# Washington Center SOP Revision & CRC Implementation

27 September 2023







- Background
- Combined Center
- Deconsolidating & Sectorization
- Airspace Clarifications/Alignments
- Automated Information Transfer (AIT)
- Important ERAM in CRC Changes & Requirements



- This SOP update incorporates numerous changes in routing and sectorization to help facilitate a more dynamic management of the Washington ARTCC airspace.
- A core selection of sectors have been adapted to replace the traditional "split by area" approach. This requires a little extra review to understand the sectorization plan, however, this change will facilitate a more tailored approach to deconsolidation during events.
- Resources for working center combined have been increased and consolidated to a single chapter.
- With vNAS and CRC, several new tools are available to take advantage of and some require consistent use. This SOP begins the process of standardizing some of these processes.



- "Descend Via" Table 2-1 lists all descend via STARs utilized by vZDC. A "Join By Fix" has been listed for each STAR to indicate the furthest center may clear an aircraft on the arrival.
- **Change**: Controllers will no longer enter the "bottom altitude" for a STAR but instead enter the altitude prescribed in Table 2-1. These altitudes are the altitude at which the aircraft will enter its servicing TRACON's airspace.
- TRACON handoff codes are listed in Table 2-2. These codes are provided so that if you
  have a secondary position active and need to handoff from your secondary (STARS)
  position to another STARS facility. The controller list in CRC will <u>not</u> display the
  correct handoff code for STARS to STARS when you are active on a center session.
- Section 2-3 consolidates routing and altitude requirements from various SOP and LOA publications to provide a single point of reference for the majority of routing and altitude restrictions. It is sorted by facility (as in, the facility the aircraft will be entering).

## Deconsolidating & Sectorization

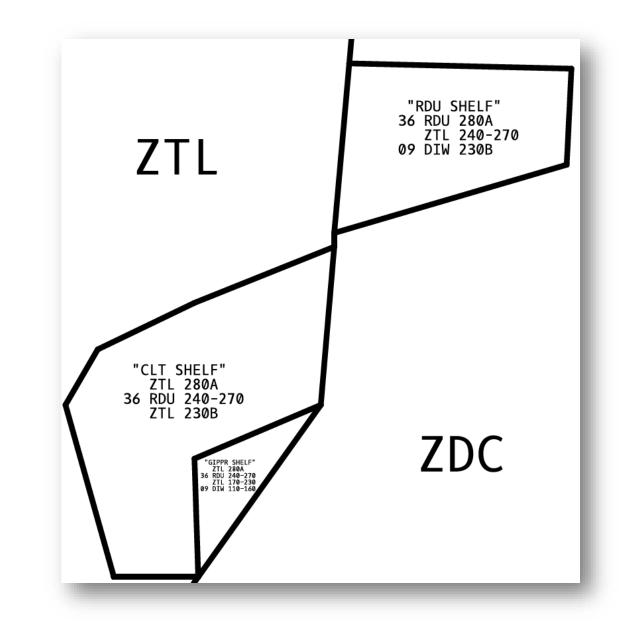
- The sectorization plan incorporates numerous shelfs. These shelfs facilitate the movement of traffic more efficiently, minimizing coordination requirements.
- "Markets" of traffic can be more specifically tailored by combining various sectors vs combining entire areas.
- Event splits will define which sectors are combined to which positions.
- Change: There is no longer an "area" split or "high/low" type split for use.





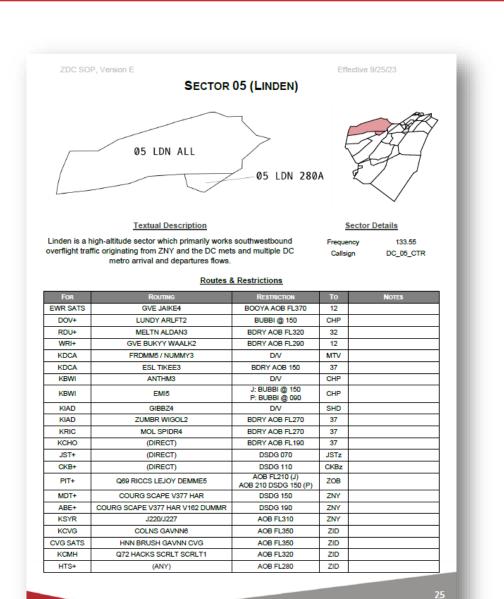
#### Southeastern Shelving with ZTL

- The shelves are defined with ZTL:
  - RDU Shelf
  - CLT Shelf
  - GIPPR Shelf
- These shelves facilitate more efficient management of traffic climbing out of CLT into ZDC and aircraft descending into CLT to ZTL.
- Review the altitudes in the SOP to ensure you are familiar with these airspace areas.
- Note: The ZDC/ZTL LOA is being revised to ensure accuracy/alignment of policy.





