

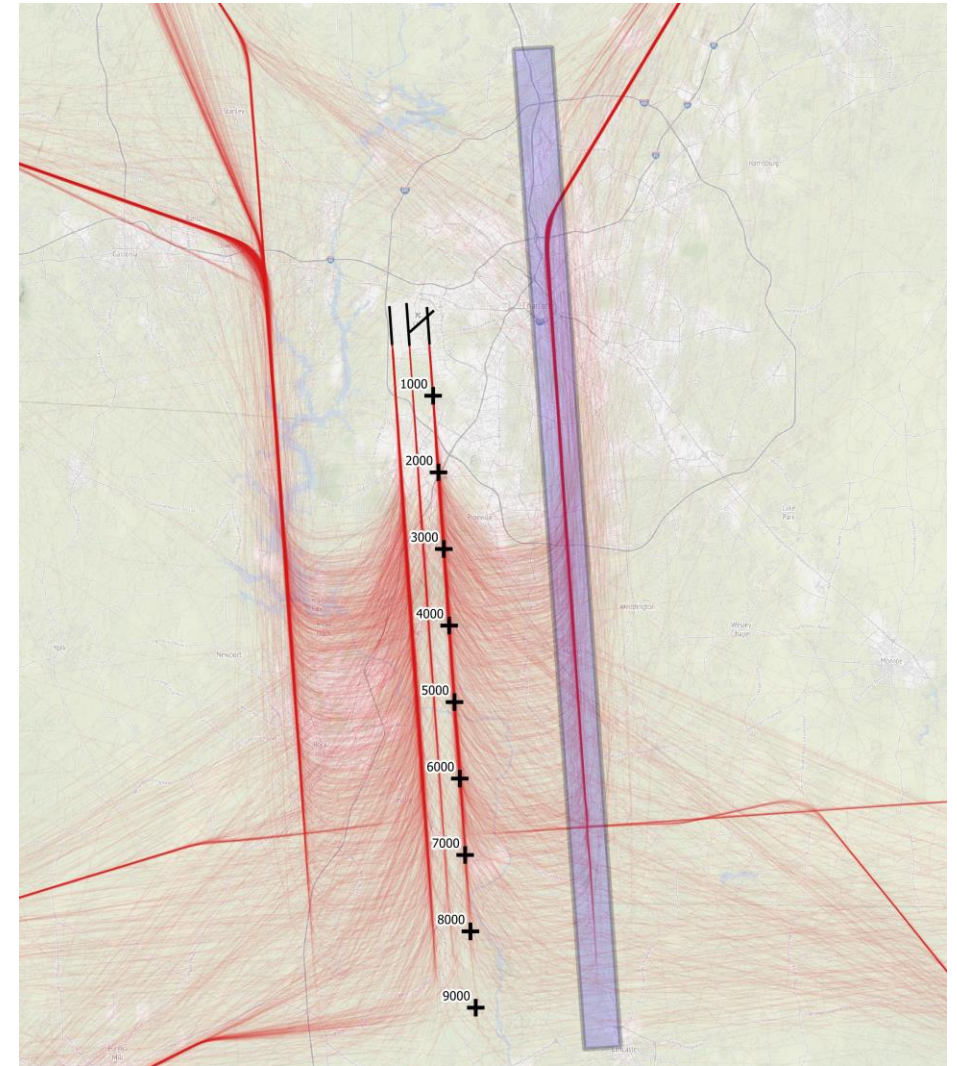
FAA Implementation of ACR Recommendation 3

Return CAATT Waypoint to Pre-Metroplex location

July 2024

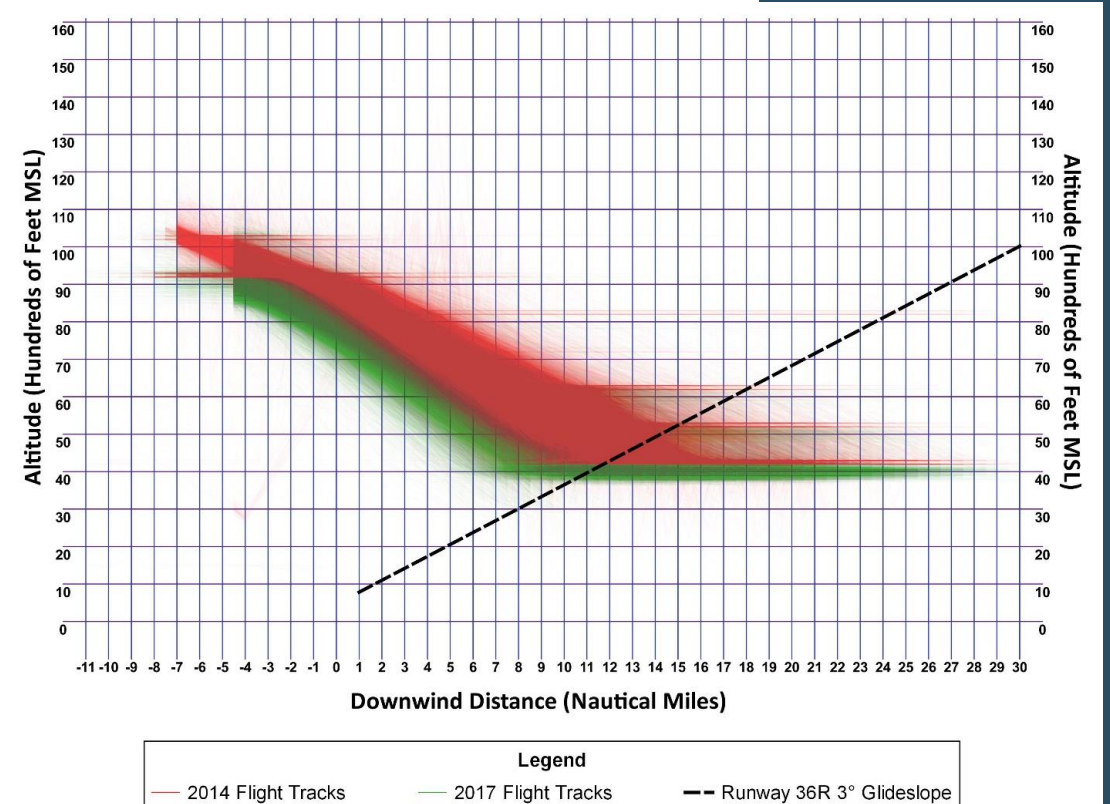
Agenda

- ACR Slate Recommendation
- FAA Proposed Alternative
- FAA Implementation
- HMMH Review of FAA Published Procedures



ACR Slate Recommendation 3: Return CAATT Waypoint to Pre-Metroplex location

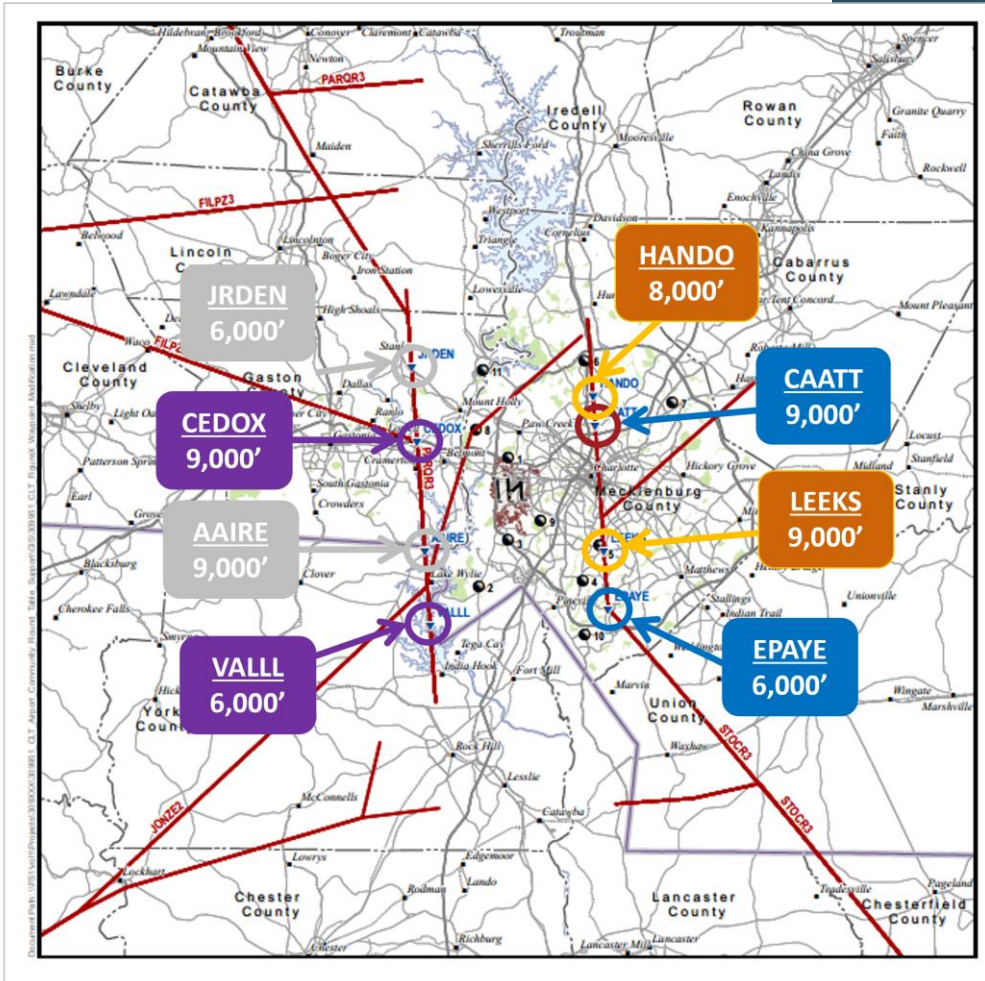
- Bring altitudes on CHSLY arrival closer to pre-Metroplex altitudes
- Under preliminary analysis using the ACR criteria this recommendation was expected to have a net benefit in noise reduction to over 80,000 residents in the Charlotte Metropolitan area
 - Preliminary analysis evaluated raising CAATT and EPAYE by 1,000 ft



