NBAA has updated its resources detailing the proper use of "climb via" (CV) and "descend via" (DV) clearances ahead of NAV Canada's upcoming implementation of International Civil Aviation Organization (ICAO) standard instrument departure (SID) and standard terminal arrival (STAR) phraseology.

In November 2016, ICAO's Procedures for Navigation Services – Air Traffic Management (PANS ATM) adopted the "Climb Via SID" and "Descend Via STAR" clearances. Prior to this change, ICAO Standards and Recommended Practices (SARP) held that SID and STAR clearances included both lateral path, as well as a clearance to comply with vertical constraints, which was contrary to FAA procedures.

With this change, the ICAO PANS ATM harmonizes climb via and descend via phraseology already in use, or pending, throughout the world. Nav Canada will adopt these new ICAO procedures on April 27.

Rich Boll, chairman of the ATC, Airspace and Flight Technologies Working Group of the NBAA Access Committee, noted while the pending changes represent greater international harmonization of CV and DV clearances, some key differences remain.

"One potential 'gotcha' is that, as far as the FAA is concerned, a descend via clearance cancels any ATC-assigned speed restrictions," Boll explained. "For ICAO and Canada, you must still comply with the speed assigned by ATC; that could catch U.S.-based pilots unaware when they're flying internationally, and they slow down to meet the charted speed.

"Secondly, ICAO allows ATC to issue an 'unrestricted' climb or descend clearance, cancelling the charted speed and altitude limits," continued Boll. "We don't have similar clearances in the U.S; with an FAA 'maintain' climb/descent clearance, published restrictions apply unless specifically canceled by the controller."

Despite these differences, Boll noted the greater significance of international acceptance of "via" clearances, which were first implemented by the FAA in 2014.

"The world is seeing the benefits of greater ATC discretion over vertical clearances when needed to allow for traffic separation," he noted. "Harmonization is key, and I think we're close enough to call that effort successful."

Several ICAO member states have also implemented CV and DV procedures, including Brazil – which, Boll noted, adopted the terminology following NBAA's extensive presentations on the subject.

Review NBAA's <u>Climb/Descend Via and Speed Adjustment Clearances</u> resources.

Climb/Descend Via Phraseology	
FAA/USA	ICAO/CANADA
Top/Bottom altitudes are charted DESCEND VIA EAGUL6 ARRIVAL	Always assign an altitude DESCEND VIA STAR [TO] (altitude)
DESCEND AND MAINTAIN (altitude) = DELETE RESTRICTIONS	DESCEND UNRESTRICTED [TO] (altitude) = DELETE RESTRICTIONS ABOVETHE CLEARANCE ALTITUDE
DELETE SPEED RESTRICTION	SPEED RESTRICTION CANCELLED
DELETE ALTITUDE RESTRICTION	ALTITUDE RESTRICTION CANCELLED
DESCEND/CLIMB VIA Cancels previously issued speed – comply with published speeds	DESCEND/CLIMB VIA Does not cancel a previously issued speed
DESCEND VIA Pilot's discretion descent to meet speed and altitude constraints	DESCEND VIA Pilot to begin descent immediately to comply with altitude constraints NOTE: Canada plans to make descend via clearance discretionary to harmonize with US
Uses the STAR/SID name and number with descend/climb via clearances	Does not use specific STAR/SID name with descend/climb via clearances