

**VATUSA MEMPHIS ARTCC AND VATUSA INDIANAPOLIS ARTCC
LETTER OF AGREEMENT**

EFFECTIVE: 28 February 2021

SUBJECT: INTERFACILITY COORDINATION

1. PURPOSE

This Letter of Agreement defines inter-facility responsibilities and communication procedures between VATUSA Memphis ARTCC (ZME) and VATUSA Indianapolis ARTCC (ZID). This agreement is supplemental to procedures contained within FAA Order 7110.65.

2. DISCLAIMER

Information contained herein is designed and specifically for use in a virtual air traffic control environment on the VATSIM Network. It is not applicable, nor should it be referenced for live operations in the National Airspace System (NAS).

3. CANCELLATION

This agreement cancels the VATUSA Memphis ARTCC and VATUSA Indianapolis ARTCC Letter of Agreement dated 1 February 2019.

4. RESPONSIBILITIES

Airspace delegation between ZME and ZID is depicted in Attachment C of this document.

5. PROCEDURES

- a. Each ARTCC will encourage pilots to file the preferred route/restrict aircraft in accordance with Attachment A and Attachment B of this document.
- b. Coordinate and resolve, in a practical manner that provides the smoothest experience to the pilot, all deviations from, and situations not addressed by, this document (e.g., non-standard sectorization, holding, pilots unable to accept LOA routes, aircraft above/below LOA altitudes, etc.).
- c. Ensure that all aircraft are at a 1X simulation rate prior to initiating handoff.
- d. Ensure that aircraft on the same route segment at the same altitude (or different altitudes, but same destination airport within ZME or ZID) are separated by not less than 10 nautical miles (steady or increasing) or other value specified herein unless greater MIT separation is requested real-time by ZME/ZID.
 - i. NOTE: Separation of less than 10 nautical miles is permitted provided the trailing aircraft is operating at a speed that will permit it to overtake the lead aircraft, and both are vertically separated.
- e. Ensure that handoff requests are made at least 10 nautical miles prior to the relevant airspace boundary unless otherwise specified in this document. Handoff requests may be initiated up to 50 nautical miles without prior coordination.
 - i. NOTE: Transfer of radio communications can be delayed no later than the lateral boundary but should occur when H/O is accepted.
- f. The receiving ARTCC has control for beacon code changes and turns when aircraft are within 20 nautical miles of the common ZME/ZID boundary. The maximum turn must not exceed 20 degrees off course and must not affect another sector without prior coordination.
- g. Ensure that all scratchpad entries are cleared except as defined in paragraph H below.
- h. Ensure the data block is formatted as follows:
 - i. Data blocks must reflect the aircraft's assigned altitude at the time of handoff.
 - ii. No scratchpad, except when specific control instructions that differ from LOA procedures have been issued.
 - iii. Scratchpad entries may include:

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1. Indicated speed restrictions (e.g., "S210", "S270+"). Clients only capable of 4-character scratchpads drop the trailing "0" if needed (e.g., "S27+")
2. "M" for Mach speed restrictions (e.g., "M81", "M78+")
3. "H" for heading assignments (e.g., "H230")
4. "H" and direction for deviations (e.g., "H15L" for 15 degrees left of track)

6. ATTACHMENTS

- a. Attachment A – Permanent Route/Altitude Restrictions from ZME to ZID and Airspace Delegation Diagram
- b. Attachment B – Permanent Route/Altitude Restrictions from ZID to ZME
- c. Attachment C - Airspace Delegation
- d. Attachment D - Sector Maps

/Richard Sill/

Air Traffic Manager
Memphis ARTCC, VATUSA

/David Stone/

Air Traffic Manager
Indianapolis ARTCC, VATUSA

/Paul Semeran/

South-Central Region
Manager VATUSA

/Cody Cochran/

Southeastern Region
Manager, VATUSA

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**ATTACHMENT A - PERMANENT ROUTES/ALTITUDE RESTRICTIONS
FROM ZME TO ZID**

Arrival Airports(s)	Qualifier		Route Via	Altitude (Cross common boundary, unless otherwise noted) ¹
KCVG	RNAV		...PXV.SARGO#	
	Non-RNAV	West of line CCT-MEI	...PXV.CVG	
		East of line CCT-MEI	BNA.J39.IIU.CVG	
KIND	RNAV BNA Deps		... TERGE.SMUKE# ... HAGAL GIIBS#	
	Non-RNAV		... PXV.RACYR#	
KSDF	RNAV		WANAV.MBELL#	AOB FL210
	Non-RNAV	N of Q68 S of Q68	ALL OTHERS INTO SDF	AOB FL330
			PXV.CHERI#	AOB FL330
			LVT.DARBY#	AOB FL330
KCMH	RNAV		PXV/IIU.GAILL#	
	Non-RNAV		... PXV/IIU.CVG	

¹Aircraft whose destination airport lies within 30NM of the common boundary must enter the receiving facility's airspace AOB 11000' unless otherwise noted in Attachment A and/or Attachment B. ZID control for descents. IAFDOF altitude coordination not required.

