

Letter of Agreement

VATSIM Caribbean Division

&

VATSIM Miami Air Route Traffic Control Center

1. **Scope**

This agreement is made by and between the VATSIM Caribbean Division (VATCAR) and the VATSIM Miami ARTCC (ZMA). Separate agreements between ZMA and the VATSIM Nassau FIR (MYNA) may supplement the contents of this LOA, but this document shall be mutually considered to take precedence over all other agreements between all entities of the VATCAR or VATUSA divisions.

2. **Cancellation**

This LOA cancels all previous agreements made between Miami ARTCC (and/or VATUSA) with the Nassau FIR (and/or VATCAR), regarding airspace, procedures, and operations within the confines of Nassau, ZMA, and ZMO airspace. The cancelled agreements include:

- Nassau FIR & Miami LOA (08/16/2018)
- Nassau FIR & Miami LOA (09/08/2018)
- VATUSA-VATCAR LOA-1119 REV001 (08/11/2019)
- Nassau FIR & Miami LOA (03/18/2020)
- All other relevant agreements predating this LOA which are not listed above

3. **Version & Effective Date**

This particular version of this agreement and the terms within this LOA shall be mutually considered by Miami ARTCC (ZMA) and Nassau FIR (MYNA), as well as their respective divisions, to become effective in accordance with the below:

Version 2

Effective Date: August 31st, 2023

Manuel Manigault

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VATSIM

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Division Director
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4. Definition of Terms

- 4.1. "Ocean Area" (ZMO): Often called "ZMO", "The Ocean Area", or "Miami Oceanic", ZMO refers to the Ocean Area of the real-world Miami Air Route Traffic Control Center. It is one of six "areas" into which the ARTCC's airspace is divided. The remaining five areas of Miami Center can be collectively referred to as "Miami Center Domestic".
- 4.2. "Miami Center Domestic" (ZMA): Refers to all Miami Center airspace *excluding Miami Center's "Ocean Area"*.
- 4.3. "Jurisdiction": Term describing which subdivision holds the root ownership of a given airport or ATC facility. The jurisdictional subdivision holds the final authority regarding the operation and procedures for that particular airport or ATC facility.
- 4.4. "Owning Facility": When referring to shared access to airspace, the owning facility refers to the subdivision (ie ZMA/MYNA) who holds jurisdictional ownership of the airspace in question.
- 4.5. "Using Facility": When referring to shared access to airspace, the using facility refers to the subdivision (ie ZMA/MYNA) who is using the airspace in question, but does not hold jurisdictional ownership.
- 4.6. "Authorized Certification Authority (ACA)": An individual person within the Using Facility who is authorized by the Owning Facility to conduct evaluations, and issue certifications, for ATC positions belonging to the Owning Facility.

5. Jurisdictional Assignment of Airspace

5.1. Jurisdiction of airspace shall, by all parties, be considered to be as described below, in reference to the labels of Figure 1. The exact boundary coordinates to be used by ZMA and VATCAR are specified in Appendix A of this document.

5.1.1. Area 1: Miami Center (Domestic) at all altitudes: ZMA jurisdiction
Note: Excludes Nassau and Freeport approach controls.

5.1.2. Area 2: Miami Center (Oceanic) at all altitudes: ZMA jurisdiction
Note: Excludes Nassau, Freeport, and Provo approach controls.

