

# NOTICE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
Air Traffic Organization Policy

N JO 7110.584

Effective Date:  
August 15, 2012

Cancellation Date:  
March 7, 2013

**SUBJ:** “Climb Via” and “Descend Via” Procedures and Phraseology

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- 1. Purpose of This Notice.** This notice amends procedures contained within Federal Aviation Administration (FAA) Order JO 7110.65, Air Traffic Control, and introduces the application of “climb via” procedures and phraseology. This notice also adds definitions of “climb via” and “descend via” to the Pilot/Controller Glossary (PCG).
- 2. Audience.** This notice applies to the following Air Traffic Organization (ATO) service units: En Route and Oceanic, Terminal, Mission Support, and System Operations; and all associated air traffic control facilities.
- 3. Where Can I Find This Notice?** This notice is available on the MyFAA employee Web site at [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/) and on the air traffic publications Web site at [http://www.faa.gov/air\\_traffic/publications/](http://www.faa.gov/air_traffic/publications/).
- 4. Explanation of Changes.** This change incorporates guidance on the use of “climb via” phraseology for route transitions and/or the assignment of standard instrument departure (SID) and area navigation (RNAV) SID procedures containing speed and altitude restrictions. The “climb via” phraseology and procedures have been developed for departure operations and are consistent with existing “descend via” phraseology and procedures. This change adds “climb via” and “descend via” to the PCG and defines responsibility for adherence to published altitude and speed restrictions when issued a “climb via” or “descend via” clearance.
- 5. Procedures.**

- a.** Amend the following paragraphs in FAA Order JO 7110.65 to read as follows:

#### 4-4-2. ROUTE STRUCTURE TRANSITIONS

Title thru a, no change.

- b.** Assign a SID/STAR or clear departing or arriving aircraft to climb or descend via a SID/RNAV SID/STAR/RNAV STAR.

#### **PHRASEOLOGY-**

*CLIMB VIA (SID/RNAV SID).*

*DESCEND VIA (STAR/RNAV STAR).*

#### **EXAMPLE-**

*“Climb via the Dawgs Four departure.”*

*“Descend via the Eagul Two arrival.”*

#### **REFERENCE-**

*FAAO JO 7110.65, Para 4-5-7, Altitude Information*

**4-5-7. ALTITUDE INFORMATION**

Title thru g, no change.

h. Instructions to vertically navigate on a STAR/RNAV STAR or SID/RNAV SID with published restrictions.

**PHRASEOLOGY-**

*DESCEND VIA (STAR/RNAV STAR name and number).*

*TERMINAL: DESCEND VIA (STAR/RNAV STAR name and number and runway number).*

*CLIMB VIA (SID/RNAV SID).*

**EXAMPLE-**

*“Descend via the Mudde One Arrival.”*

*“Cross JCT at flight level two four zero, then descend via the Coast Two Arrival.”*

*TERMINAL: “Descend via the Lendy One Arrival, Runway 22 left.”*

*“Climb via the Dawgs Four Departure.”*

**NOTE-**

*Clearance to “descend via” authorizes pilots:*

- 1. To vertically and laterally navigate on a STAR/RNAV STAR.*
- 2. When cleared to a waypoint depicted on a STAR/RNAV STAR, to descend from a previously assigned altitude at pilot’s discretion to the altitude depicted for that waypoint.*
- 3. Once established on the depicted arrival, to navigate laterally and vertically to meet all published or assigned speed and altitude restrictions. ATC is responsible for obstacle clearance when issuing a “descend via” clearance from a previously assigned altitude.*

*Clearance to “climb via” authorizes pilots:*

- 4. When cleared to a waypoint depicted on a SID/RNAV SID, to join a procedure after departure or resume a procedure; ATC is responsible for obstacle clearance when issuing a “climb via” clearance until the aircraft is established on the lateral and vertical path of a SID/RNAV SID.*
- 5. When vertical navigation is interrupted and an altitude is assigned to maintain which is not contained on the published procedure, to climb from that previously-assigned altitude at pilot’s discretion to the altitude depicted for the next waypoint.*
- 6. Once established on the depicted departure, to navigate laterally and vertically to meet all published or assigned speed and altitude restrictions.*

**REFERENCE-**

*FAAO JO 7110.65, Para 4-4-2, Route Structure Transitions*

*FAAO JO 7110.65, Para 4-5-6, Minimum En Route Altitudes*

*FAAO JO 7110.65, Para 5-5-9, Separation From Obstructions*

**NOTE-**

*7. Pilots navigating on a STAR/RNAV STAR must maintain last assigned altitude until receiving clearance to “descend via.”*

*8. Pilots cleared for vertical navigation using the phraseology “descend via” or “climb via” must inform ATC, upon initial contact, of the altitude leaving, the runway transition if assigned, and any assigned restrictions not published on the procedure.*

**EXAMPLE-**

*“Delta One Twenty One leaving flight level one niner zero, descending via the Riivr Two arrival.”*

*“Delta One Twenty One leaving flight level one niner zero for one two thousand, descending via the Riivr Two arrival.”*

*“Cactus Seven Eleven leaving two thousand, climbing via the Laura Two departure.”*

*“Cactus Seven Eleven leaving two thousand for flight level one niner zero, climbing via the Laura Two departure.”*

**REFERENCE-**

*AIM, Para 5-2-8, Instrument Departure Procedures (DP) – Obstacle Departure Procedures (ODP) and Standard Instrument Departures (SID) AIM, Para 5-4-1, Standard Terminal Arrival (STAR), and Area Navigation (RNAV) STAR for Arrivals*

1. Assign an altitude to cross the waypoint/fix, if no altitude is depicted at the waypoint/fix, for aircraft on a direct routing to a STAR/RNAV STAR or SID/RNAV SID waypoint/fix.