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**ATTACHMENT B - PERMANENT ROUTES/ALTITUDE RESTRICTIONS
FROM ZID TO ZME**

Arrival Airports(s)	Qualifier		Route Via	Altitude (Cross common boundary, unless otherwise noted) ¹
BNA ²	RNAV Entering ZME west of J39	Jets	GUMMA/LULOU.RYYMN#	AOB FL230
		Props ³	Direct to destination	AOB 13,000
	RNAV Entering ZME east of J39	Jets	FORKS/GROAT/LVT.PASLY#	AOB FL230
		Props ³	Direct to destination	AOB 16,000
	Non-RNAV		As filed	As noted above
MEM		RNAV	BNA/PXV/BWG.BLUZZ#	
		Non-RNAV	DYR/PXV/BWG.WLDER#	
HOP/CKV (and satellites)	via EVV sector			AOB 11,000

¹Aircraft whose destination airport lies within 30NM of the common boundary must enter the receiving facility's airspace AOB 11000' unless otherwise noted in Attachment A and/or Attachment B.

²ZME control for descents. IAFDOF altitude coordination not required.

³Includes arrivals into BNA satellites (MQY, MBT, JWN).

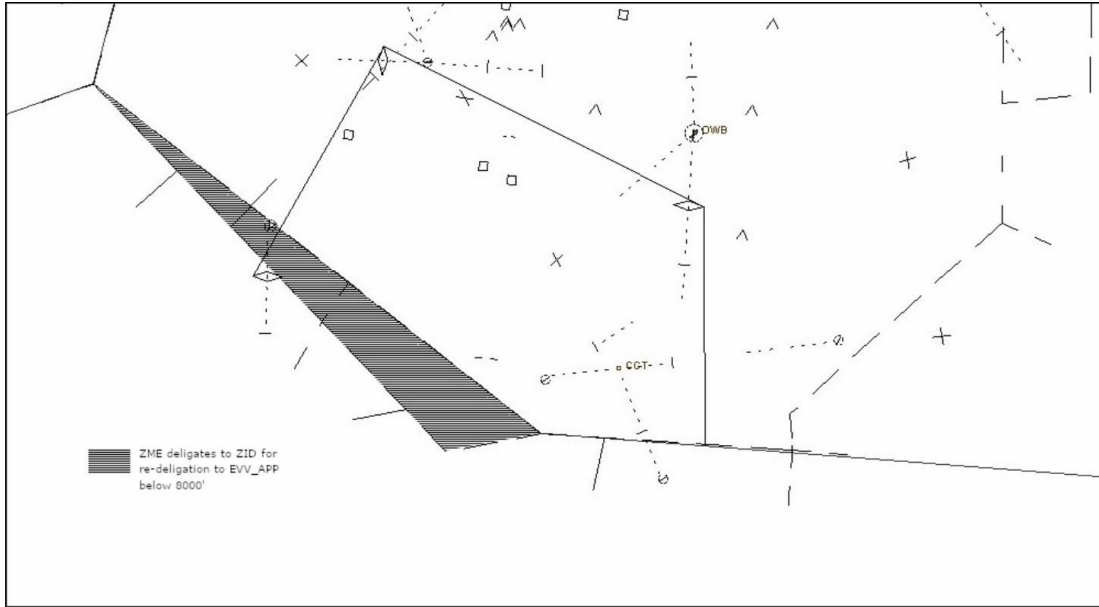
⁴ZID should reroute arrivals that have the MONAA, CONDR or HYTHR filed on to the appropriate STAR in the LOA table

EVV and Satellite Departures

Aircraft climbing to FL230 or requested, whichever is lower. IAFDOF altitude coordination not required.