5.1.3. Area 3: Nassau Approach SFC-12,000ft MSL: MYNA jurisdiction

5.1.4. Area 4: Freeport Approach SFC-6,000ft MSL: MYNA jurisdiction

5.1.5. Area 5: Provo Approach SFC-6,000ft MSL: MYNA jurisdiction

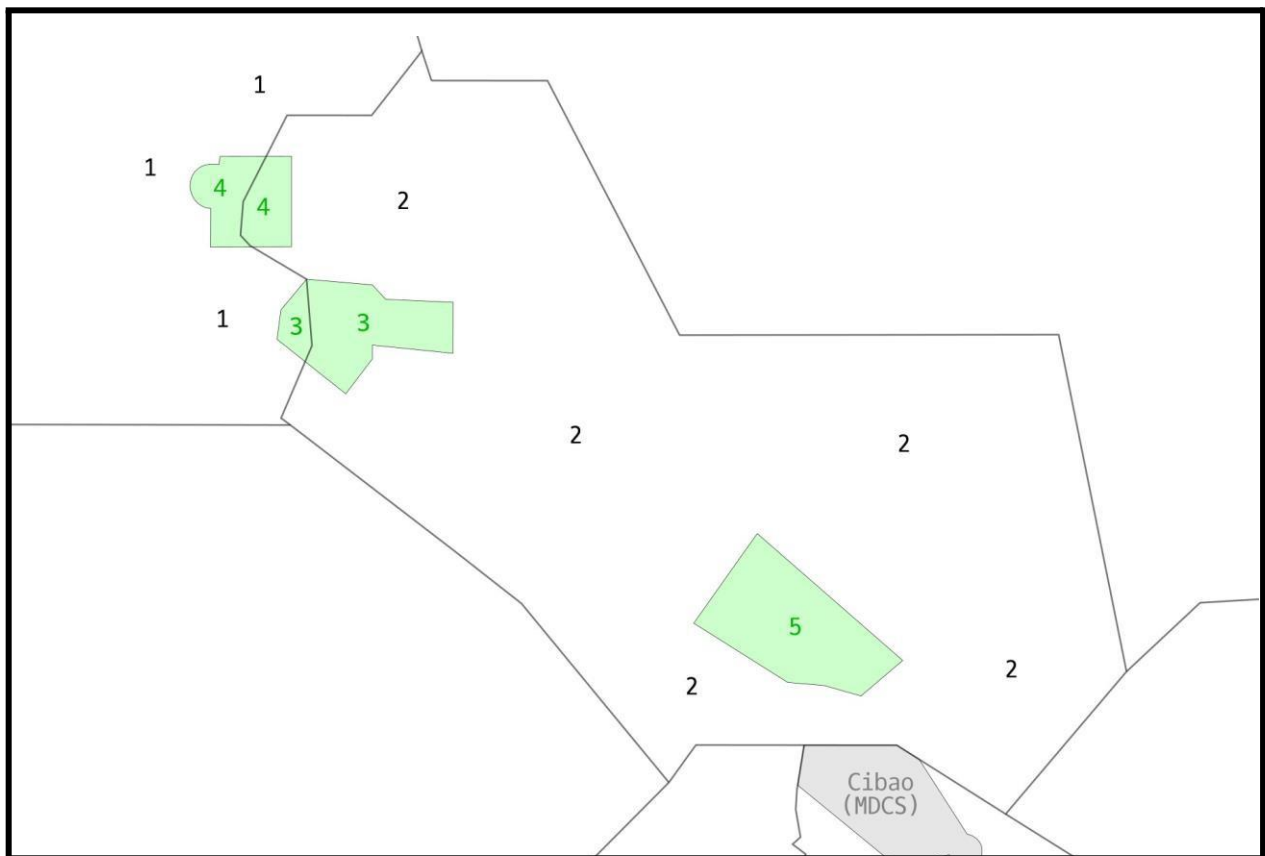


Figure 1 - Airspace Areas for Jurisdictional Assignment

- 5.2. Jurisdiction of airports shall, by all parties, be considered to be as described below:
- 5.2.1. Airports contained within¹ an approach control shall be assigned jurisdiction to match that of the approach control².
- 5.2.2. Airports *not* contained within an approach control shall be assigned jurisdiction according to which area of Miami Center overlies it:
- 5.2.2.1. If ZMO overlies the airport³: MYNA jurisdiction
- 5.2.2.2. If ZMA overlies the airport⁴: ZMA jurisdiction
- 5.3. In the event that a new approach control is created which underlies ZMO airspace (by any amount), MYNA shall be assumed to hold jurisdiction over that approach control until this document can be updated to specify it explicitly.
- 5.4. This agreement shall act as the only agreement which specifies jurisdictional assignment of airspace between ZMA and MYNA.

¹ Here "contained within" means that the approach control airspace lies directly above the geographical center of the airport's largest runway.

² Example: MYAF is MYNA jurisdiction (within Nassau Approach).

