# LETTER OF AGREEMENT

**between**

| vACC Germany | **and** | vACC Austria |
|---|---|---|
| **München ACC** | | **Wien ACC** |
| **Karlsruhe UAC** | | **LAUs** |

Effective: February 20, 2025 (AIRAC 2502)

## 1 General.

### 1.1 Purpose.

The purpose of this Letter of Agreement is to define the coordination to be applied between München ACC, Karlsruhe UAC, Wien ACC and LAUs when providing ATS to air traffic (IFR/VFR) on the VATSIM network.

All information and procedures described in this Letter of Agreement shall not be used for real world purposes.

### 1.2 Operational Status.

All operational significant information and procedures contained in this Letter of Agreement shall be distributed to all concerned controllers by appropriate means. This Letter of Agreement itself constitutes public information.

### 1.3 Validity.

This Letter of Agreement becomes effective on February 20, 2025 (AIRAC 2502) and supersedes previous version, dated April 20, 2023 (AIRAC 2304), of the Letter of Agreement between München ACC/Karlsruhe UAC and Wien ACC/LAUs.

### 1.4 Revision control.

| Revision | Date | Author |
|---|---|---|
| 1.X | 30.12.2021 | Various authors |
| 2.0 | 11.08.2022 | JV, SG, TT, JE |
| 3.0 | 20.04.2023 | JV, JE |
| 4.0 | 20.02.2025 | JV, AL, JE |

# 2 Areas of Responsibility and Sectorization.

## 2.1 Areas of Responsibility.

The lateral and vertical limits of the respective areas of responsibility are as follows:

2.1.1 München ACC.

Lateral limits: München FIR and Rhein UIR as described in AIP Germany
Vertical limits: GND – FL245 (München FIR)
FL245 – FL315 (Rhein UIR)

2.1.2 Rhein UAC.

Lateral limits: Rhein UIR as described in AIP Germany
Vertical limits: FL315 – FL660

2.1.3 Wien ACC and LAUs.

Lateral limits: Wien FIR as described in AIP Austria
Vertical limits: GND – FL660

## 2.2 Sectorization.

Sector chart EDMM: vats.im/sectors-edmm
Sector chart LOVV: vats.im/sectors-lovv

For detailed coordinates refer to GNG, AIP Germany ENR 2.1 or AIP Austria ENR 2.2.

## 2.3 Delegation of the Responsibility for the Provision of ATS.

2.3.1 Delegation of ATS from Wien ACC/LAUs to München ACC.

2.3.1.1 ROCKY Line.

Generally, the airspace west of ROCKY Line (see Appendix C) is permanently delegated from Wien FIR to München FIR, except the AoR Innsbruck.

2.3.2 Delegation of ATS from München ACC to Wien ACC/LAUs.

2.3.2.1 ROCKY Line.

Generally, the airspace east of ROCKY Line (see Appendix C) is permanently delegated from München FIR to Wien FIR.

2.3.2.2 Königssee Area.

The airspace overhead Königssee Area (see Appendix C) is permanently delegated from München FIR to Wien FIR.

Vertical limits: GND – FL125

# 3 Procedures for Coordination.

## 3.1 Definitions.

A release is an authorization for the accepting ATS unit to climb, descend and/or turn (by no more than 45°) a specific aircraft before the transfer of control point. The transferring ATS unit remains responsible for separation within its Area of Responsibility unless otherwise agreed.

Wherever VATSIM callsigns are used to describe the terms of a certain procedure, this procedure is also applicable for all higher stations that take over the responsibilities of said station. E.g., procedures for an APP station are also applicable for the respective CTR station fulfilling the duties of said APP station.

The use of VATSIM callsigns in this document includes any variation of said callsign. E.g., any procedure applicable for EDMM_CTR may also be used by EDMM_X_CTR or EDUU_X_CTR.