FAA Alternative: Increased Arrival Altitudes at Additional Waypoints

- Modify altitude at CAATT and EPAYE to 10,000 ft and 7,000 ft
 - 1,000 ft higher than current restrictions
 - No expected increase in flight miles or change to flight tracks
- Requires that the corresponding fixes for other STARs must be raised for operational continuity
 - JONZE STAR: AAIRE and JRDEN raised to 10,000 ft and 7,000 ft
 - FLIPZ and PARQR STARs: CEDOX and VALLL raised to 10,000 ft and 7,000 ft
 - STOCR STAR: LEEKS raised to 10,000 ft; HANDO remains at 8,000 ft

- CHSLY4 STAR
- STOCR3 STAR
- FLIPZ3 & PARQR3 STARs
- JONZE2 STAR



FAA Implementation

On May 16, 2024, FAA published updates to seven (7) Standard Terminal Arrivals (STARs) into CLT

The updates included altitude changes to address CLT Recommendation 3, which was *to bring altitudes on CHSLY arrival closer to pre-Metroplex altitudes*

As a result of the FAA's implementation of the changes to the 7 STARS, the CHSLY procedure increased the altitude at:

- ✓ CAATT from 9,000 feet to 10,000 feet
- EPAYE from 6,000 feet to 10,000 feet unless otherwise directed by ATC

