



IVAO
SPECIAL OPERATIONS



IVAO
ECUADOR



PICHINCHA BICENTENNIAL

Special Operations Event

1222

SEQM - QUITO



@lvaoEcuador



21/05/2022 - 20:00z

2022.05.21
20 UTC

PICHINCHA
BICENTENNIAL

MASTER PLAN



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1. Introduction.

Quito, Ecuador's capital sits high in the Andean foothills at an elevation of 2 850m (9 351 Ft) in the north part of Ecuador and is very close to the equator line. It is a plateau surrounded by mountains and valleys; the main Elevation is *Pichincha Volcano* (4 784 m) at the west.

New Mariscal Sucre International Airport (UIO-SEQM) is located in a valley at 7 900 Ft, 18 km (11 miles) east of Quito Downtown approximately. This airport launched operations on February 2 013, so **IT IS NOT DEFAULT IN FSX OR P3D. DO NOT MISTAKE WITH SEQU** which is the Old Quito Airport (Closed nowadays and becoming a park).

This year, 2022 we celebrate a significant date in our history as a nation. The moment when we (as other countries in the region) gained our freedom from the Spanish Kingdom and became an independent republic.

May 24th, 1822. Antonio Jose de Sucre (better known as '*Mariscal Sucre*') was sent by Simon Bolivar to Guayaquil to secure its freedom; Sucre won the battle and walked to Quito, He decided to fight in *Pichincha Volcano* using his locality. Patriotic troops won the climactic battle. General Almerich (Spanish Army) supported surrender and left this modern republic.

IVAO EC SpecOps Dept. want to celebrate this date with three mini-events, we want to commemorate these 200 years of freedom. Furthermore, remember the fallen and the heroes, Venezuelan, Colombian, Peruvian, British troops who collaborated, black people, slaves, half-breeds, indigenous people, women who fought.

This was an extensive trip since Eugenio Espejo started writing about new revolution ideas in his newspaper in 1 792, then the '*Primera Junta de Gobierno Autónoma de Quito*' in 1809 and finally '*Pichincha Battle*' in 1 822. Names as Espejo, Manuela Cañizares, Montúfar, Mejía, Morales, Salinas, Calderón, Sucre, Manuela Sáenz, Bolívar, Santa Cruz, and Olmedo who were the protagonist 200 years ago and currently was heroes who everybody remembers them.

2. Briefing.

To clear any question or explain this master plan and guarantee a good event performance, a pre-mission briefing will be done at [IVAO HQ-SOD Discord Official Server](#) at 19h30 UTC.

3. Mission Description.

MISSION A

Aircraft: VIP Transport.

Place: SEQM – Quito.

Time: 20h00 UTC.

Flight Rules: IFR.

Mission Description:

For the first mission, Ecuador's president has invited some of his colleagues to a civil ceremony that will be taking place at Ecuador National Assembly in Quito due to the bicentenary.

The first part of the event will take place at **SEQM – Mariscal Sucre Intl. Airport**, placed in Quito. You must transport the president or a diplomatic corps from their origin country to Quito in their VIP official aircraft.

The official list from the Ecuador Goby will be officialised a few days before the event. However, we have compiled a non-official list of possible candidates to might be invited. For logits reasons we have been taking 3 primary airports near Quito which **you must depart from**.

<i>COUNTRY</i>	<i>DEPARTURE</i>	<i>DESTINATION</i>	<i>ESTIMATED FLIGHT TIME</i>	<i>ESTIMATED TIME TO ARRIVAL (UTC)</i>
<i>Brazil</i>	SBEG – Manaus	SEQM – QUITO	03h15	20h30 – 20h50
<i>Peru</i>	SPJC – Lima		02h15	20h20 – 20h40
<i>Colombia</i>	SKBO – Bogota		01h30	20h10 – 20h30

The diplomatic corps will make a scale in these points mandatory before arriving at SEQM. The flight from their origin country to these key points is not mandatory.