## 3.2 Abbreviations.

| | |
|---|---|
| ACC | Area Control Center |
| AD | Aerodrome |
| ADEP | Aerodrome of Departure |
| ADES | Aerodrome of Destination |
| AoR | Area of Responsibility |
| APP | Approach Facility |
| ATS | Air Traffic Services |
| COP | Coordination Point |
| CTR | Center/Enroute Facility |
| FIR | Flight Information Region |
| FIS | Flight Information Service |
| FL | Flight Level |
| GND | Ground |
| GNG | Global Nav Generator (gng.aero-nav.com) |
| kts | Knots |
| LAU | Local Approach Unit |
| LoA | Letter of Agreement |
| LoR | Line of Responsibility |
| MIT | Miles in Trail |
| NM | Nautical Mile |
| NVFR | Night Visual Flight Rules |
| RFL | Requested Flight Level |
| Rlsd | Released |
| SSR | Secondary Surveillance Radar |
| TMA | Terminal Maneuvering Area |
| UAC | Upper Area Control Center |
| VFR | Visual Flight Rules |
| WEF | With Effect From |

## 3.3 General Conditions.

Coordination of flights shall take place via the agreed coordination points (COP).

Coordinated flights shall be handed off via a valid COP. Any deviation shall be coordinated verbally, by text or by Euroscope inter-sector coordination.

Traffic shall be handed off at the levels, defined in the regulations below. If a specified level restriction cannot be met due to a lower RFL, traffic shall be handed off at RFL, if this does not cause a conflict with any other traffic. Otherwise, traffic shall be coordinated.

If a traffic situation is not covered herein or closely matching a covered one, individual coordination between the concerned sectors shall be made.

After Transfer of communications, traffic is NOT released for climb, descent or turns until Transfer of control or otherwise specified in this Letter of Agreement.

↓FLxxx / ↑FLxxx means „descending / climbing to a specified FL“, without any further restriction. Any required crossing/speed restriction shall be added separately. At level means that the aircraft shall be in level flight on a published flight level and in accordance with east/ west odd/even policy.

FLxxxA means “climbing and above specified FL”, FLxxxB means “descending and below specified FL”.

### 3.4 IFR flights from München ACC to Wien ACC/LAUs.

3.4.1 Arrivals.

| Arrival AD | COP | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| LOWI via RTT | BADVI TULSI | ↓FL130 | FL160B | TEG | APP-WI |
| LOWI via ELMEM | MADEB XEBIX | ↓FL150 | | ZUG | |
| LOWL | AKIMA DEXIT | FL160 | Rlsd↔ and ↓FL110 | EGG | APP-WL |
| | INPUL | FL270 | | TRU | ACC-B |
| LOWS | TITIG MEBEK | ↓8000 ft | QNH EDDM | DMSL | APP-WS |
| | TRAUN | | | TRU | |
| | UNKEN | FL130 | (*1) | TRU | |
| | BIBAG | FL100 | BIBAG at FL (*2) | EGG | |

(*1) Note: 10NM west of UNKEN at FL. Passing ROCKY Line at FL120B will be assured by LOWS_APP.

(*2) Note: Released for descent to lowest 7000 ft and turns after passing BIBAG.

3.4.2 Departures.

| Departure AD | COP | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| EDDM | AKIMA | ↑FL290 | ROCKY Line FL170A | EGG | ACC-N |
| | MEBEK | ↑FL190 | ROCKY Line FL100A | DMSH | ACC-B |
| | RADIZ LATLO MODSA | ↑FL270 | ROCKY Line FL180A | TRU | ACC-W |
| EDMA EDMO | RADIZ LATLO MODSA | ↑FL270 | ROCKY Line FL180A | | |
| EDNY EDJA LSZR | BIRGI UMVEG GEDSO | FL310 | | TEG | ACC-W |
| EDDN | LAMSI | FL310 | | EGG | ACC-N |

### 3.5 IFR flights from Karlsruhe UAC to Wien ACC.

3.5.1 Arrivals.

| Arrival AD | AoR Boundary | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| LOWG, LOWK, LOXZ, LJLJ, LIPQ | ACC Wien W | FL330 | | ALP/CHI | ACC-W |
| LDZA, LDRI, LJMB, LIP* (except LIPQ), LDPL, LDLO | | FL350 | | | |
| LOWG, LOWK, LOXZ | ACC Wien B | FL330 | | CHI | ACC-B |
| LDZA, LJMB, LDPL, LDLO | | FL350 | | | |
| LOWG, LOWK, LOXZ | ACC Wien N | FL330 | | DON | ACC-N |
| LOWW | ACC Wien N | FL330 | | | |
| | ACC Wien B | | | CHI | ACC-B |
| | ACC Wien W | FL350 | | ALP/CHI | ACC-W |