³ Example: MYAK is MYNA jurisdiction (not within Nassau Approach, with ZMO above).

⁴ Example: MYAW is ZMA jurisdiction (not within Freeport Approach, with ZMA above).

6. Mutual Access to Airports & Airspace

- 6.1. In the sections that follow, ZMA and MYNA grant each other mutual access to certain airports and airspace for which they hold jurisdiction. Except for the last part of this section, this mutual access may not be globally revoked without the agreement of the Division Director of VATUSA (VATUSA1), Division Director of VATCAR (VATCAR1), and the VATSIM Vice President of the Americas Region (VP-AMAS).
- 6.2. ZMA hereby grants MYNA controlling privileges for the "Ocean Area" of Miami Center, in accordance with the terms of this LOA.
- 6.3. MYNA hereby grants ZMA controlling privileges for all airports and airspace under their jurisdiction, in accordance with the terms of this LOA.
- 6.4. At their discretion, ZMA may elect to make arrangements with MYNA to provide training and certification for MYNA controllers to also control appropriate sectors of Miami Center Domestic from a ZMO position. This shall be handled in a separate ZMA-MYNA LOA, and ZMA retains the right to revoke such arrangements at any time.

7. Top-Down Service Model

- 7.1. All parties agree that, under this agreement, ZMO is to be operated as a "top-down" center at all times. This means any person authorized to control ZMO must also continuously provide approach control and tower services for airports and airspace within MYNA's jurisdiction.

8. Mutual Certification Program

- 8.1. The Owing Facility shall maintain a public list of Authorized Certification Authorities (ACAs). These ACAs are staff members of the Using Facility (division or subdivision level) who the Owing Facility has authorized to issue certifications for their positions on their behalf.
 - 8.1.1. The Owing Facility may require ACAs to undergo any training deemed appropriate, including in excess of typical requirements for certification.
 - 8.1.2. When local procedures change, the Owing Facility may, in writing, require ACAs to undergo reasonable additional training, in order to retain their certification authority.
 - 8.1.3. The Owing Facility may, in writing, revoke certification authority for a particular ACA at any time, and for any reason.
 - 8.1.4. Each facility should designate at least two ACAs, and shall make genuine efforts to ensure that, at all times, there is at least one.
 - 8.1.4.1. If a situation arises where a Using Facility possesses no designated ACAs, the Owing Facility shall conduct all evaluations within 7 days of any such request, and shall expeditiously appoint replacement ACAs as soon as appropriate candidates are found and trained.
- 8.2. For any evaluation conducted by the Using Facility for certification on the other's positions, the Using Facility shall:
 - 8.2.1. Notify the Owing Facility of the time of the evaluation, in writing, at least 4 hours in advance. Without this notification, the evaluation is invalidated.
 - 8.2.2. For all certifications issued through this process, the ACA shall notify the Owing Facility, who shall reflect the certification in their roster.
 - 8.2.3. Allow a single representative of the Owing Facility to silently observe the evaluation and debrief session, in its entirety, including being present in local voice channels.
 - 8.2.3.1. The observer from the Owing Facility does not have any input on the decision to certify, and shall not participate or weigh in unless specifically asked. Unsolicited input or disturbances may result in forfeiting this privilege for that evaluation only.

- 8.3. Upon observation of issues of controller competence, only after receiving approval from their Division Training Director (or Division Director), the Owing Facility may, in writing, revoke the certification of a controller of the Using Facility, with immediate effect. In the event of a revoked certification:
- 8.3.1. Within 24 hours of written revocation, a representative of the Owing Facility shall document the observed deficiencies, and submit a detailed, written report, via a single email, including the Owing Facility's division⁵, the VATSIM Vice President of the Americas Region (VP-AMAS), and the Using Facility's Training Administrator. In the absence of this report being sent within this time period, both facilities shall consider the certification to be automatically restored, and the events leading to the revocation as ineligible as rationale for a later revocation. The Owing Facility's division shall coordinate with the Using Facility's division to ensure the appropriate corrective training is provided in collaboration with the Owing Facility.
- 8.3.2. Only the Owing Facility may conduct the evaluation to reissue a certification that had been revoked through this process.
- 8.3.3. The Using Facility shall conduct all necessary remedial training, and advise the Owing Facility when the controller is ready for evaluation. The Owing Facility shall conduct this evaluation within 14 days of written request.