The diplomatic corps are the next:


Country	Scale at	Callsign	Aircraft
Brazil	SBEG	<i>BRS01</i>	Airbus A319CJ
Colombia	SKBO	<i>FAC0001</i>	Boeing 737-700
Costa Rica		<i>AVS001</i>	Beechcraft King Air 200
Dominican Republic		<i>FAD001</i>	Beechcraft Super King Air
Guatemala		<i>FAG001</i>	Beechcraft King Air 300
Haiti		<i>HAC001</i>	Learjet 60
Honduras		<i>FAH001</i>	Embraer Legacy 600
Mexico		<i>TP01</i>	Boeing 787-800
Panama		<i>HP-01A</i>	Embraer ERJ 145
Spain		<i>AME001</i>	Dassault Falcon 900
United Kingdom			Airbus A321-200neo
United States		<i>SAM32</i>	Boeing 757-200
Venezuela		<i>AMB001</i>	Airbus A319CJ
Argentina	SPJC	<i>T-10</i>	Learjet 60
Bolivia		<i>FAB001</i>	Dassault Falcon 50EX
Chile		<i>FACH001</i>	Gulfstream IV
Peru		<i>FAP001</i>	Boeing 737-500
Paraguay		<i>FAP01</i>	Cessna 680 Citation Sovereign
Uruguay		<i>FAU001</i>	Dassault Falcon 2000

Feel free to choose any of these available flights.

- Do not forget the *STS/HEAD* in your flight plan at remark section.
- Expect ILS-Z RWY 36 at SEQM. Quito TMA upper limit is FL245 and IAF altitude is 18 000 ft.
- Maximum speed for ILS-Z Rwy 36 is 180 KIAS

You are going to be escorted as soon as your entry to SEFG – Guayaquil FIR until you land at SEQM.

You should continue with your chosen route and fly as normal; the fighter will fly to your right-hand all the time. You do not need to perform any extra procedures.

 IVAO ECUADOR	PICHINCHA BICENTENNIAL	IVEC-SPECOPS-08
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Suggested route

SKBO – SEQM

SILEG W42 TOLIM UWI ULQ UQ113 BOKAN UP533 QIT

Flight Level: ODD

SPJC – SEQM

ATATU UM674 QIT

FL: ODD

SBEG – SEQM

EPKIR UM665 IQT UM776 QIT

FL: EVEN

MISSION B

Aircraft: Fighter.

Place: SETA – Taura.

Time: 20h00 UTC.

Flight Rules: VFR/IFR.

Mission Description:

To guarantee security during the whole event, the Ecuadorian Air Force (FAE) will use their fighters IAI K-Fir, Atlas Cheetah, or Dassault Mirage to escort all VIP presidential aircraft that entry to **SEFG – Guayaquil FIR** until it lands at SEQM. The fighters will take off from **SETA – Taura Air Force Base** located near Guayaquil (SEGU), in the south of the country.