3.5.2 Departures.

| Departure AD | AoR Boundary | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| LSZH, LSZS, LSMD | ACC Wien W | Min. ↑FL330 | FL320A | ALP | ACC-W |
| | | Any higher FL after REV | At FL | | |

### 3.6 IFR flights from Wien ACC/LAUs to München ACC.

3.6.1 Arrivals.

| Arrival AD | COP | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| EDDM | AMADI | FL130 | AMADI at FL (*1) | ACC-B | DMSH |
| | REDBU | FL140 | REDBU at FL (*1) | | |
| EDMA EDMO ETSI | TRAUN TITIG | ↓FL160 | AoR boundary FL190B | | DMSH TRU |
| EDDN | SIMBA SUBEN | FL300 | | ACC-N ACC-B | EGG TRU |
| EDDS | TITIG KIRDI | FL300 | Rlsd ↓FL280 | ACC-B | TRU |
| EDNY EDJA LSZR | TRAUN | FL300 | | | |
| | ERKIR | FL260 | | ACC-W | TEG |
| LSZS | GEDSO | FL300 | | ACC-W | TEG |
| Praha FIR (LK*) | DEXIT LAMSI | FL300 | | ACC-N | EGG |

(*1) Note: If traffic permits and with approval of EDDM_APP entry condition may be altered to “descending, FL190 or below at COP”. ACC Wien shall assure separation between involved flights until passing NAPSA.

3.6.2 Departures.

| Departure AD | COP | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| LOWI | ALL SIDs | ↑FL160 | | APP-WI | STA/ZUG |
| LOWL | RENKA | ↑FL160 | | APP-WL | EGG |
| | LAMSI | ↑FL160 | | | |
| | SUBEN | ↑FL140 | Rlsd ↑FL160 20NM from SUBEN | | |
| LOWS | TRAUN | ↑FL120 | | APP-WS | TRU |
| | SIMBA | | | | EGG |
| | TITIG NAPSA | ↑FL90 | Rlsd ↑FL120 | | DMSL |

### 3.7 IFR flights from Wien ACC to Karlsruhe UAC.

3.7.1 Arrivals.

| Arrival AD | AoR Boundary | Level Allocation | Special Conditions | FROM Sector | TO Sector |
|---|---|---|---|---|---|
| EDDS, LSMD, LSZS | ACC Wien W | FL340 | | ACC-W | CHI |
| EDDR, EDFM, EDSB | ACC Wien B | FL340 | | ACC-B | CHI |
| LSZH | ACC Wien B<br>ACC Wien W | FL360 | | ACC-B<br>ACC-W | |
| LKPR | ACC Wien B | FL320 | | ACC-B | DON |

### 3.8 VFR flights from München FIR to Wien FIR.

For controlled VFR flights and NVFR flights above 2500 feet GND coordination, transfer of control and transfer of communication shall take place as for IFR flights. Uncontrolled VFR flights shall be transferred to the appropriate sector if in radio contact. If online, LOVV_I_CTR (Wien Information), 124.400, shall be the primary sector for uncontrolled VFR flights.

### 3.9 VFR flights from Wien FIR to München FIR.

For controlled VFR flights and NVFR flights above 2500 feet GND coordination, transfer of control and transfer of communication shall take place as for IFR flights. Uncontrolled VFR flights shall be transferred to the appropriate sector if in radio contact. If online, EDXX_MM_CTR (Langen Information), 120.650, shall be the primary sector for uncontrolled VFR flights.

# 4 Special Procedures.

## 4.1 Releases from Wien ACC to München ACC and Karlsruhe UAC.

4.1.1 München ACC / Karlsruhe UAC may clear flights:

- from/abeam SBG VOR direct to any position within AoR München.
- direct STEIN / SASAL / TOVKA / MAREG / ABLOM entering via LOVV-N sectors.

4.1.2 München ACC / Karlsruhe UAC may turn flights:

- planned via SUBEN / RENKA / DEXIT 10 NM east of ROCKY Line.

