to minor variations) are:

FL 240–0.6

FL 250–0.61

FL 260–0.62

FL 270–0.64

FL 280–0.65

FL 290–0.66.

2. When an operational advantage will be realized, speeds lower than the recommended minima may be applied.

2. To arriving turbojet aircraft operating below 10,000 feet:

(a) A speed not less than 210 knots, except;

(b) Within 20 flying miles of the airport of intended landing, a speed not less than 170 knots.

3. To arriving reciprocating engine or turboprop aircraft within 20 flying miles of the runway threshold of the airport of intended landing, a speed not less than 150 knots.

4. To departing aircraft:

(a) Turbojet aircraft, a speed not less than 230 knots.

(b) Reciprocating engine aircraft, a speed not less than 150 knots.

e. When ATC combines a speed adjustment with a descent clearance, the sequence of delivery, with the word “then” between, indicates the expected order of execution.

**EXAMPLE-**

1. Descend and maintain (altitude); then, reduce speed to (speed).

2. Reduce speed to (speed); then, descend and maintain (altitude).

**NOTE-**

The maximum speeds below 10,000 feet as established in 14 CFR Section 91.117 still apply. If there is any doubt concerning the manner in which such a clearance is to be executed, request clarification from ATC.

f. If ATC determines (before an approach clearance is issued) that it is no longer necessary to apply speed adjustment procedures, they will:

1. Advise the pilot to “resume normal speed.” Normal speed is used to terminate ATC assigned speed adjustments on segments where no published speed restrictions apply. It does not cancel published restrictions on upcoming procedures. This does not relieve the pilot of those speed restrictions which are applicable to 14 CFR Section 91.117.

**EXAMPLE-**

(An aircraft is flying a SID with no published speed restrictions. ATC issues a speed adjustment and instructs the aircraft where the adjustment ends): “Maintain two two zero knots until BALTR then resume normal speed.”

**NOTE-**

The ATC assigned speed assignment of two two zero knots would apply until BALTR. The aircraft would then resume a normal operating speed while remaining in compliance with 14 CFR Section 91.117.

2. Instruct pilots to “comply with speed restrictions” when the aircraft is joining or resuming a charted procedure or route with published speed restrictions.

**EXAMPLE-**

(ATC vectors an aircraft off of a SID to rejoin the procedure at a subsequent waypoint. When instructing the aircraft to resume the procedure, ATC also wants the aircraft to comply with the published procedure speed restrictions): “Resume the SALTY ONE departure. Comply with speed restrictions.”

**CAUTION-**

The phraseology “Descend via/Climb via SID” requires compliance with all altitude and/or speed restrictions depicted on the procedure.

3. Instruct the pilot to “resume published speed.” Resume published speed is issued to terminate a speed adjustment where speed restrictions are published on a charted procedure.

**NOTE-**

When instructed to “comply with speed restrictions” or to “resume published speed,” ATC anticipates pilots will begin adjusting speed the minimum distance necessary prior to a published speed restriction so as to cross the waypoint/fix at the published speed. Once at the published