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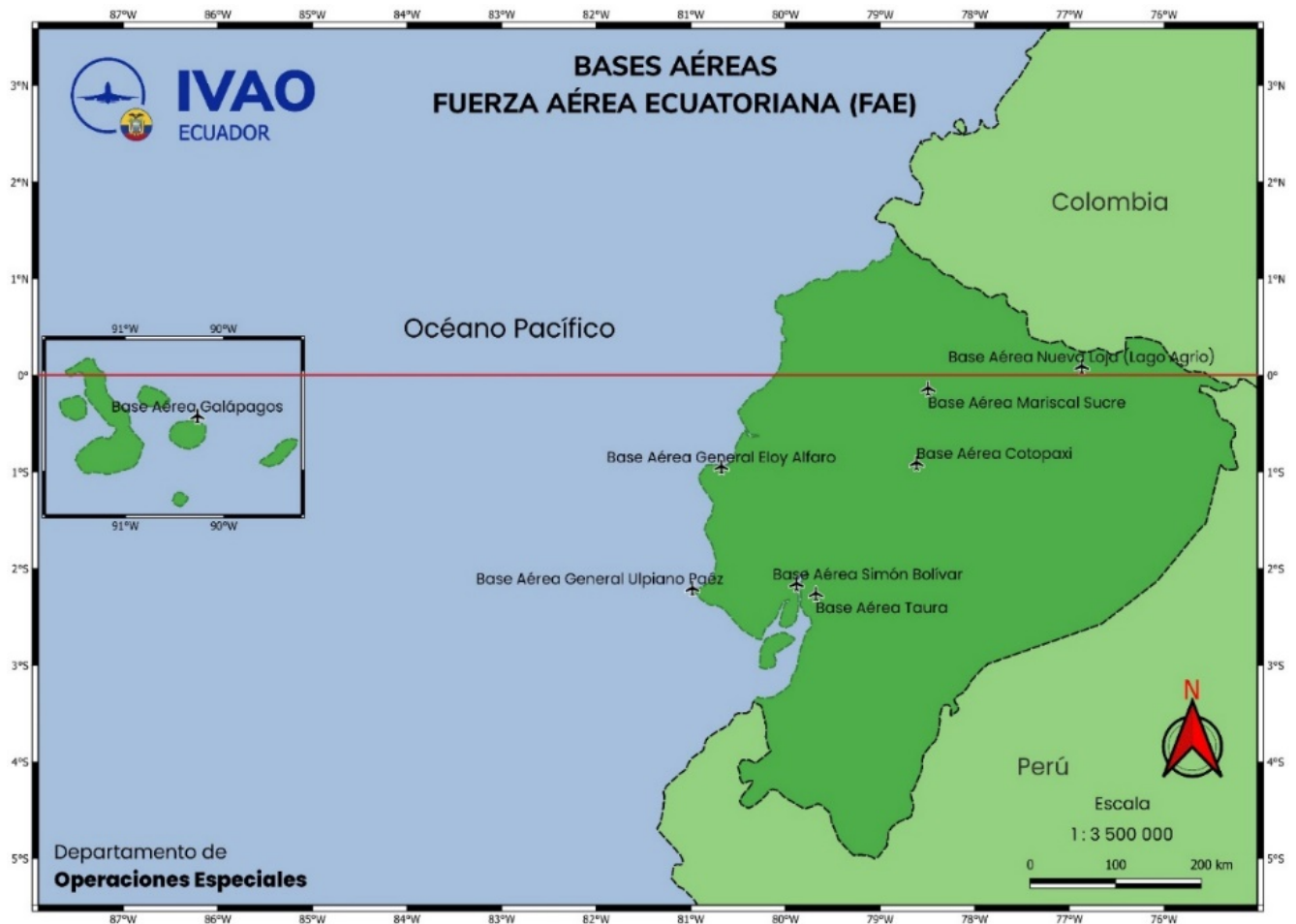