- Each sector has a section that defines its airspace, frequency, and provides a routes and restrictions table that the sector is responsible for managing.
- When working top down, use of the Ch 2 Center Combined resources (i.e. Exit Restrictions) will ensure compliance with LOA and SOP restrictions.
- Use of the sector restrictions table should be referenced when center is split.





- New for VATSIM: AIT's have not been practical in the past due to the limitations of VRC and vERAM. With the fidelity offered in CRC, we are now able to take advantage of AITs.
- What is an AIT? AITs transfer radar identification, altitude control, and other defined control information, without verbal coordination. AIT's can be incorporated during radar handoffs using information included in the datablock and when the procedure is specified by SOP or LOA.
- **Simplified...** An AIT means if you (controller A) flash an aircraft to another controller (controller B) who then makes a change to a datablock that you (controller A can issue after observing) and then also can include controller B flashing to controller C and when you see that C has the handoff from B you frequency change to C... that's simple, right?! In essence, you are potentially combining a handoff, a point out, and an APREQ all in one automated process.



- Intrafacility (summarized):
  - RDU Arrivals from 54 (54 h/o 09, 09 flashes through 20, 54 switches to 20)
  - Eastbound via HCM to 54 (12 or 20 initiates handoff to 09, 09 flashes to 54, 12 or 20 switches to 54 after 54 accepts the handoff)
  - Southbound from 51 (51 hands off to 58 or 59, 58 or 59 accept and enter a higher altitude in the datablock, 58 or 59 then flashes to 54, 51 climbs to datablock entered altitude and transfers communications to 51 after 51 accepts the handoff)
- Interfacility (summarized)
  - CLT departures via KILNS/BARMY (ZTL climbs to FL230, flashes to ZDC09. ZDC09 accepts and immediately flashes to ZDC36. ZTL transfers to ZDC36 after ZDC36 accepts the handoff.
  - RDU departures via SHPRD (ZDC09 climbs to FL230 and handsoff to T29. T29 may immediately initiate handoff to T33. ZDC09 transfers communications to T33 after T33 accepts handoff.

## ERAM in CRC | Shared Session & Routes



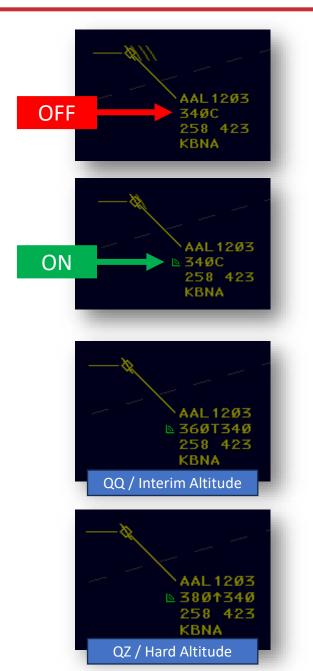
- Common Scope. A fundamental change in CRC is instead of only one person being able to be on a position at a time, multiple people can be on a single position at once. Think of it as everyone sitting in front of an actual scope. In ERAM, everything is shared. This means leader positions, lengths, dwell lock status, vector lines, etc. If you activate on a position with another controller the datablocks will be matched any action you take will be executed for the other controller also. Keep this in mind when relieving another controller and you start moving or adjusting datablocks!
- **Route Lines**. The "route key" has been introduced. As a reminder, if you clear an aircraft to a point, also update the route line. Points within an element (i.e. airway, STAR, SID) require you to enter the fix to proceed direct to first, then the element after. If the point being cleared direct to is already in the route string, then only that fix is necessary.
  - Example 1: "CLEARED DIRECT HACKS" the route string looks like this: WYNGS5.RAMAY.Q72.HACKS..PLASH.SNKPT2 and the aircraft's CID is 456. You enter "QU HACKS 456 <ENTER>" – CRC will automatically append a present position fix/radial/distance and connect to HACKS. The new route string will look like this: KIAD CSN346018 HACKS PLASH SNKPT2.
  - Example 2: "CLEARED DIRECT BULII" the route string looks like this: BEXGO5.BOUSY..WAVES.CAPSS3 and the aircraft's CID is 642. You enter "QU BULII CAPSS3 642 <ENTER>" – Notice that CAPSS3 was entered in addition to BULII since BULII isn't explicitly included in the original route string. The new route string will look like this: KRDU GVE144024 BULII CAPPS3.

