



VIRTUAL AIR TRAFFIC SIMULATION NETWORK
UNITED STATES DIVISION

Letter of
Agreement
ZAB:MMZT



AIR ROUTE TRAFFIC CONTROL CENTER
ALBUQUERQUE, NM & MAZATLAN AREA
CONTROL CENTER, MX

Effective Date:
2022-09-10

SUBJ: Albuquerque ARTCC and Mazatlan ACC Letter of Agreement

This order was established to provide Standard Operating Procedures and Standard Coordination Procedures for Albuquerque ARTCC (vZAB) and Mazatlan ACC (vMMZT) and is supplementary to FAA Order 7110.65, Air Traffic Control, all applicable ICAO documents, Mexico Air Traffic Regulations, and other appropriate Air Traffic Control manuals.

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CHAPTER 1. INTRODUCTION

SECTION 1. GENERAL

1.1.1 DISCLAIMER.

The information contained herein is designed and specifically for use in a virtual air traffic control environment and is not applicable in, nor should it be referenced for, live operations in the National Airspace System (NAS) or Mexican Airspace.

1.1.2 RESPONSIBILITY.

This LOA is the responsibility of both the vZAB ATM and VATMEX DO to maintain and update as necessary.

1.1.3 DISTRIBUTION.

This manual is intended to be used by every controller and visitor at both vZAB and VATMEX.

1.1.4 WHAT THIS ORDER CANCELS.

No prior LOA to cancel.

1.1.5 EFFECTIVE DATE.

This change is effective 2022-09-10

1.1.6 DEVIATIONS FROM PROCEDURES.

If an operational advantage or an increase in system efficiency can be achieved and an equivalent degree of safety maintained, deviations from the procedures established in this Order may be affected after coordination is accomplished completely defining the responsibilities in each case as follows:

- a.** On an individual aircraft basis, after coordination between controllers involved;
- b.** On other than an individual aircraft basis, after coordination between TMUs/CICs involved, these deviations must specify a time period for cancellation.

SECTION 2. PROCEDURES

2.2.1 INTERFACILITY PROCEDURES.

- a. Transfer of radar identification should be initiated no less than 15NM from the receiving sector's lateral boundary.
 - a. Traffic entering ZAB or MMZT airspace from the other will keep the same squawk code.
 - b. Non-automated (manual) radar handoffs shall be accomplished prior to the common boundary using the handoff points shown on Attachments A and B or any other points depicted on the radar displays in both Mazatlan ACC and Albuquerque ARTCC using the following format:
 - i. State Facility ID Calling (i.e. Mazatlan Sector 1)
 - ii. State Your Facility ID (i.e. Albuquerque Sector 63)
 - iii. State Intent/Request (i.e. Manual Hand-Off)
 - iv. (Await Response from Receiving Sector)
 - v. State Intent/Request again for clarification (i.e. Manual Hand-Off)
 - vi. State Distance from known NAVAID/Coordination Fix (i.e. 5 NM North of OLS VOR)
 - vii. State Aircraft Callsign and Squawk Code (i.e. UAL451 Squawking 4231)
 - viii. State Altitude (state descending or climbing if appropriate) (i.e. FL240 Descending 10000)
 - ix. State Destination (i.e. Enroute to MMMX)
 - x. Receiving controller will respond accordingly (RADAR CONTACT/NEGATIVE RADAR CONTACT)
 - xi. End coordination with operating initials from each controller involved.
- b. Aircraft departing within 20NM of the common boundary and entering the receiving facility's airspace must be coordinated prior to departure.
- c. Controllers must coordinate any route, altitude, speed, or discrete code changes that are different from those listed on the flight plan if the aircraft is within 20 NM (Nautical Miles) of the ZHU / MMZT common boundary.

- d. Flights originating less than 5 minutes flying time from the adjacent ARTCC / ACC boundary must be coordinated by the transferring ARTCC / ACC.
- e. The transferring facility/agency must obtain approval for incorrect altitudes for direction of flight, block altitudes, and Negative RVSM flights prior to transfer of control.
- f. Transfer of control shall occur at the common control boundary except each facility may assume control for transponder code changes and turns of no more than 20 degrees when the aircraft are 20nm or less from the common control boundary.
- g. Communications transfer must be completed prior to the ZAB ARTCC / MMZT ACC Boundary, unless coordinated.
- h. 10 NM (Nautical Mile) In-Trail Spacing is required between aircraft on the same route/course unless another form of approved separation is being applied or if coordinated.
- i. The transferring controller must apply merging target procedures before transferring communication when targets appear likely to merge in the transferring controller's airspace.