⁵ For ZMA, send the report to VATUSA3 and VATUSA1, unless otherwise directed by VATUSA. For Nassau, send the report to VATCAR3 and VATCAR1, unless otherwise directed by VATCAR.

9. **Mutual Roster**

- 9.1. ZMA and MYNA shall make arrangements for some sort of mutually controlled roster solution (or other method) to show a real-time updated certification status of all ZMA/MYNA home and visitor controllers. Both shall ensure this information is shown on the Roster page of their website.
 - 9.1.1. ZMA shall be the sole entity with the ability to edit the posted certification status for all MYNA controllers on ZMO.
 - 9.1.2. MYNA shall be the sole entity with the ability to edit the posted certification status for all ZMA controllers on MYNA.
 - 9.1.3. Both ZMA and MYNA shall ensure none of their home or visiting controllers are permitted to sign on to the other's control positions until the certification is reflected on the mutual roster.

10. **Caribbean Radio (CARI)**

- 10.1. The VATCAR division agrees that ZMO shall be excluded from all operations of the Caribbean Flight Service Station, and that ZMO may only be controlled from a ZMO_CTR callsign by certified controllers.
- 10.2. If, in the future, the Caribbean Flight Service Station is granted controlling access to any MYNA airports or airspace, the VATCAR division agrees that a certified controller working ZMO airspace shall have priority rights, over CARI, to control those MYNA airports/airspace.

Appendix A (Airspace Coordinates):

Please note that the below may not entirely reflect the full operational dimensions of ZMO/ZMA, as some ZMA airspace is delegated to ZMO, and some Port-au-Prince airspace is delegated to ZMO, etc. The below represents the "definitional dimensions" of all relevant facilities, which are the dimensions to which this document refers. Information on delegated airspace can be found in the appropriate facility's SOP documents.

ZMO:

N027 27.59 999 W077 00.00 000 N027 27.59 999 W078 03.30 000
N027 27.59 999 W078 03.30 000 N028 59.59 987 W078 19.11 385
N028 59.59 987 W078 19.11 385 N028 30.00 000 W078 35.59 998
N028 30.00 000 W078 35.59 998 N028 07.01 000 W078 38.04 000
N028 07.01 000 W078 38.04 000 N028 00.00 000 W078 30.30 000
N028 00.00 000 W078 30.30 000 N025 37.40 000 W077 48.50 000
N025 37.40 000 W077 48.50 000 N025 04.12 437 W077 45.34 753
N025 04.12 437 W077 45.34 753 N024 52.60 000 W077 44.30 000
N024 52.60 000 W077 44.30 000 N024 47.30 080 W077 47.08 735
N024 47.30 080 W077 47.08 735 N024 38.45 635 W077 51.21 063
N024 38.45 635 W077 51.21 063 N024 05.01 137 W078 07.35 113
N024 05.01 137 W078 07.35 113 N024 00.00 000 W078 00.00 000
N024 00.00 000 W078 00.00 000 N022 35.17 652 W070 00.00 004
N022 35.17 652 W070 00.00 004 N022 00.00 000 W075 10.00 000
N022 00.00 000 W075 10.00 000 W073 19.59 999
N022 00.00 000 W073 19.59 999 N020 25.00 000 W073 00.00 000
N020 25.00 000 W073 00.00 000 N020 00.00 000 W072 00.42 748
N020 00.00 000 W072 00.42 748 N020 25.00 000 W071 40.00 000
N020 25.00 000 W071 40.00 000 W071 39.05 179
N020 25.00 000 W071 39.05 179 N020 25.00 000 W070 30.00 000
N020 25.00 000 W070 30.00 000 N019 38.59 999 W069 09.00 000
N019 38.59 999 W069 09.00 000 N020 30.39 774 W068 20.15 234
N020 30.39 774 W068 20.15 234 N021 07.59 999 W067 45.00 000
N021 07.59 999 W067 45.00 000 N021 14.20 999 W067 39.02 000
N021 14.20 999 W067 39.02 000 N025 00.00 000 W068 29 33 000
N025 00.00 000 W068 29 33 000 N025 00.00 000 W072 33 07 498
N025 00.00 000 W072 33 07 498 N025 00.00 000 W073 12 00 000
N025 00.00 000 W073 12 00 000 N027 49 59 999 W074 49 59 999
N027 49 59 999 W074 49 59 999 N027 49 59 999 W074 15 52 000
N027 49 59 999 W074 15 52 000 N028 11 10 800 W076 22 33 400
N028 11 10 800 W076 22 33 400 N027 27 59 999 W077 00 00 000
N027 27 59 999 W077 00 00 000 N027 27 59 999 W077 00 00 000