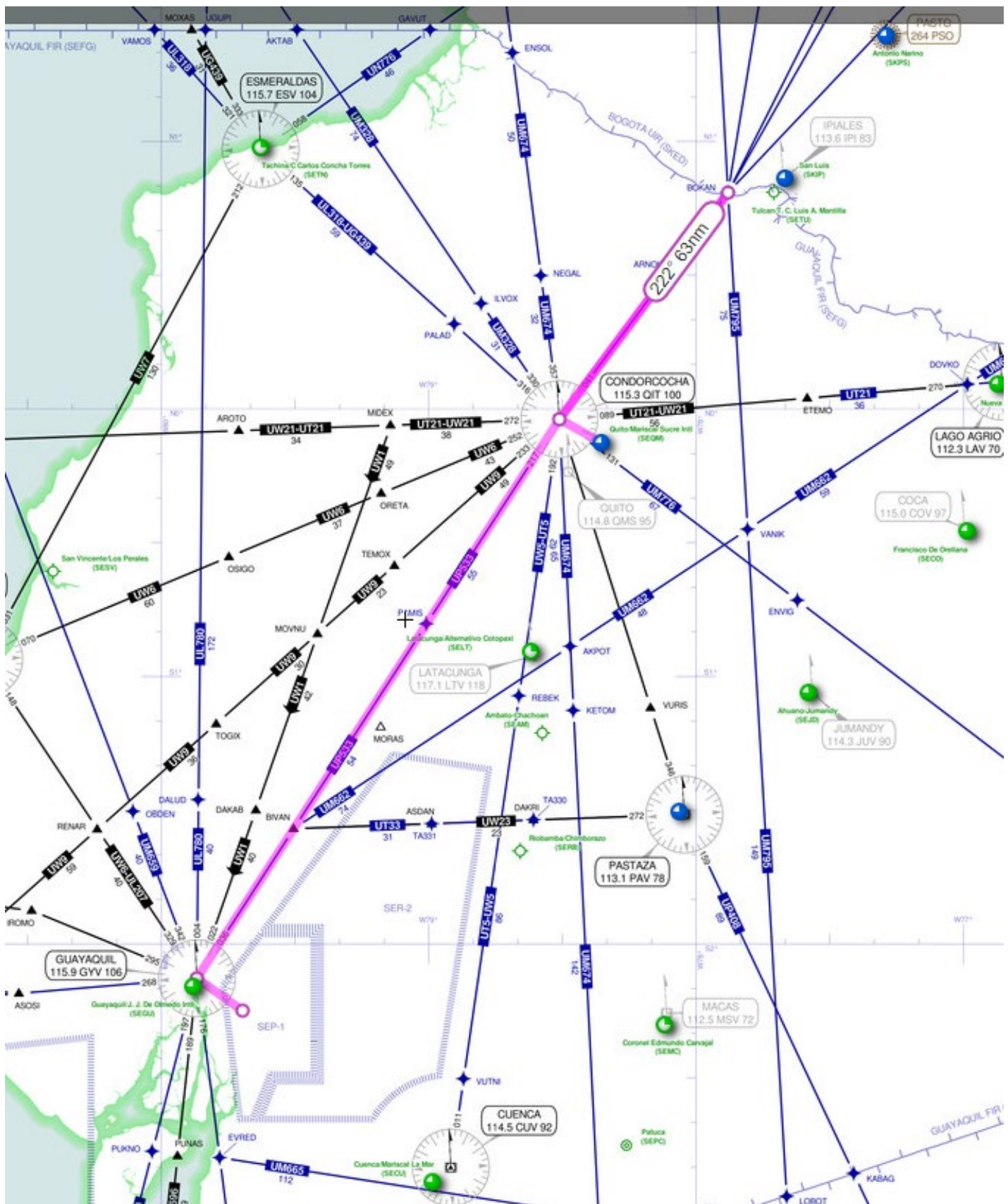
Fig.3.1. SETA location

Once your fighter departure, you must fly to **GYV - Guayaquil VOR**, and according to the aircraft assigned during briefing you must follow one of these routes or follow further ATC instructions:

1. NORTH WIND

SETA -> GYV UP533 BOKAN -> UP533 QIT (North)