Thank you

Please contact jstoddard@hmmh.com for questions at your convenience

HMMH Detailed Analyses of Published Procedures Follows

BANKR FIVE Arrival

MLLET THREE Arrival

CHSLY SIX Arrival

PARQR FOUR Arrival

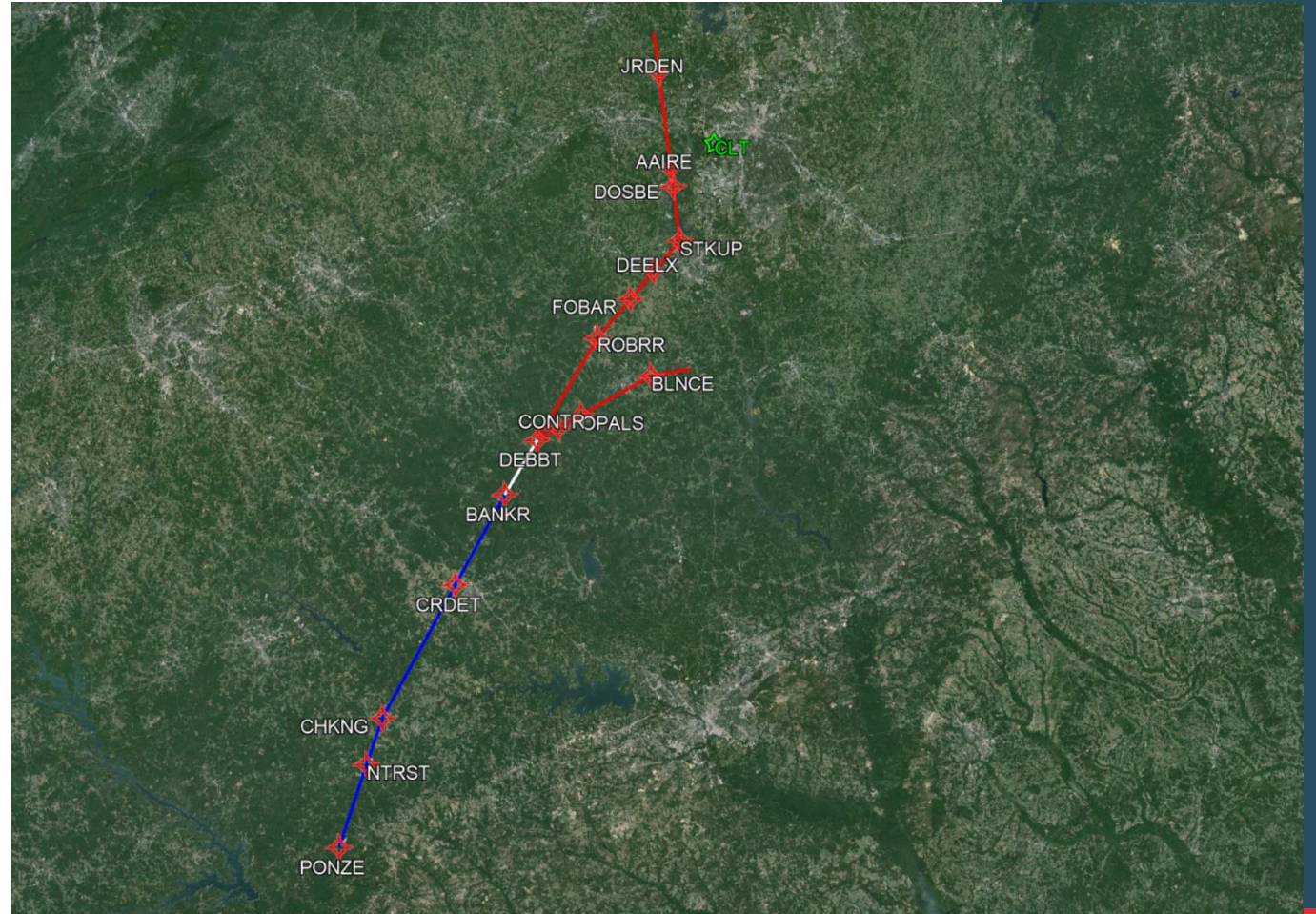
FILPZ FOUR Arrival

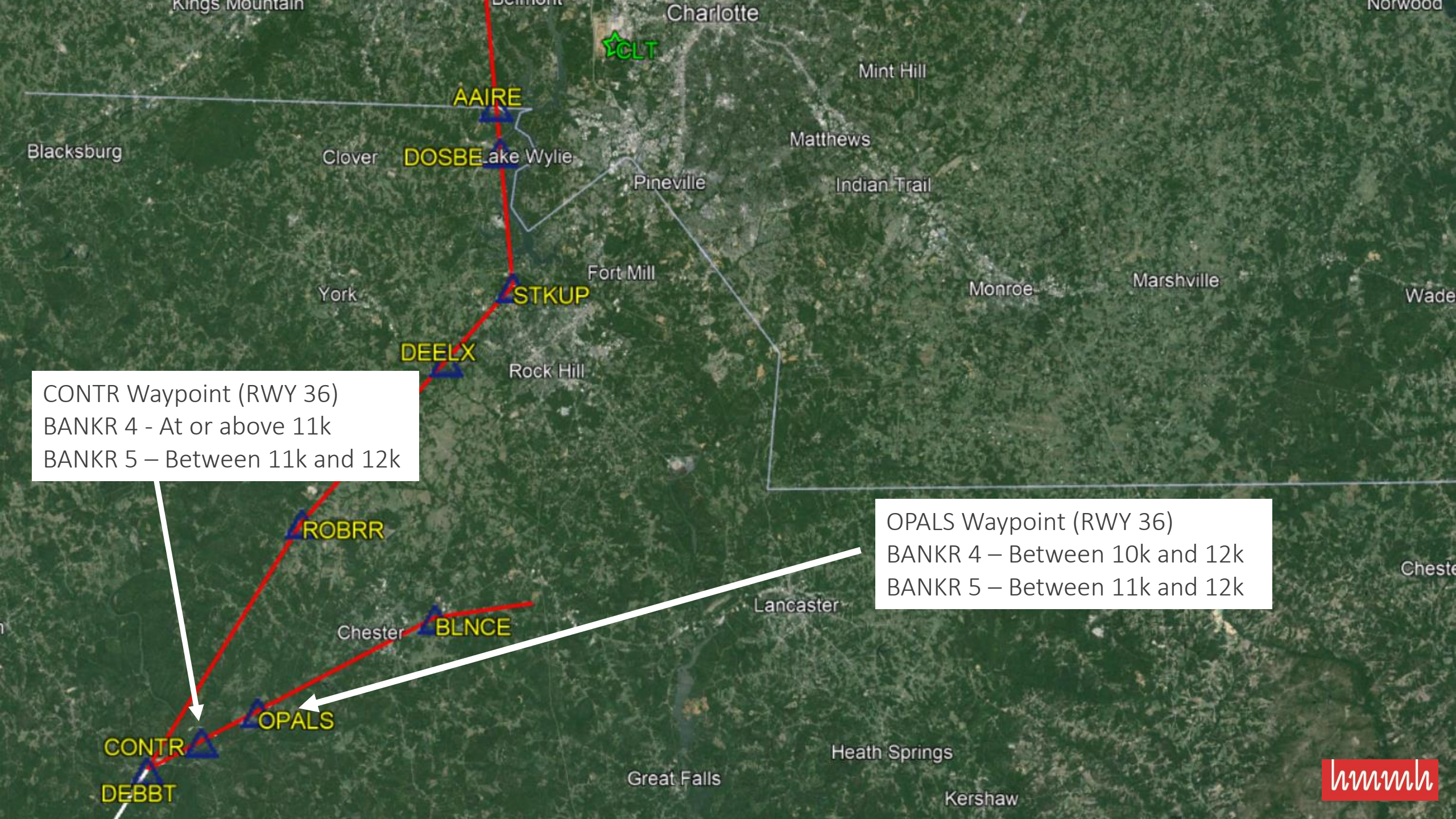
STOCR FOUR Arrival

JONZE FIVE Arrival

BANKR FIVE ARRIVAL (RNAV)

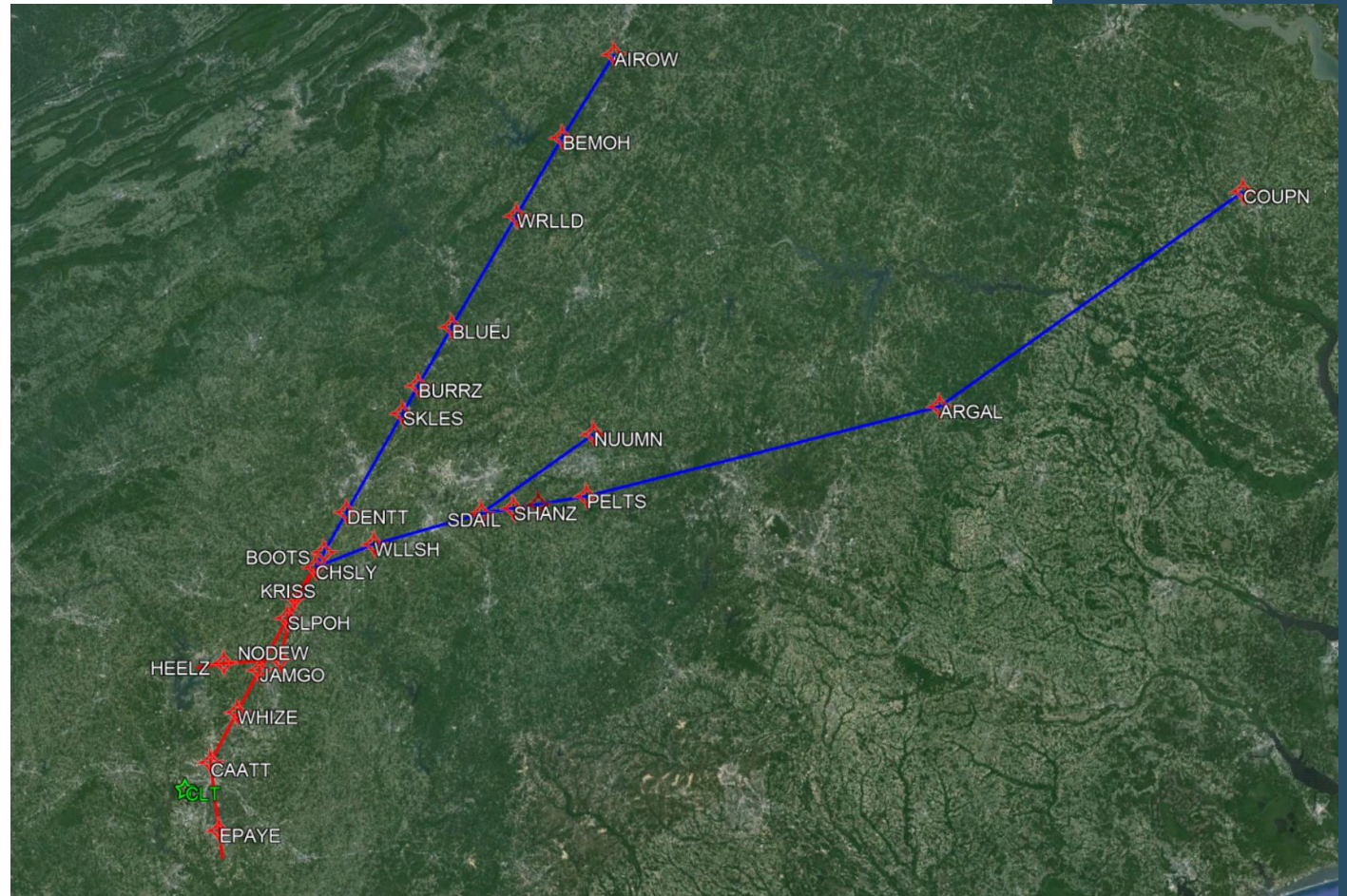
- Altitude changes:
 - CONTR – changed altitude restriction from at or above 11k ft. MSL to between 11k and 12k ft. MSL. *Lower limit remains the same
 - OPALS – deleted altitude restriction of between 11k and 12k ft. MSL