2.2.2 GIM-S SPEED ADVISORIES.

After the completion of a hand-off and frequency change, the receiving controller has control for speeds + or – .03 Mach or + or – 20 knots within 20 miles from the common sector boundary.

2.2.3 DEFINITIONS.

- a. Tucson Area: KTUS, KDMA, KRYN

2.2.4 REFERENCE LOCATIONS.

- a. The following are designated reference points:

- | | |
|---------------|---------------------------|
| 1. TRI-CENTER | 31.33° N, 108.5° W |
| | Boundary of MMZT/MMTY/ZAB |

SECTION 3. COORDINATION

2.3.1 POINT OUT ALTITUDE COORDINATION.

- a.** A controller making an intra-facility point-out may omit altitude information, as long as the data block accurately reflects this information.
- b.** When utilizing automated point-outs, verbal coordination must be utilized for IAFDOF and non-RVSM aircraft.

2.3.2 MUTUAL WEATHER DEVIATIONS.

- a.** Upon coordination of Mutual Weather Deviations, and after a radar handoff and frequency change to the receiving controller have been completed, the transferring controller releases control for:
 - 1.** Turns not to exceed 30 degrees;
 - 2.** Aircraft to be cleared on course; and
 - 3.** Fourth line updates without further coordination.
- b.** Mutual weather deviation agreements remain in effect for sector airspace(s) following the combining or de-combining of sectors.
- c.** Coordination must be accomplished to discontinue mutual weather deviations.

SECTION 4. STANDARD SECTORIZATION - ZAB**2.4.1 ZAB SINGLE SECTOR OPERATIONS.**

1. MMZT hands ALL to Sector 16.

2.4.3 ZAB TWO SECTOR OPERATIONS

- a. Standard ZAB Splits with two sectors operational:

1. **“Low/Hi” (Low/Hi Split)**

- (a). MMZT hands aircraft AOB FL280 to 16.
- (b). MMZT hands aircraft AOA FL290 to 91.

2. **“North/South” (North/South Split)**

- (a). MMZT staffs 16/63.
- (b). MMZT hands ALL to 63.

3. **“Heavy East” (East/West Split)**

- (a). ZAB staffs 16/15.
- (b). MMZT hands all to 16.

4. **“Heavy West” (East/West Split)**

- (a). ZAB staffs 16/43.
- (b). MMZT hands all to 43.

2.4.4 ZAB THREE SECTOR OPERATIONS

a. Standard ZAB Splits with three sectors operational:

1. “Albuquerque Split”

- (a).** ZAB staffs 16/15/43.
- (b).** MMZT hands all to 43.

2. “Phoenix Split”

- (a).** ZAB staffs 16/43/91.
- (b).** MMZT hands all to 91.

3. “Amarillo Split”

- (a).** ZAB staffs 16/15/63.
- (b).** MMZT hands ALL to 63.

4. “El Paso Split”

- (a).** ZAB staffs 16/63/91.
- (b).** MMZT hands all to 91.

5. “Roswell Split”

- (a).** ZAB staffs 16/43/63.
- (b).** MMZT hands all to 43.

6. “Tucson Split”

- (a).** ZAB staffs 16/15/91.
- (b).** MMZT hands all to 91.

2.4.5 ZAB FOUR OR MORE SECTOR OPERATIONS

a. Standard ZAB Splits with four or more sectors operational:



SECTION 5. STANDARD SECTORIZATION – MMZT

2.5.1 MMZT COMBINED

MMZT operates combined on 128.0.

2.5.2 MMZT SECTORIZED

a. MMZT's other frequencies are:

- | | | | |
|----|------|--------|--------------------|
| 1. | MZT1 | 128.0 | (Default Combined) |
| 2. | MZT2 | 126.3 | |
| 3. | MZT3 | 128.3 | (MZTW) |
| 4. | MZT4 | 124.4 | |
| 5. | MZT5 | 124.2 | |
| 6. | MZT6 | 126.5 | (MZTE) |
| 7. | MZT7 | 128.75 | |