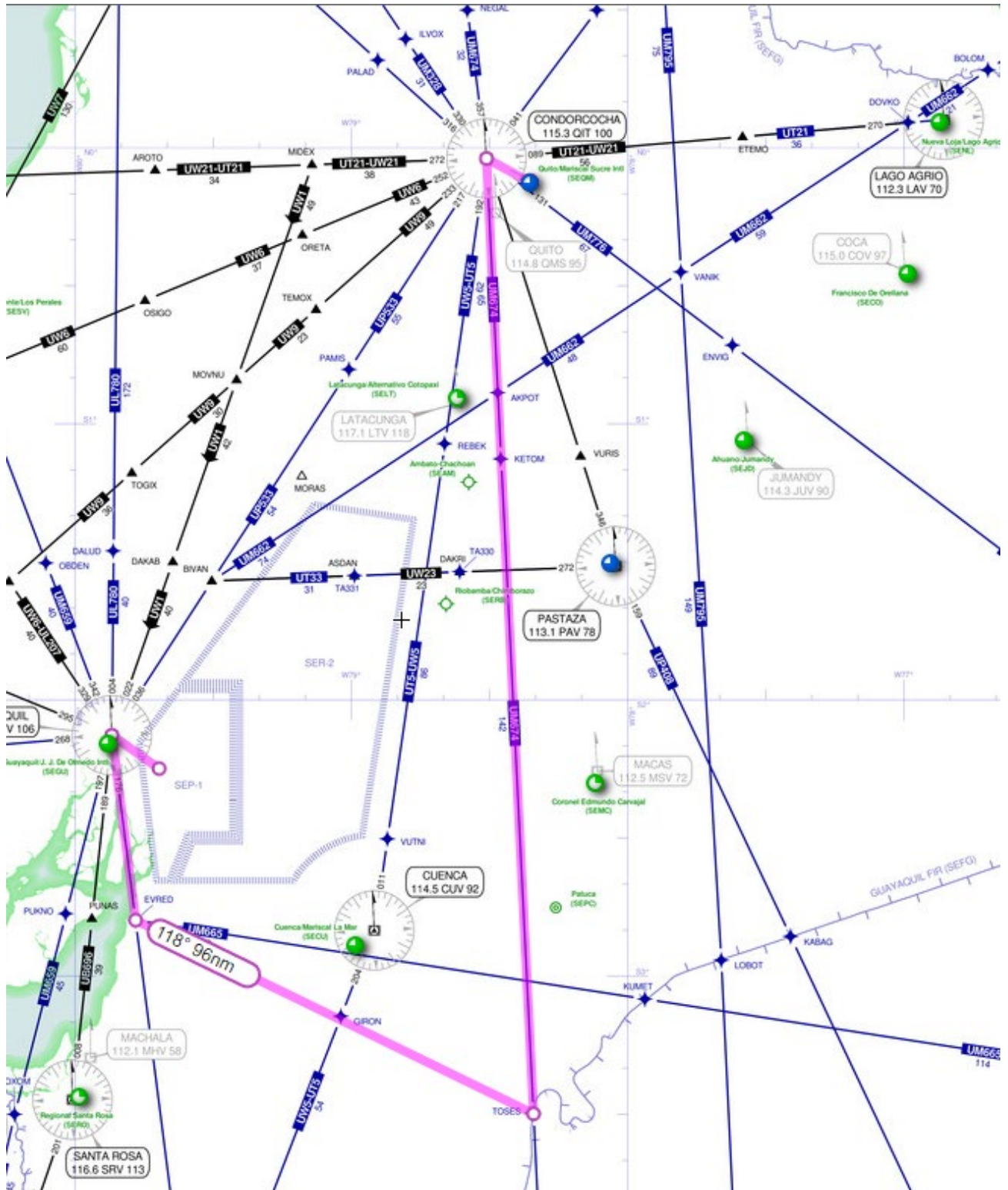
DEPARTURE TIME: 19h40 UTC



2. AUSTRAL

SETA -> GYV W31 EVRED -> TOSES -> UM674 QIT (South)