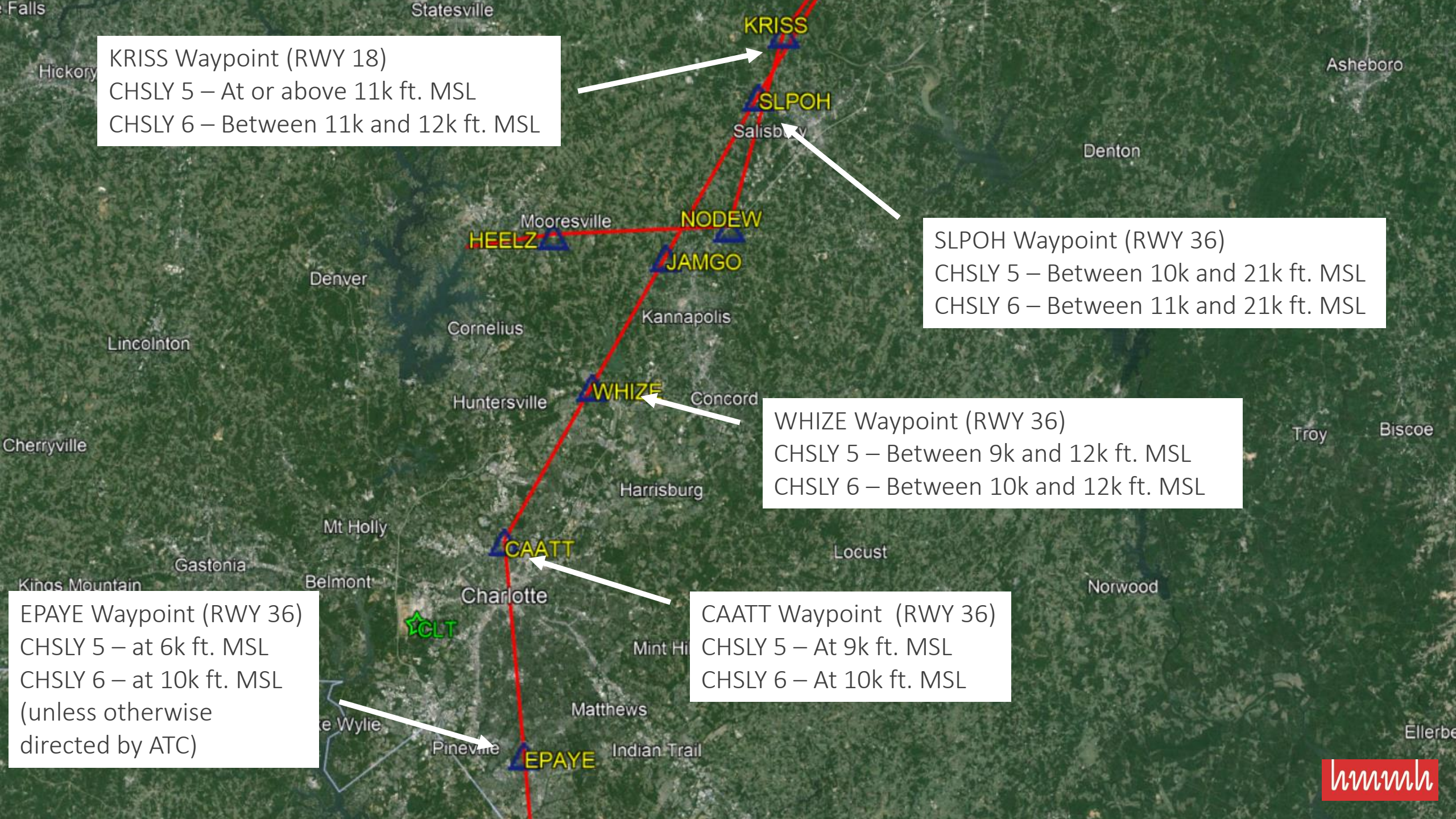




CHSLY SIX ARRIVAL (RNAV)

- Altitude changes:
 - SLPOH – raised lower limit of altitude restriction from 10k to 11k ft. MSL
 - WHIZE – raised lower limit of altitude restriction from 9k to 10k ft. MSL
 - KRISS – changed altitude restriction from at or above 11k ft. MSL to between 11k and 12k ft. MSL. *Lower limit remains the same
 - CAATT – raised altitude restriction from 9k to 10k ft. MSL
 - EPAYE – removed altitude restriction of 6k ft. MSL





KRISS Waypoint (RWY 18)
CHSLY 5 – At or above 11k ft. MSL
CHSLY 6 – Between 11k and 12k ft. MSL

SLPOH Waypoint (RWY 36)
CHSLY 5 – Between 10k and 21k ft. MSL
CHSLY 6 – Between 11k and 21k ft. MSL

WHIZE Waypoint (RWY 36)
CHSLY 5 – Between 9k and 12k ft. MSL
CHSLY 6 – Between 10k and 12k ft. MSL

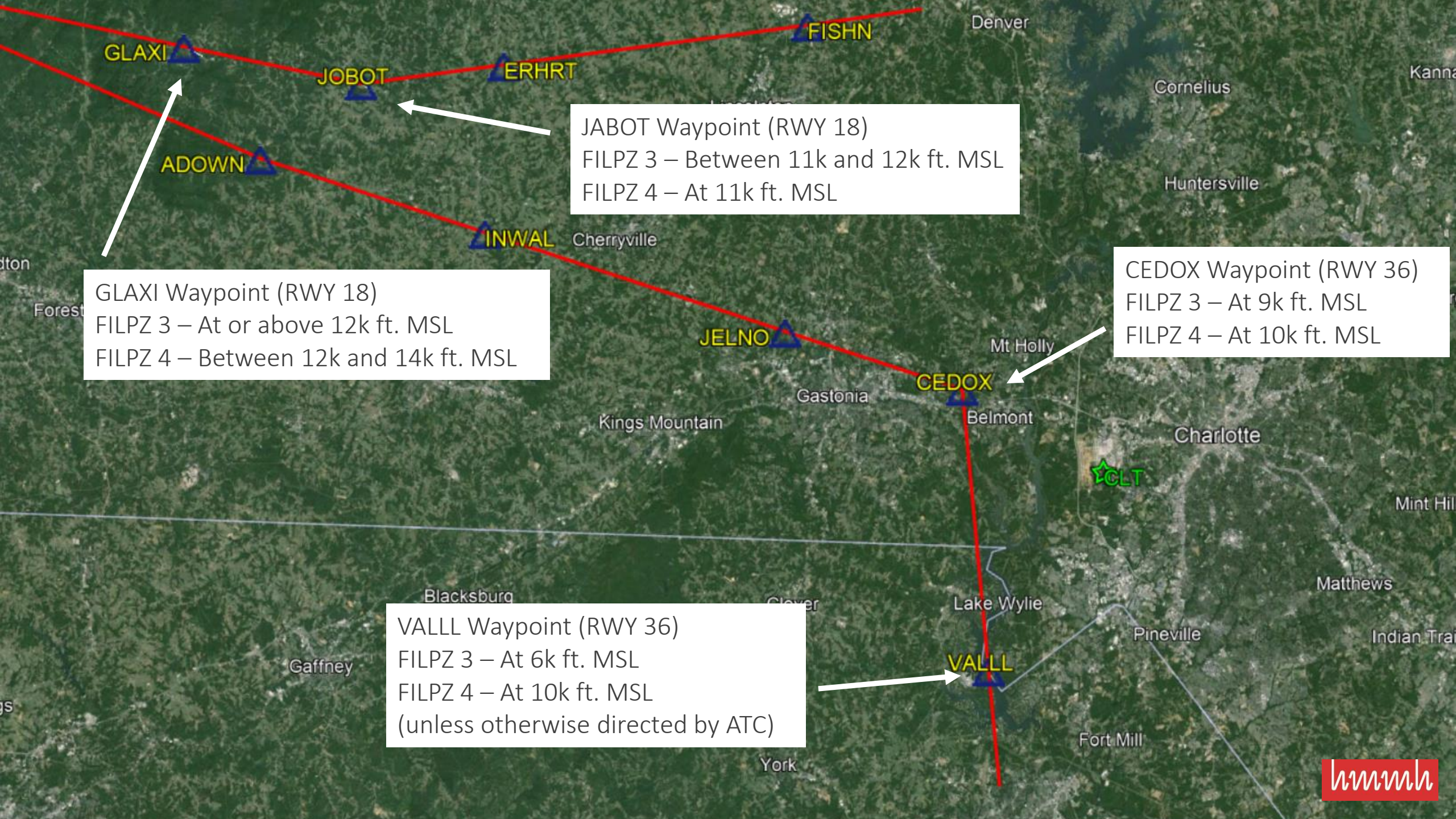
CAATT Waypoint (RWY 36)
CHSLY 5 – At 9k ft. MSL
CHSLY 6 – At 10k ft. MSL

EPAYE Waypoint (RWY 36)
CHSLY 5 – at 6k ft. MSL
CHSLY 6 – at 10k ft. MSL
(unless otherwise directed by ATC)

FILPZ FOUR ARRIVAL (RNAV)

- Altitude changes:
 - VALLL – removed 6k ft. MSL altitude restriction
 - CEDOX – raised altitude restriction from 9k to 10k ft. MSL
 - GLAXI – changed altitude restriction from at or above 12k to between 12k and 14k ft. MSL
 - JOBOT – changed altitude restriction from between 11k and 12k ft. MSL to at 11k ft. MSL





GLAXI

JOBOT

ERHRT

FISHN

ADOWN

INWAL

JELNO

CEDOX

VALLL

CLT

JABOT Waypoint (RWY 18)
FILPZ 3 – Between 11k and 12k ft. MSL
FILPZ 4 – At 11k ft. MSL