ZMA:

N027 27.59 999 W077 00.00 000 N027 27.59 999 W078 03.30 000
N027 27.59 999 W078 03.30 000 N028 59.59 987 W078 19.11 385
N028 59.59 987 W078 19.11 385 N028 30.00 000 W078 35.59 998
N028 30.00 000 W078 35.59 998 N028 07.01 000 W078 38.04 000
N028 07.01 000 W078 38.04 000 N028 00.00 000 W078 30.30 000
N028 00.00 000 W078 30.30 000 N025 37.40 000 W077 48.50 000
N025 37.40 000 W077 48.50 000 N025 04.12 437 W077 45.34 753
N025 04.12 437 W077 45.34 753 N024 52.60 000 W077 44.30 000
N024 52.60 000 W077 44.30 000 N024 47.30 080 W077 47.08 735
N024 47.30 080 W077 47.08 735 N024 38.45 635 W077 51.21 063
N024 38.45 635 W077 51.21 063 N024 05.01 137 W078 07.35 113
N024 05.01 137 W078 07.35 113 N024 00.00 000 W078 00.00 000
N024 00.00 000 W078 00.00 000 N022 35.17 652 W070 00.00 004
N022 35.17 652 W070 00.00 004 N022 00.00 000 W075 10.00 000
N022 00.00 000 W075 10.00 000 W073 19.59 999
N022 00.00 000 W073 19.59 999 N020 25.00 000 W073 00.00 000
N020 25.00 000 W073 00.00 000 N020 00.00 000 W072 00.42 748
N020 00.00 000 W072 00.42 748 N020 25.00 000 W071 40.00 000
N020 25.00 000 W071 40.00 000 W071 39.05 179
N020 25.00 000 W071 39.05 179 N020 25.00 000 W070 30.00 000
N020 25.00 000 W070 30.00 000 N019 38.59 999 W069 09.00 000
N019 38.59 999 W069 09.00 000 N020 30.39 774 W068 20.15 234
N020 30.39 774 W068 20.15 234 N021 07.59 999 W067 45.00 000
N021 07.59 999 W067 45.00 000 N021 14.20 999 W067 39.02 000
N021 14.20 999 W067 39.02 000 N025 00.00 000 W068 29 33 000
N025 00.00 000 W068 29 33 000 N025 00.00 000 W072 33 07 498
N025 00.00 000 W072 33 07 498 N025 00.00 000 W073 12 00 000
N025 00.00 000 W073 12 00 000 N027 49 59 999 W074 49 59 999
N027 49 59 999 W074 49 59 999 N027 49 59 999 W074 15 52 000
N027 49 59 999 W074 15 52 000 N028 11 10 800 W076 22 33 400
N028 11 10 800 W076 22 33 400 N027 27 59 999 W077 00 00 000
N027 27 59 999 W077 00 00 000 N027 27 59 999 W077 00 00 000

MYNN:

N024 21.00 000 W077 19.45 001 N024 52.60 000 W078 10.59 999
N024 52.60 000 W078 10.59 999 N025 17.30 001 W078 08.10 000
N025 17.30 001 W078 08.10 000 N025 37.59 999 W077 48.50 000
N025 37.59 999 W077 48.50 000 N025 34.19 999 W077 00.00 000
N025 34.19 999 W077 00.00 000 N024 50.30 001
N024 50.30 001 W076 50.30 001 N025 25.59 999 W076 00.00 000
N025 25.59 999 W076 00.00 000 N024 48.29 999 W076 00.00 000
N024 48.29 999 W076 00.00 000 N024 53.60 000 W077 00.00 000
N024 53.60 000 W077 00.00 000 N024 45.08 000 W077 00.00 000
N024 45.08 000 W077 00.00 000 N024 21.00 000 W077 19.45 001
N024 21.00 000 W077 19.45 001