**EXAMPLE-**

*“Proceed direct Luxor, cross Luxor at or above flight level two zero zero, then descend via the Ksino One Arrival.”*

*“Proceed direct Rockr, cross Rockr at or above one-zero thousand, climb via the Bizee Two departure.”*

2. A “descend via” clearance must not be used where procedures contain published “expect” altitude restrictions.

**NOTE-**

*Pilots are not expected to comply with published “expect” restrictions in the event of lost communications, unless ATC has specifically advised the pilot to expect these restrictions as part of a further clearance.*

3. If it is necessary to assign a crossing altitude which differs from the STAR/RNAV STAR or SID/RNAV SID altitude, emphasize the change to the pilot.

**PHRASEOLOGY-**

*DESCEND VIA (STAR/RNAV STAR) ARRIVAL, EXCEPT CROSS (fix, point, waypoint) (revised altitude information).*

**EXAMPLE-**

*“United 454 descend via the Haris One Arrival, except cross Haris at or above one six thousand.”*

**NOTE-**

*The aircraft should track laterally and vertically on the Haris One Arrival and should descend so as to cross Haris at or above 16,000; remainder of the arrival shall be flown as published.*

**PHRASEOLOGY-**

*CLIMB VIA (SID), EXCEPT CROSS (fix, point, waypoint), (revised altitude information).*

**EXAMPLE-**

*“Climb via the Suzan Two departure, except cross Mkala at or above seven thousand.”*

**NOTE-**

*The aircraft should track laterally and vertically on the Suzan Two departure and should climb so as to cross Mkala at or above 7,000; remainder of the departure must be flown as published.*

4. If it is necessary to assign an interim altitude or assign a final altitude not contained on a STAR/RNAV STAR or SID/RNAV SID, the provisions of subpara 4-5-7h may be used in conjunction with subpara 4-5-7a.

**PHRASEOLOGY-**

*DESCEND VIA THE (STAR/RNAV STAR) ARRIVAL, EXCEPT AFTER (fix), MAINTAIN (revised altitude information).*

**EXAMPLE-**

*“United 454 descend via the Haris One Arrival, except after Bruno, maintain one zero thousand.”*

**NOTE-**

*The aircraft should track laterally and vertically on the Haris One Arrival and should descend so as to comply with all speed and altitude restrictions until reaching Bruno and then maintain 10,000. Upon reaching 10,000, aircraft should maintain 10,000 until cleared by ATC to continue to descend.*

**REFERENCE-**

*FAAO JO 7110.65, Para 4-7-1, Clearance Information AIM, Para 5-4-1, Standard Terminal Arrival (STAR), and Area Navigation (RNAV) STAR for Arrivals*

**PHRASEOLOGY-**

*CLIMB VIA (SID name and number), EXCEPT AFTER (waypoint name), MAINTAIN (altitude).*

**EXAMPLE-**

*“Climb via the Johnn Two Departure, except after Baret, maintain flight level one niner zero.”*

**NOTE-**

*Issuance of “climb via” and assignment of an altitude to maintain while an aircraft is on a SID, without stating a waypoint where the maintain altitude becomes a mandatory restriction, authorizes the pilot to climb unrestricted on the SID. Use “resume” phraseology to rejoin a route and assign a new altitude where compliance with published altitude restrictions is not required.*

**REFERENCE-**

*FAAO JO 7110.65, Para 4-2-5, Route or Altitude Amendments*

*FAAO JO 7110.65, Para 5-6-2, Methods*

*AIM, Para 5-2-8, Instrument Departure Procedures (DP) – Obstacle Departure Procedures (ODP) and Standard Instrument Departures (SID)*

No further changes to paragraph.

**b.** Amend the following definition in the PCG to read as follows:

**CLIMB VIA** – Used in an ATC clearance to authorize a pilot to navigate vertically and laterally on a SID or RNAV SID. The pilot is responsible to meet all published speed and altitude restrictions. Climb can be made at the discretion of the pilot.

**DESCEND VIA** – Used in an ATC clearance to authorize a pilot to navigate vertically and laterally on a STAR/RNAV STAR. The pilot is responsible to meet all published speed and altitude restrictions. Descent can be made at the discretion of the pilot.

**6. Distribution.** This notice is distributed to the following ATO service units: Terminal, En Route and Oceanic, System Operations, and Mission Support; the ATO Office of Safety and Technical Training; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

**7. Background.** The Air Traffic Control Procedures and Phraseology Action Team (ATCPP) works under the Performance Based Operations Aviation Rulemaking Committee. This group was established to address RNAV and required navigation performance implementation issues and propose action to the FAA. Composed of air traffic, aviation industry, and human factors experts, the ATCPP reviews, assesses, and proposes changes to air traffic control (ATC) procedures and phraseology. It is also tasked with incorporating those changes into FAA Order JO 7110.65, the AIM, and AIP.

Because of the increased number of published procedures concerning speed and altitude restrictions (for example, SIDs and standard terminal arrivals), the ATCPP has validated an operational need to provide expanded guidance on existing route transition procedures using “climb via” phraseology as was previously done for “descend via” phraseology. This is the result of evaluations of procedure implementations and extensive field input. The “climb via” concept and phraseology were validated through human factors testing at the FAA William J. Hughes Technical Center in 2006. Current phraseology has proved inadequate and cumbersome for ATC to clear aircraft onto a procedure, to resume a procedure, or to simultaneously instruct pilots that compliance with speed and altitude restrictions is required. Assignment of procedures has resulted in misunderstandings, misapplications, and misinterpretations of current guidance for ATC when assigning or terminating speed and altitude adjustments. This frequently results in discussion between pilots and ATC to confirm the intention of clearances.



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5/14/2012  
Date Signed