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ATTACHMENT C - DELEGATION OF AIRSPACE



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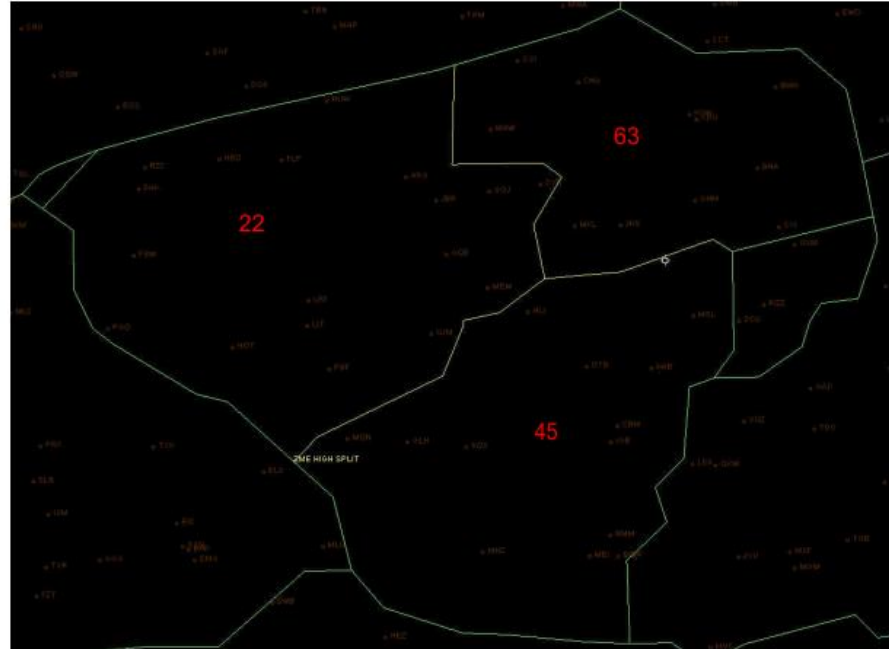
ATTACHMENT D - SECTOR MAPS

MEM High Splits

Controls FL240 to
FL340

- 63 – Northeast, Campbell
- 22 – Northwest, Razorback
- 45 – South, Vicksburg

22 is the combined High sector



MEM Low Splits

Controls up to
FL230

- 05 – Northeast, Paducah
- 13 – Southeast, Hamilton
- 04 – Northwest, Jonesboro
- 15 – Southwest, Helena