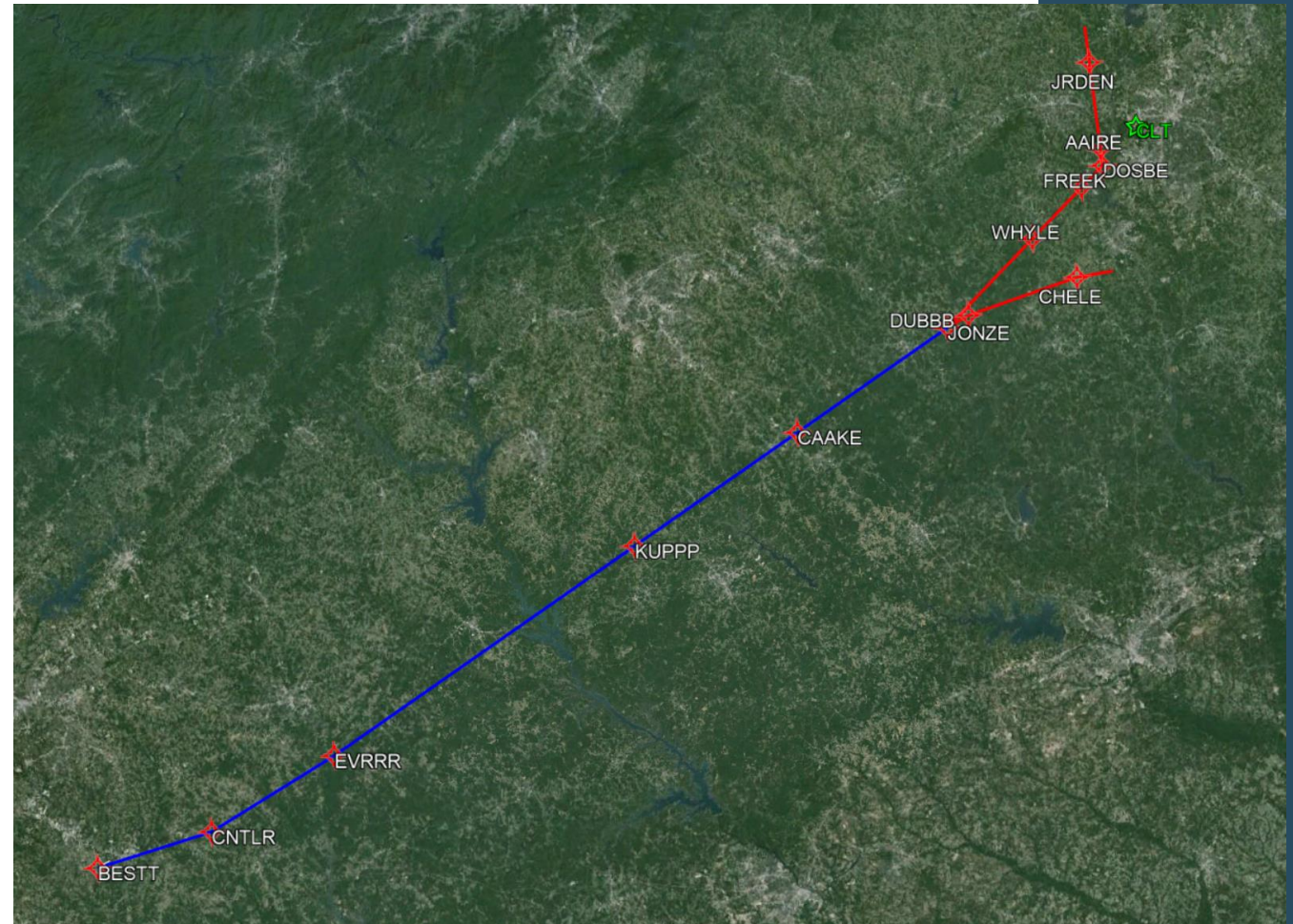
GLAXI Waypoint (RWY 18)
FILPZ 3 – At or above 12k ft. MSL
FILPZ 4 – Between 12k and 14k ft. MSL

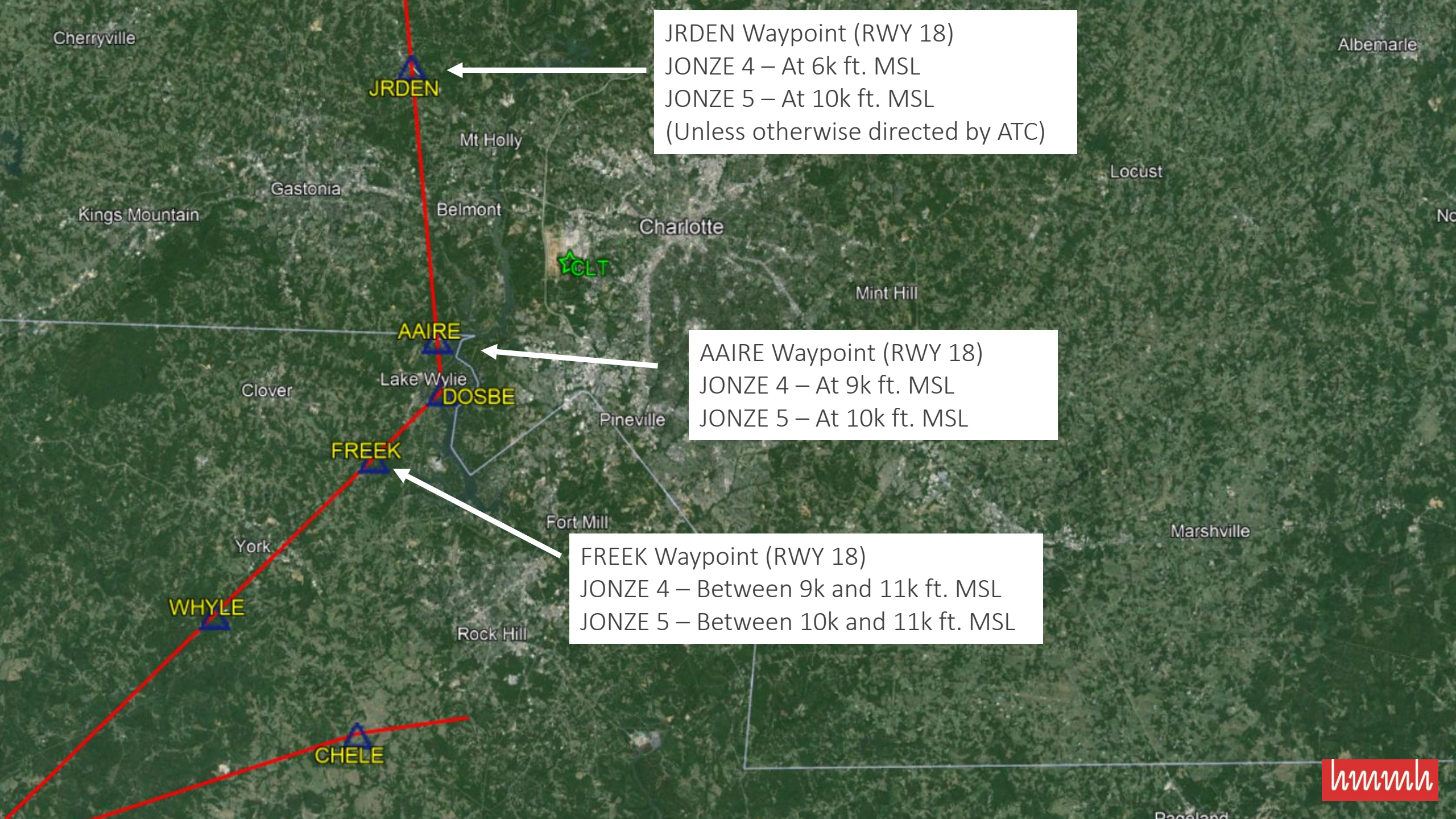
CEDOX Waypoint (RWY 36)
FILPZ 3 – At 9k ft. MSL
FILPZ 4 – At 10k ft. MSL

VALLL Waypoint (RWY 36)
FILPZ 3 – At 6k ft. MSL
FILPZ 4 – At 10k ft. MSL
(unless otherwise directed by ATC)

JONZE FIVE ARRIVAL (RNAV)

- Altitude changes:
 - FREEK – changed altitude restriction lower limit from 9k to 10k ft. MSL
 - AAIRE – raised altitude restriction from 9k to 10k ft. MSL
 - JRDEN – removed altitude restriction of 6k ft. MSL