## 4.2 Releases from München ACC and Karlsruhe UAC to Wien ACC.

4.2.1 Wien ACC may clear flights:

- ADES EDDS planned via TITIG / KIRDI with RFL FL200A direct EBEDA.

4.2.2 Wien ACC may turn flights:

- planned via L725 to the right when passing UNKEN.
- planned via LATLO / RADIZ / MODSA after passing L725.

## 4.3 Traffic from München ACC and Karlsruhe UAC / Wien ACC to Wien ACC / München ACC and Karlsruhe UAC.

4.3.1 Traffic may generally be cleared by both parties to the next published waypoint after the COP, provided that the original next sector of the accepting unit remains the same.

Note 1: Arrivals EDDM, EDDF, EDM* and LOW* are exempted from this procedure.

Note 2: After coordination between both parties, specific flights or all flights in general can be suspended from this procedure for a limited period of time.

4.3.2 Additional to the procedure described in 4.3.1, the following waypoints may be cleared without individual coordination provided flight is entering the accepting sector above FL320:

LOVV → EDUU: RUDNO, MAMOR, AKINI, KPT
EDUU → LOVV: MASUR, SASAL, STEIN, GOTAR, NEMEK, GIMIX

Note 1: Arrivals EDDF and LOW* are exempted from this procedure.

Note 2: After coordination between both parties, specific flights or all flights in general can be suspended from this procedure for a limited period of time.

## 4.4 LOWI Procedures.

4.4.1 Release Line Innsbruck.

APP Innsbruck may turn and descent flights ADES LOWI passing the Release Line Innsbruck. Turns greater than 45° are permitted, as long as traffic remains south of Release Line Innsbruck and is below FL165.
Separation for arriving and departing traffic south of Release Line Innsbruck shall be provided by APP Innsbruck.
APP Innsbruck may use a 3 NM surveillance separation minimum south of Release Line Innsbruck, as long as all aircraft concerned are on the frequency of APP Innsbruck.

4.4.2 LAU Innsbruck may clear LOWI Departures:

- direct KOGOL.
- via KOGOL direct KONIN, provided the flight path remains between IRBIR and LUXEK.
- with ADES EDDM direct DISUN.
- via KPT direct KPT.

4.4.3 München ACC may clear LOWI Arrivals:

- planned via ELMEM direct ELMEM and arrivals planned via RTT direct RTT.

4.4.4 LOWI High Traffic Procedures.

If HIRO procedures shall be applied, this shall be verbally coordinated with all involved ACC München sectors by APP Innsbruck. During HIRO, APP Innsbruck shall inform adjacent ACC München sectors about RWY in use and any planned change of RWY direction.

Traffic shall be handed off with 15 MIT on average, higher MIT is to be expected. A general maximum speed on handover may be requested by APP Innsbruck.

Full definition of LOWI HIRO Procedures can be found here: https://vats.im/lowi-hiro

4.4.4.1 Runway 26 in use.

Runway “26C” shall be selected in Euroscope, to get the desired system behavior.
Arrivals via RTT shall be handed off at FL160 to LOWI_E_APP.
Arrivals via ELMEM shall be handed off at FL160 to LOWI_APP.

4.4.4.2 Runway 08 in use.

Runway “08C” shall be selected in Euroscope, to get the desired system behavior.
Arrivals via RTT shall be handed off at FL160 to LOWI_APP.
Arrivals via ELMEM shall be coordinated individually, usually they are not accepted by APP Innsbruck and shall be rerouted via RTT.

## 4.5 LOWS Procedures.

4.5.1 Release Line Salzburg.

APP Salzburg may turn and descent flights ADES LOWS passing the Release Line Salzburg.

4.5.2 LAU Salzburg may clear flights:

- via TRAUN direct to ATLOL.
- Via SIMBA direct to NENUM / GONBA / LALIN.

4.5.3 München APP/ACC may clear Arrivals LOWS:

- planned via L725 from any position south of L725 direct SBG VOR.

## 4.6 EDDM Procedures.

4.6.1 Release Line München.

After coordination with **APP Salzburg**, APP München may descent and turn flights ADES EDDM EDMA EDMO northwest of Release Line München between FL95 and FL125. APP München shall be responsible for separation of these flights to all concerned traffic within TMA LOWS.