# ERAM in CRC | Datablocks

 Voice Communication Indicator. Beginning with initial audio contact with an aircraft, you must utilize the voice communication indicator to reflect the current status of voice communications. The VCI is toggled by left clicking the field where the VCI appears or by using the command // <CID> <ENTER>

Reference: FAAO 7110.65AA, Para 2-1-17d

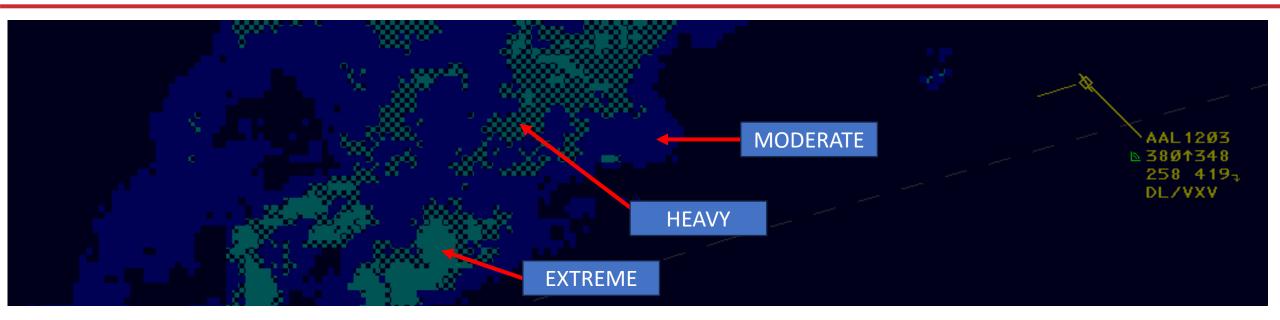
• Datablock Altitudes. The primary altitude entires used in ERAM are QZ and QQ ("hard" and "interim" respectively). When aircraft are climbing to an intermediate altitude use the interim altitude (QQ) entry to reflect the altitude the aircraft is cleared to climb to. For aircraft climbing to their final requested altitude, or, for aircraft descending, use the hard altitude (QZ) entry. *Reference: vZDC Center SOP, Para 1-2-2* 





#### ERAM in CRC | Weather Radar





- CRC introduces weather radar! You may issue weather at your discretion.
- Reference FAAO 7110.65AA Para 2-6-4 for phraseology to issue weather.
- Use 4<sup>th</sup> line when clearing an aircraft to deviate.
- Center (ERAM) does not depict "light" intensity precipitation.

ISSUING PRECIPITATION "AMERICAN TWELVE ZERO THREE, AREA OF MODERATE TO EXTREMEME PRECIPITATION BETWEEN TEN O'CLOCK AND TWO O'CLOCK, TWO FIVE MILES. AREA IS FOUR ZERO MILES IN DIAMETER."

CLEARANCE TO DEVIATE *"AMERICAN TWELEVE ZERO THREE,* DEVIATION LEFT OF COURSE APPROVED, WHEN ABLE PROCEED DIRECT VOLUNTEER AND ADVISE."

- 4<sup>th</sup> Line can be selected to display destination, or type, or nothing automatically. If a 4<sup>th</sup> Line entry is made, it will be displayed over the destination or type and can be toggled by using the small down arrow to the right of the speed.
- CRC ERAM passes the heading and speed fields of 4<sup>th</sup> line, unlike vERAM – this means you should use these fields instead of the 4<sup>th</sup> line free text.
- Heading Field: QS <heading> <FLID>. Formats to the heading field automatically (i.e. 250 will appear as H250). May include 10L, 15R, PH, etc.
- Speed Field: QS /<speed> <FLID>. Formats speed field automatically (i.e. 300 will appear as S300, 77 will appear as M77, etc.).
- Free Text QS O<text> <FLID>.





- The new SOP is intended to improve and standardize the way we operate as a center. It introduces some fundamental shifts in the way the airspace is managed. There will be a learning curve as everyone gets used both new procedures and new software.
- As the facility continues to grow into CRC we will undoubtedly make changes and tweaks to the procedures in the SOP and other documents. If you run into any issues or have ideas that you think would help improve a process, please submit them to the vZDC Staff.