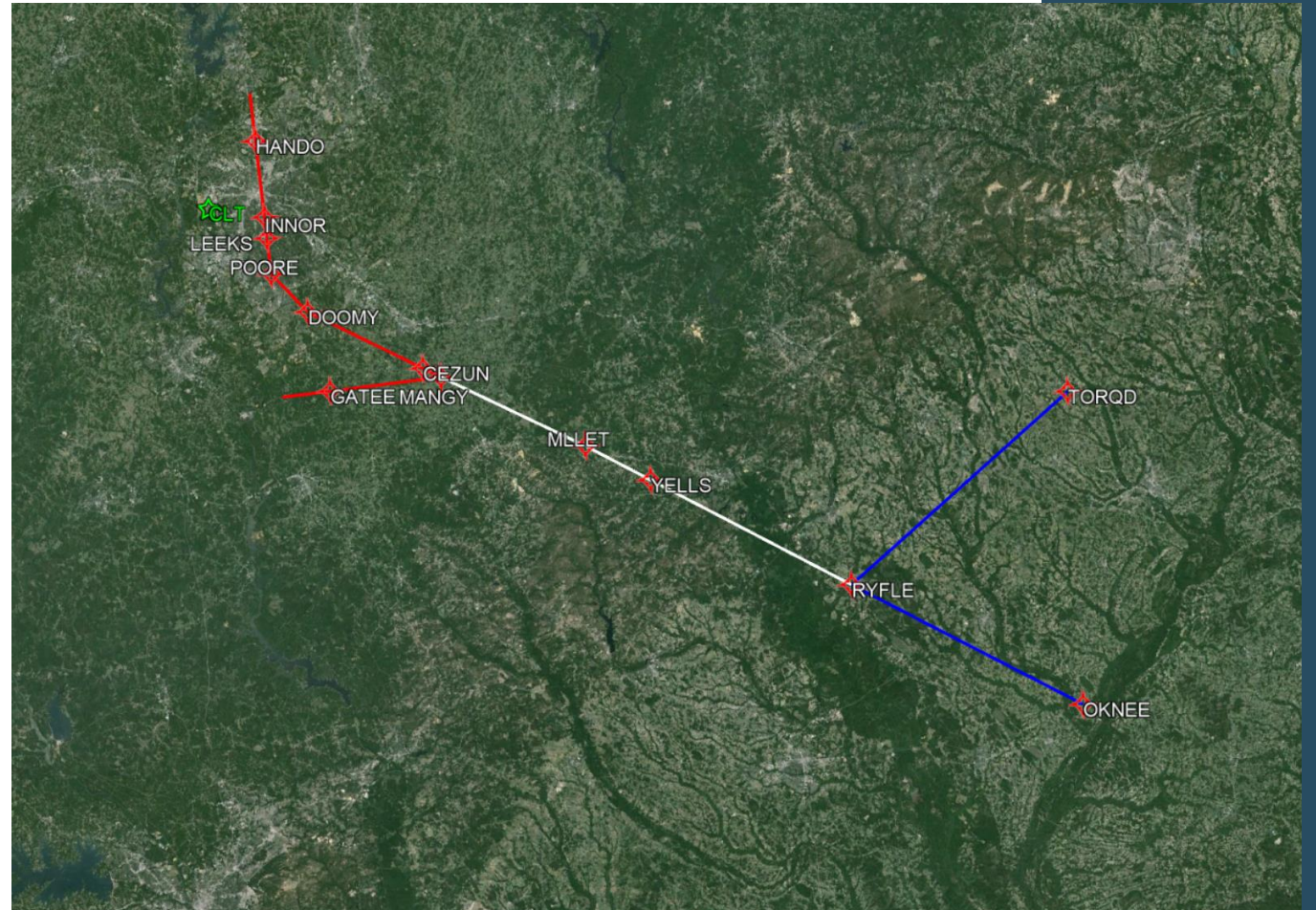
JRDEN Waypoint (RWY 18)
JONZE 4 – At 6k ft. MSL
JONZE 5 – At 10k ft. MSL
(Unless otherwise directed by ATC)

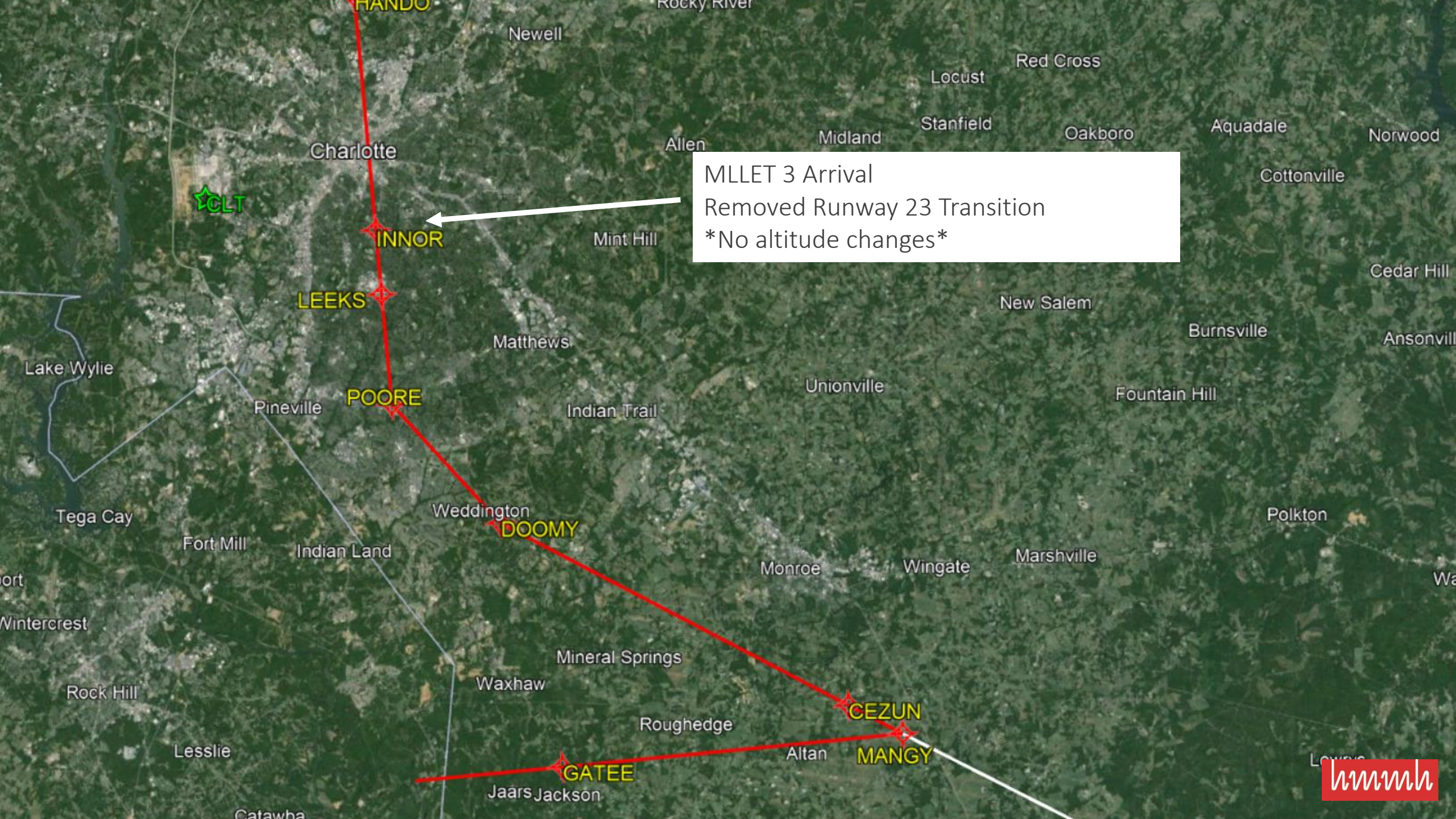
AAIRE Waypoint (RWY 18)
JONZE 4 – At 9k ft. MSL
JONZE 5 – At 10k ft. MSL

FREEK Waypoint (RWY 18)
JONZE 4 – Between 9k and 11k ft. MSL
JONZE 5 – Between 10k and 11k ft. MSL

MLLET THREE ARRIVAL (RNAV)