4.6.2 Arrivals/Departures EDDM.

Arrivals EDDM EDMA EDMO via AMADI, REDBU and SBG VOR are released by LOVVB1 sector to APP München for turn and descent when passing these COPs. APP München shall be responsible for separation of these flights.

Minima for silent transfer of control between arrivals EDDM EDMA EDMO are reduced to 7 NM (see section 5.2).

München APP shall ensure separation between IFR flights

- Departing EDDM on KIRDI SID, arriving via NAPSA, arrivals LOWS via TITIG.

4.6.2.1 KIRDI Window.

Within the KIRDI Window (see Appendix C), DEPs EDDM via KIRDI are released for right turn and for climb to FL230 by München ACC and APP to ACC Wien.

4.6.3 München APP may clear flight planned via BADIT and TITIG direct SBG VOR.

# 5 Transfer of Control and Transfer of Communication.

## 5.1 Transfer of Control.

Transfer of Control shall take place at the AoR boundary.

If the downstream sector in EuroScope is set to >.break<, the procedure 5.4 is suspended and transfer of communication can only take place after the downstream sector has assumed the flight via the appropriate function of the radar client.

If it becomes necessary to reduce or suspend transfers, a 5-minute prior notification is required.

When transfers are suspended, the hand-off procedure (5.4) is suspended.

Flights shall not be vectored closer than 3 NM to the respective AoR boundary, except:

- In the section along airway Y107 at FL165 and above, München ACC may vector aircraft along the ROCKY Line. ACC Wien shall maintain 6 NM separation to the ROCKY Line in the section described above.

## 5.2 Silent transfer of control.

The following values for silent transfer of control apply:

- If preceding aircraft is faster (ADES EDDM EDMA EDMO): 7 NM
- If preceding aircraft is faster: 10 NM
- If succeeding aircraft is faster by 20kts / M0.05 or less: 20 NM
- If succeeding aircraft is faster by 40kts / M0.1 or less: 30 NM

## 5.3 Transfer of Communications.

Transfer of Communications shall take place no later than Transfer of Control.

## 5.4 Hand-Off procedure.

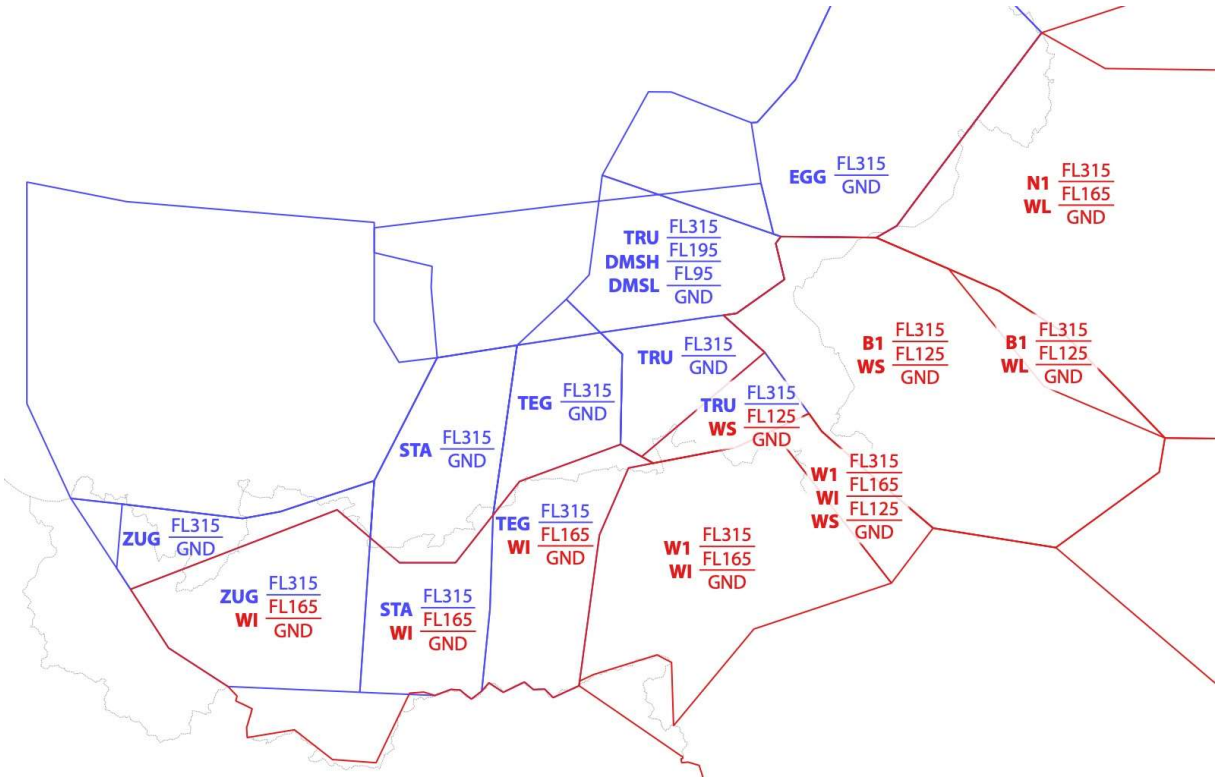
Unless otherwise agreed between stations online, the following hand-off procedure shall apply:

1. The upstream sector sends the aircraft to the frequency of the downstream sector by voice or text.
2. The upstream sector initiates a transfer via the appropriate function of the radar client.
3. Upon initial call the downstream sector assumes the flight via the appropriate function of the radar client.

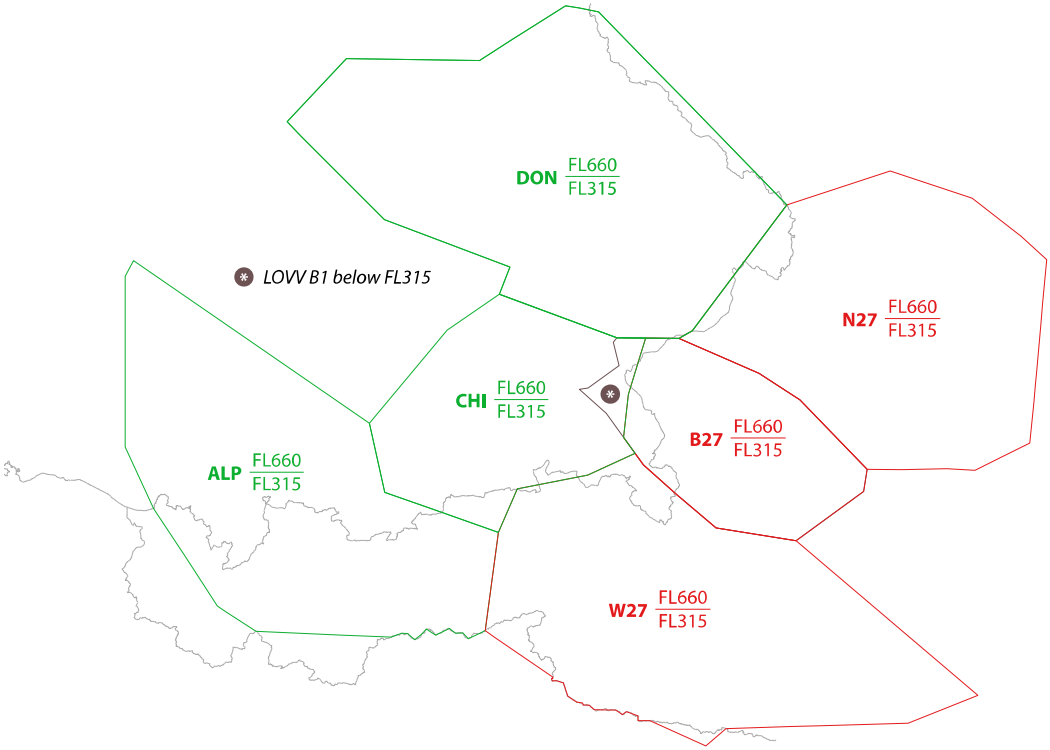
## 5.5 SSR Code Assignment.

Both ATS units shall transfer flights on verified discrete SSR codes. Any change of SSR code by the accepting ATS unit may only take place after the transfer of control point.

# Appendix A
## Area of Common Interest (ACI) below FL315




# Appendix B
## Area of Common Interest (ACI) above FL315



# Appendix C
## Lines depiction