MYGF:

N026 26.17 002 W079 00.00 000 N026 26.22 379 W079 01.23 741
N026 26.22 379 W079 01.23 741 N026 26.40 439 W079 02.46 133
N026 26.40 439 W079 02.46 133 N026 27.17 805 W079 04.08 577
N026 27.17 805 W079 04.08 577 N026 27.52 874 W079 05.25 574
N026 27.52 874 W079 05.25 574 N026 28.28 848 W079 06.41 915
N026 28.28 848 W079 06.41 915 N026 29.17 733 W079 07.55 476
N026 29.17 733 W079 07.55 476 N026 30.07 527 W079 09.08 806
N026 30.07 527 W079 09.08 806 N026 31.02 212 W079 10.14 400
N026 31.02 212 W079 10.14 400 N026 32.01 745 W079 11.14 696
N026 32.01 745 W079 11.14 696 N026 33.06 038 W079 12.10 262
N026 33.06 038 W079 12.10 262 N026 34.14 936 W079 13.03 800
N026 34.14 936 W079 13.03 800 N026 35.28 195 W079 13.49 149
N026 35.28 195 W079 13.49 149 N026 36.44 442 W079 14.27 300
N026 36.44 442 W079 14.27 300 N026 38.06 159 W079 15.42 624
N026 38.06 159 W079 15.42 624 N026 39.29 621 W079 15.18 734
N026 39.29 621 W079 15.18 734 N026 40.54 951 W079 15.30 541
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N026 42.21 071 W079 15.32 333 N026 43.46 791 W079 15.23 859
N026 43.46 791 W079 15.23 859 N026 44.32 151 W079 14.36 629
N026 44.32 151 W079 14.36 629 N026 47.49 574 W079 13.58 864
N026 47.49 574 W079 13.58 864 N026 49.02 307 W079 13.12 701
N026 49.02 307 W079 13.12 701 N026 50.09 752 W079 12.19 073
N026 50.09 752 W079 12.19 073 N026 51.11 438 W079 11.18 946
N026 51.11 438 W079 11.18 946 N026 52.07 185 W079 10.19 254
N026 52.07 185 W079 10.19 254 N026 52.56 883 W079 09.02 869
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N026 53.40 531 W079 07.48 576 N026 54.18 195 W079 06.31 075
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N026 54.99 981 W079 05.19 981 N026 55.16 015 W079 03.48 836
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N026 55.36 429 W079 02.25 115 N026 56.15 353 W079 01.00 263
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N026 56.00 908 W078 59.54 999 N026 56.05 204 W078 58.08 500
N026 56.05 204 W078 58.08 500 N026 56.04 335 W078 56.42 357
N026 56.04 335 W078 56.42 357 N026 55.58 381 W078 55.16 386
N026 55.58 381 W078 55.16 386 N026 55.41 999 W078 53.52 001
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N026 00.00 000 W078 00.00 000 N026 26.17 002 W079 00.00 000
N026 26.17 002 W079 00.00 000 N026 26.22 379 W079 01.23 741
N026 26.22 379 W079 01.23 741

MBPV:

N022 47.06 659 W072 14.17 429 N021 21.55 359 W070 25.59 300
N021 21.55 359 W070 25.59 300 N020 56.60 000 W070 58.00 001
N020 56.60 000 W070 58.00 001 N021 04.00 001 W071 22.59 999
N021 04.00 001 W071 22.59 999 N021 05.48 998 W071 48.54 999
N021 05.48 998 W071 48.54 999 N021 46.00 001 W070 31.59 999
N021 46.00 001 W070 31.59 999 N022 47.06 659 W072 14.17 429
N022 47.06 659 W072 14.17 429