- Altitude changes:
 - None
 - *Removed Rwy 23 Transition



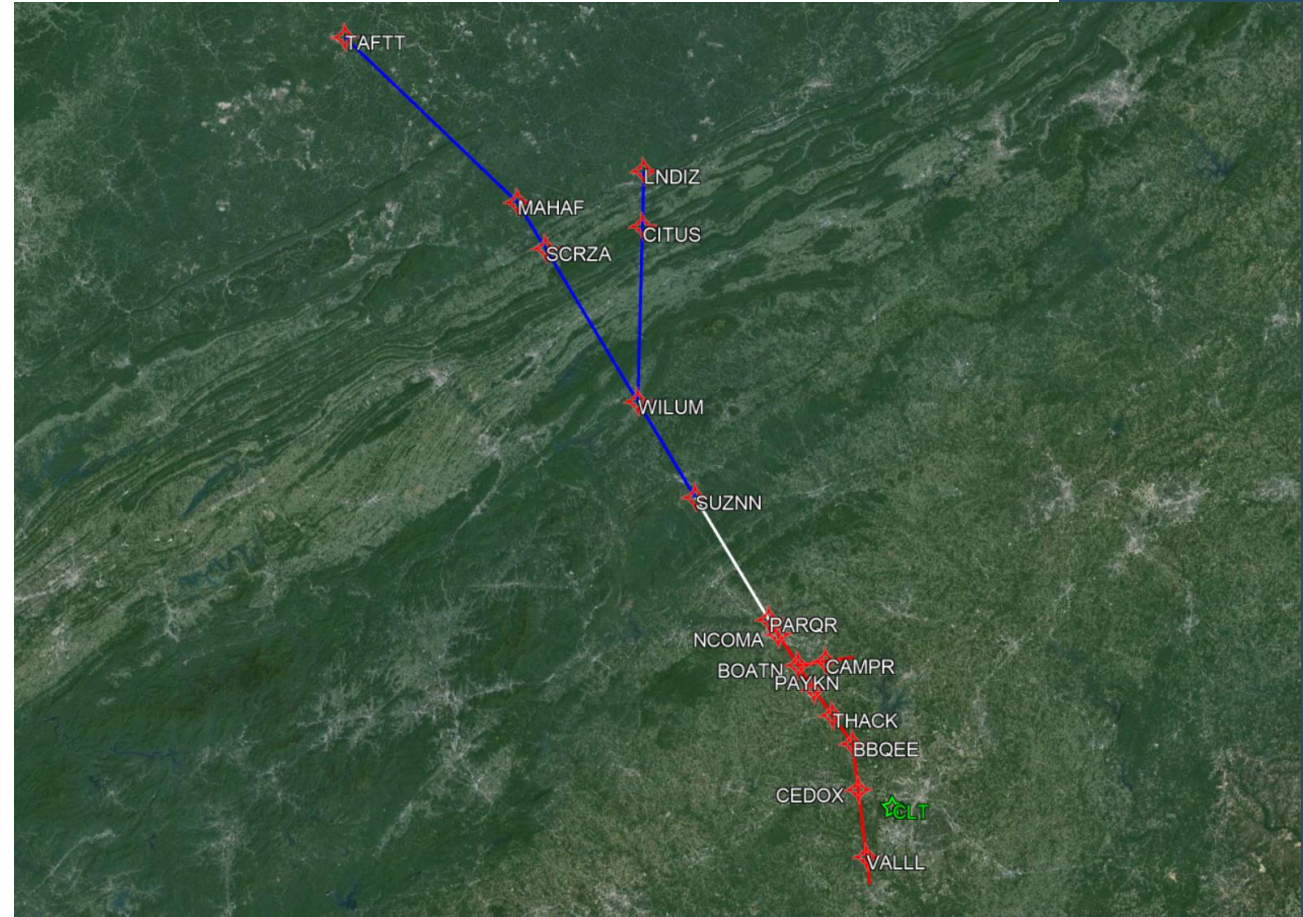


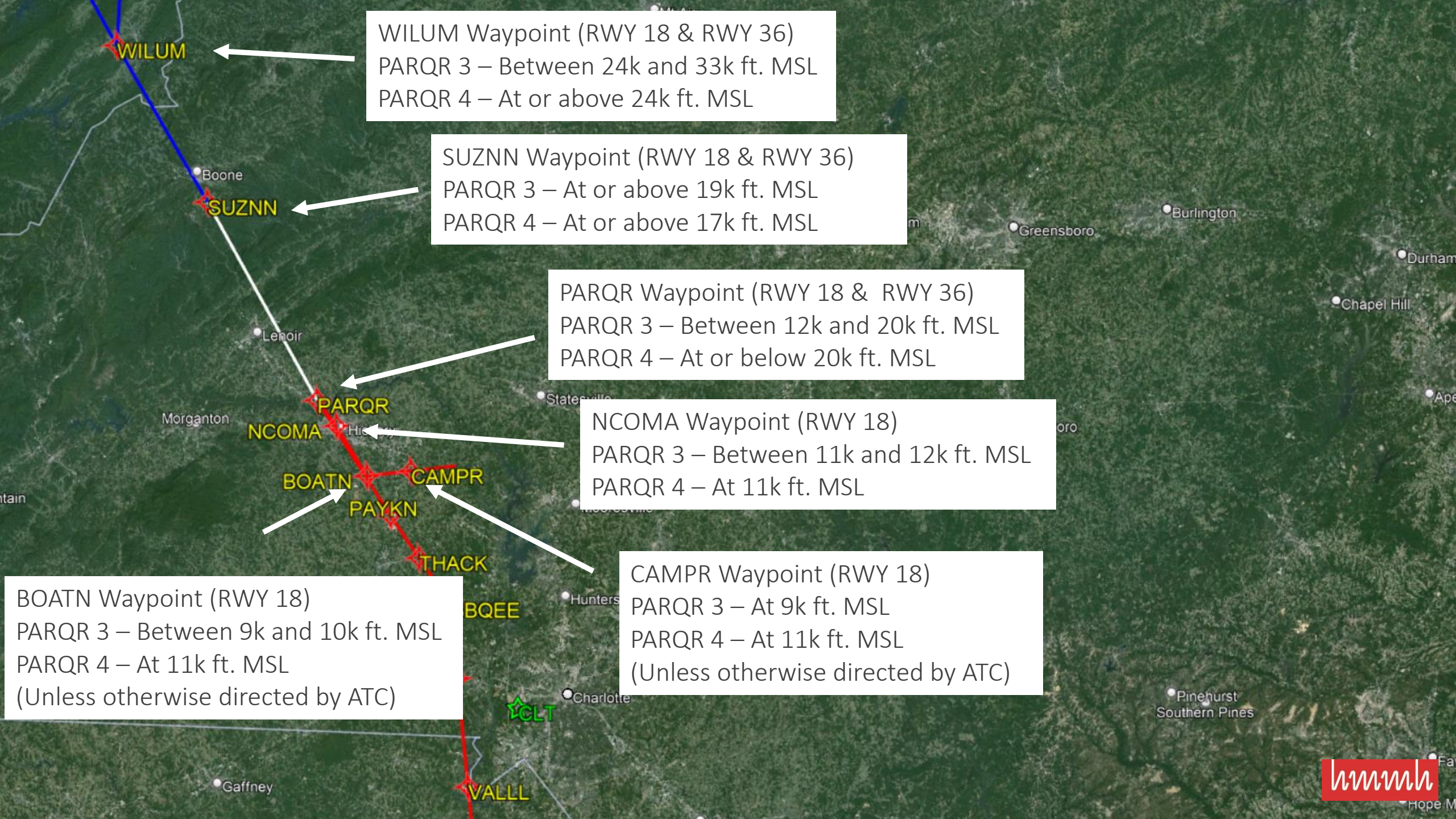
MLLET 3 Arrival
Removed Runway 23 Transition
No altitude changes

PARQR FOUR ARRIVAL (RNAV)

- Altitude changes:

- WILUM – changed altitude restriction to at or above 24k ft. MSL (lower altitude limit remains the same)
- SUZNN – lowered altitude restriction lower limit from 19k to 17k ft. MSL
- PARQR – changed altitude restriction from between 12k and 20k ft. MSL to at or below 20k ft. MSL
- NCOMA – changed altitude restriction from between 11k and 12k ft. MSL to at 11k ft. MSL
- BOATN – removed altitude restriction
- CAMPR – removed altitude restriction





WILUM Waypoint (RWY 18 & RWY 36)
PARQR 3 – Between 24k and 33k ft. MSL
PARQR 4 – At or above 24k ft. MSL

SUZNN Waypoint (RWY 18 & RWY 36)
PARQR 3 – At or above 19k ft. MSL
PARQR 4 – At or above 17k ft. MSL

PARQR Waypoint (RWY 18 & RWY 36)
PARQR 3 – Between 12k and 20k ft. MSL
PARQR 4 – At or below 20k ft. MSL