05 is the combined Low sector

East/West Split

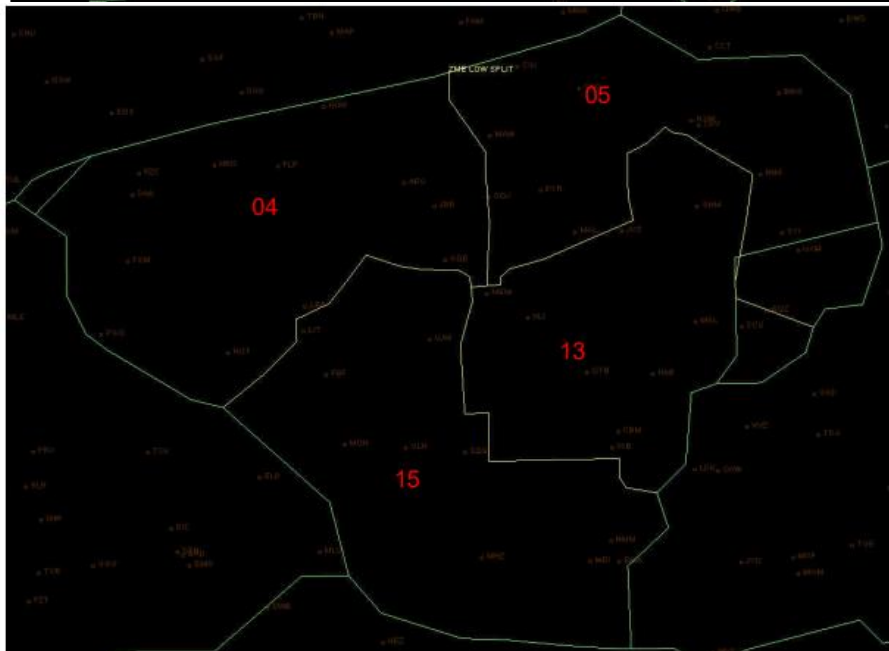
05 is the combined East split

13 is the combined West split

North South Split

05 is the combined North split

15 is the combined South split

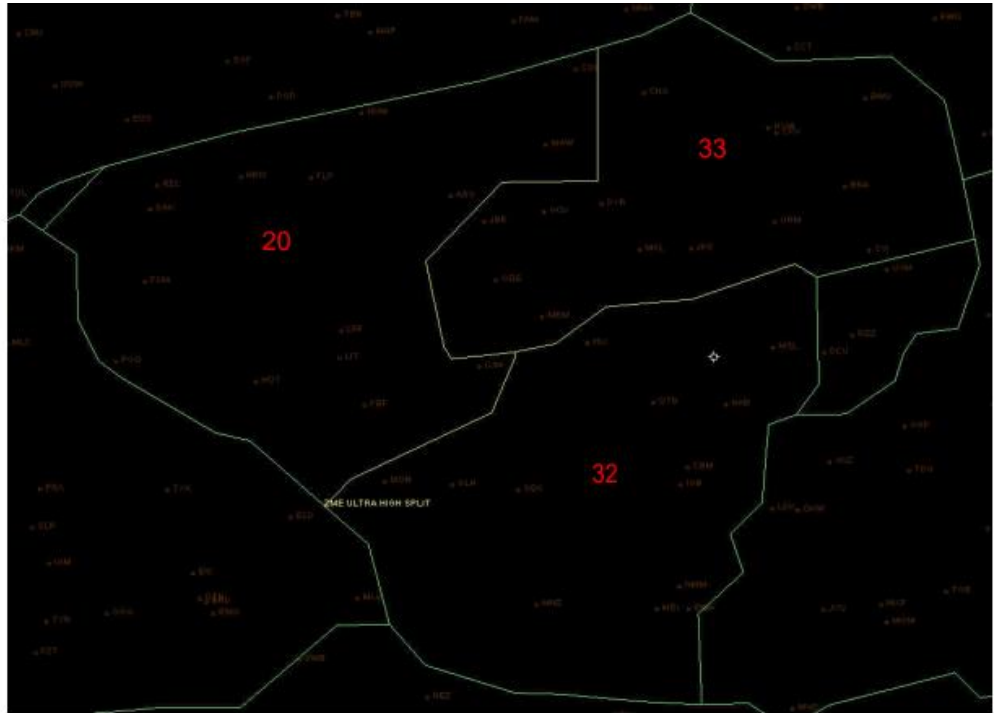


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MEM Ultra-High Splits
Controls FL350 and
above

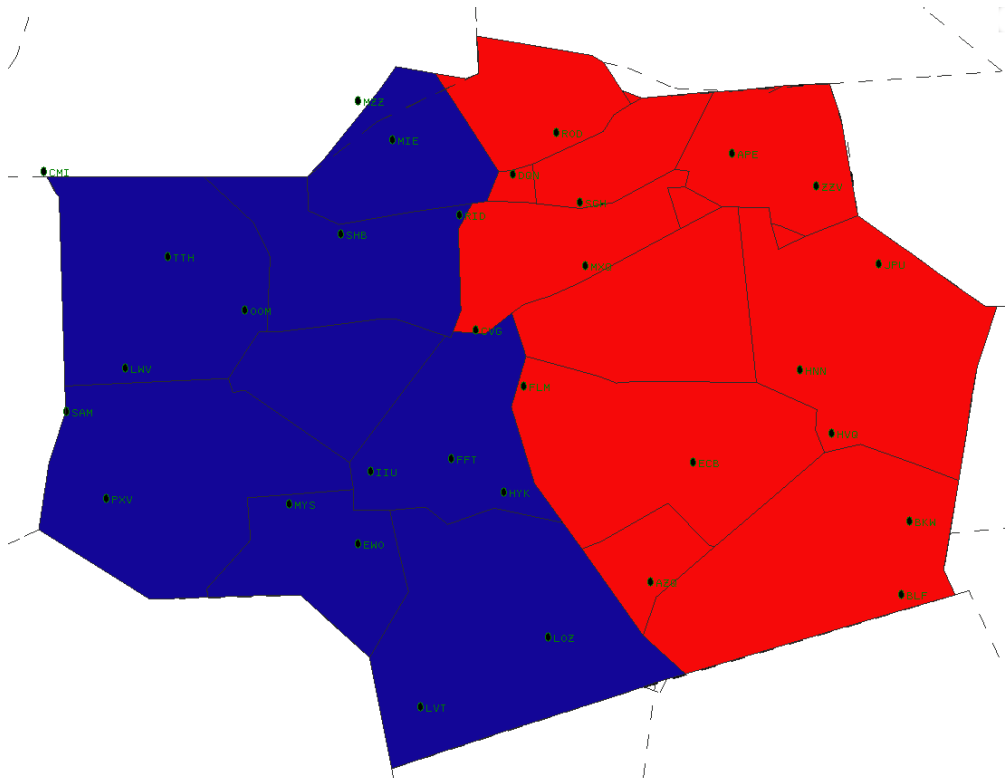
33 – Northeast, Elvis
20 – Northwest, Little Rock
32 – South, Tupelo

33 is the combined Ultra-High sector



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East/West Split



North/South Split