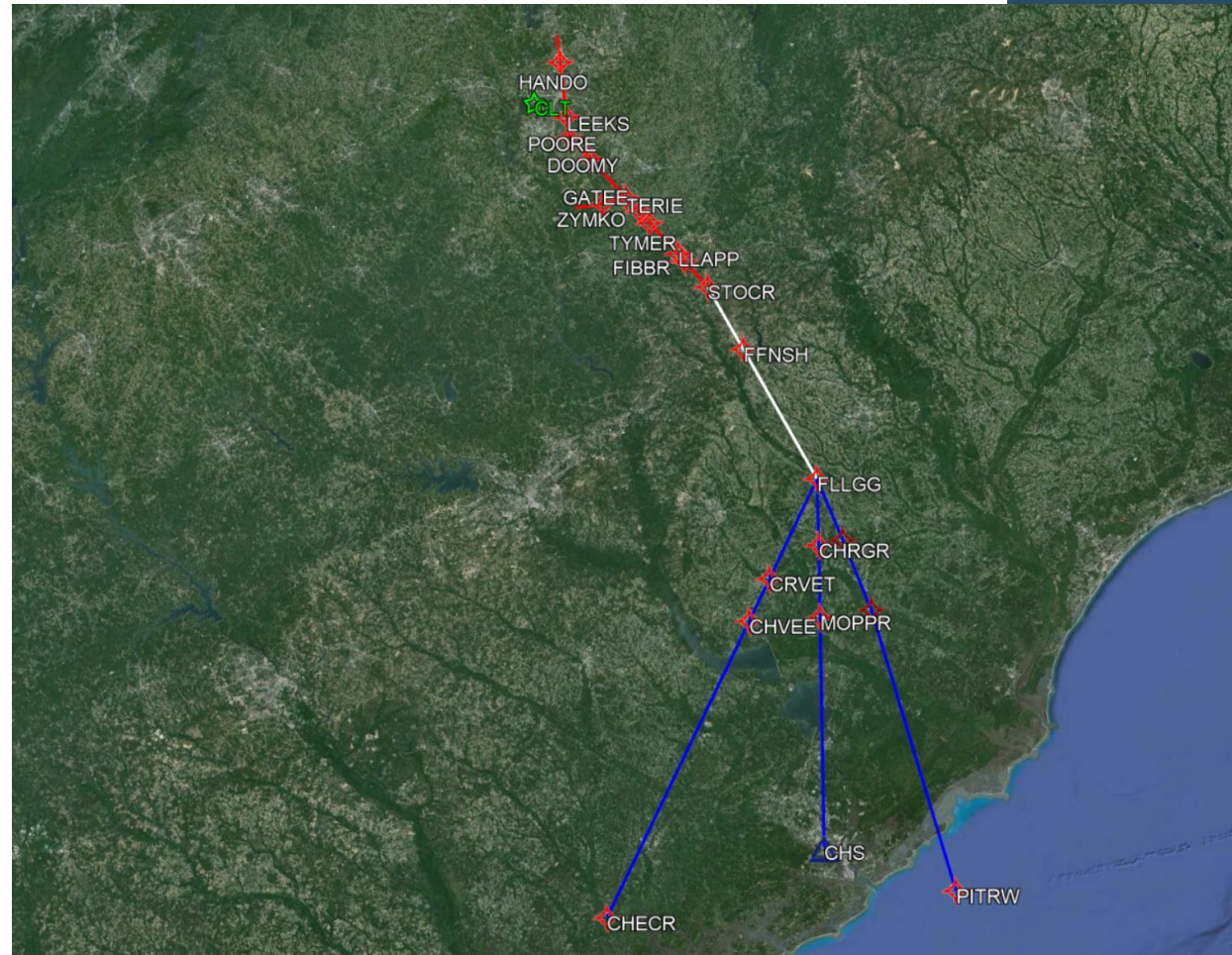
NCOMA Waypoint (RWY 18)
PARQR 3 – Between 11k and 12k ft. MSL
PARQR 4 – At 11k ft. MSL

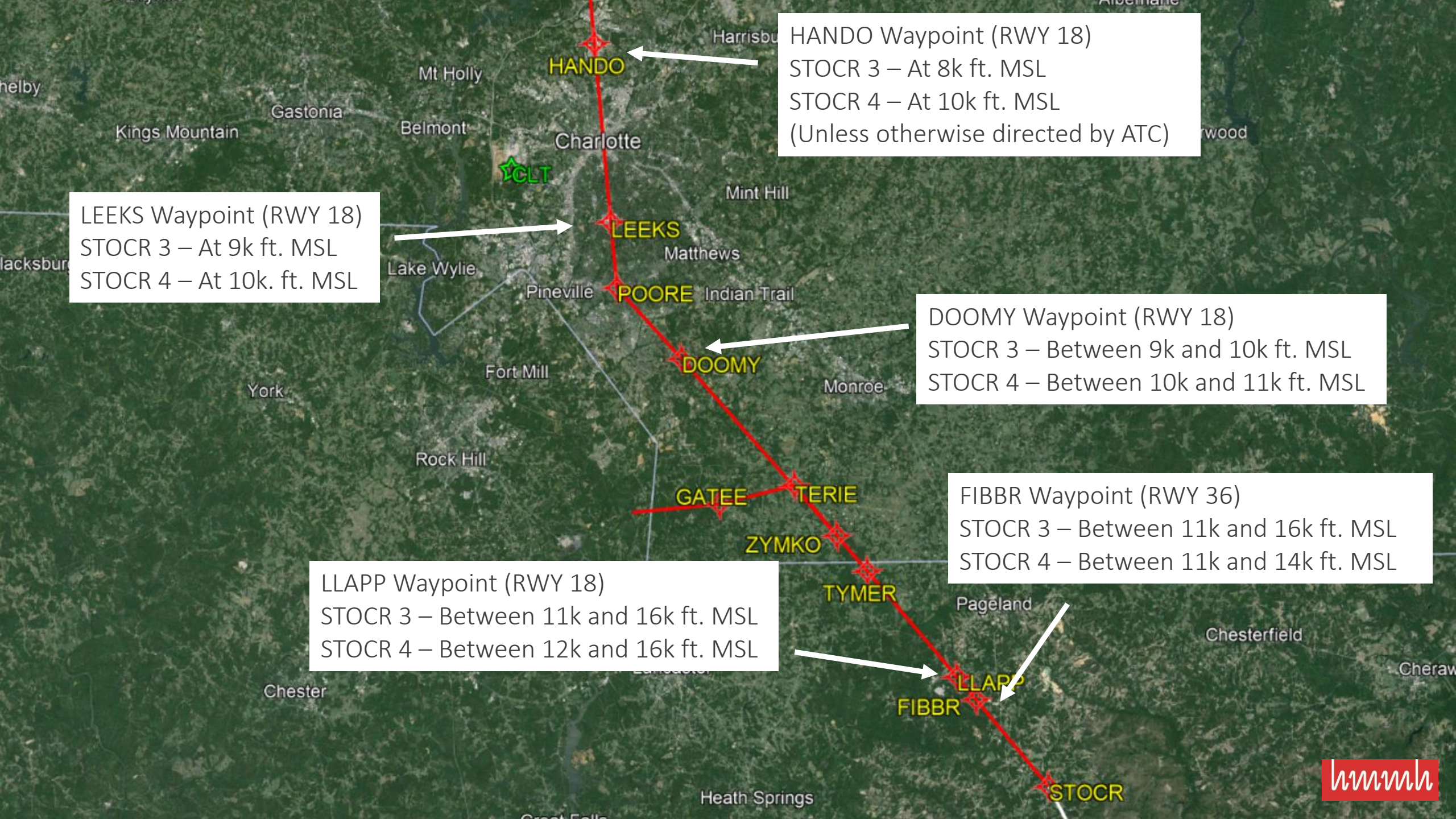
CAMPR Waypoint (RWY 18)
PARQR 3 – At 9k ft. MSL
PARQR 4 – At 11k ft. MSL
(Unless otherwise directed by ATC)

BOATN Waypoint (RWY 18)
PARQR 3 – Between 9k and 10k ft. MSL
PARQR 4 – At 11k ft. MSL
(Unless otherwise directed by ATC)

STOCR FOUR ARRIVAL (RNAV)

- Altitude changes:
 - HANDO – removed speed and altitude restriction
 - DOOMY – raised lower altitude limit from 9k to 10k ft. MSL
 - LLAPP – raised lower altitude limit from 11k to 12k ft. MSL
 - LEEKS – raised required altitude from 9k to 10k ft. MSL
 - FIBBR – lowered upper altitude limit from 16k to 14k ft. MSL





HANDO Waypoint (RWY 18)
STOCR 3 – At 8k ft. MSL
STOCR 4 – At 10k ft. MSL
(Unless otherwise directed by ATC)

LEEKES Waypoint (RWY 18)
STOCR 3 – At 9k ft. MSL
STOCR 4 – At 10k. ft. MSL

DOOMY Waypoint (RWY 18)
STOCR 3 – Between 9k and 10k ft. MSL
STOCR 4 – Between 10k and 11k ft. MSL

FIBBR Waypoint (RWY 36)
STOCR 3 – Between 11k and 16k ft. MSL
STOCR 4 – Between 11k and 14k ft. MSL

LLAPP Waypoint (RWY 18)
STOCR 3 – Between 11k and 16k ft. MSL
STOCR 4 – Between 12k and 16k ft. MSL