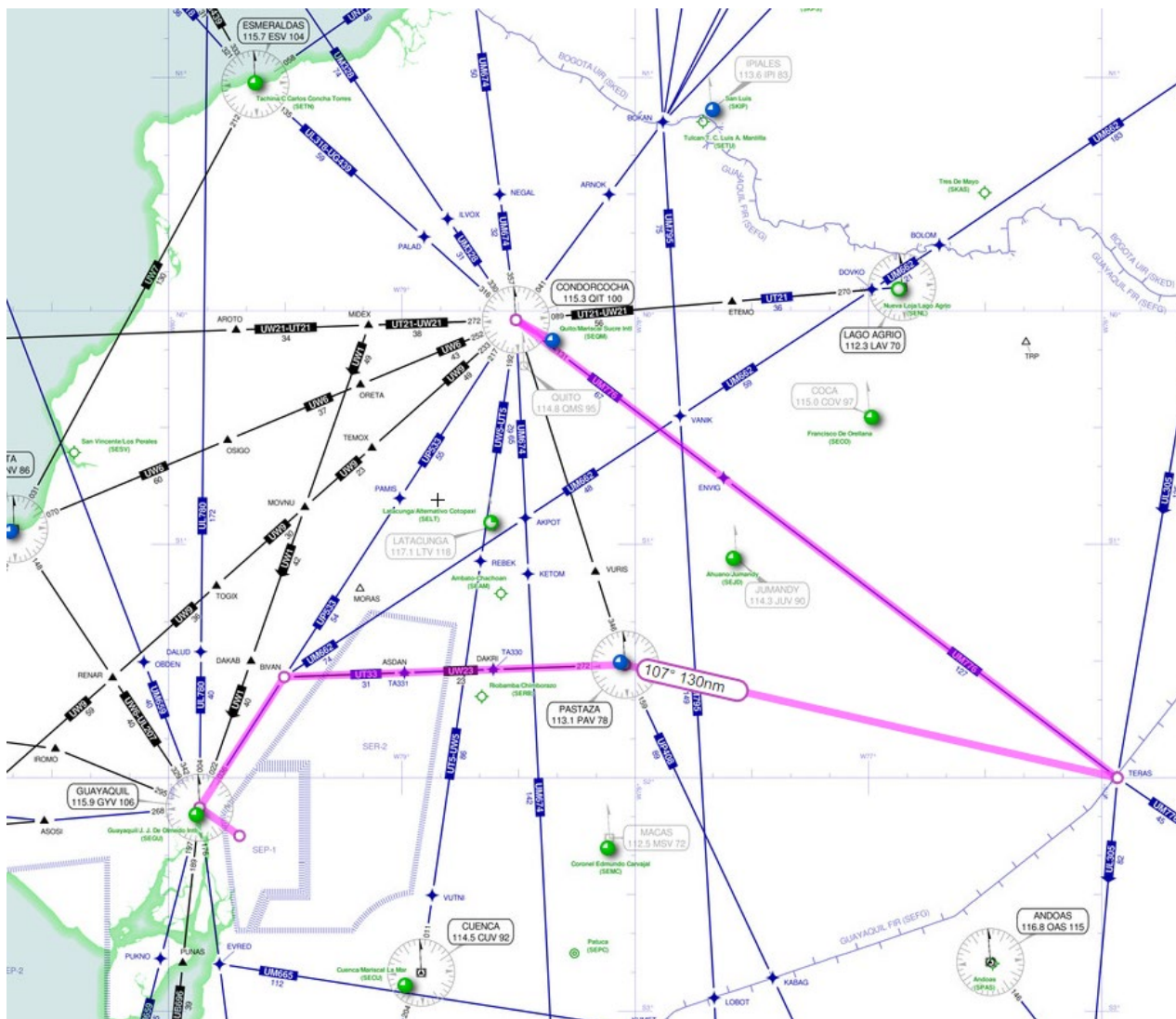
DEPARTURE TIME: 20h00 UTC



3. AMAZONIC

SETA -> GYV UP533 BIVAN UW23 PAV -> TERAS -> UM776 QIT (East)

DEPARTURE TIME: 19h40 UTC



It will be assigned one fighter to each VIP aircraft (it might be changed depending on the traffic situation.)

Once you are near the VIP aircraft, you will receive further instructions from ATC. Once you have the VIP at sight, you must say: **'TARGET AT SIGHT'**, ATC, will give you the clearance to escort. The VIP will continue with his flight as normal; it does not require any special procedure.

The intercept and escort procedure are the next

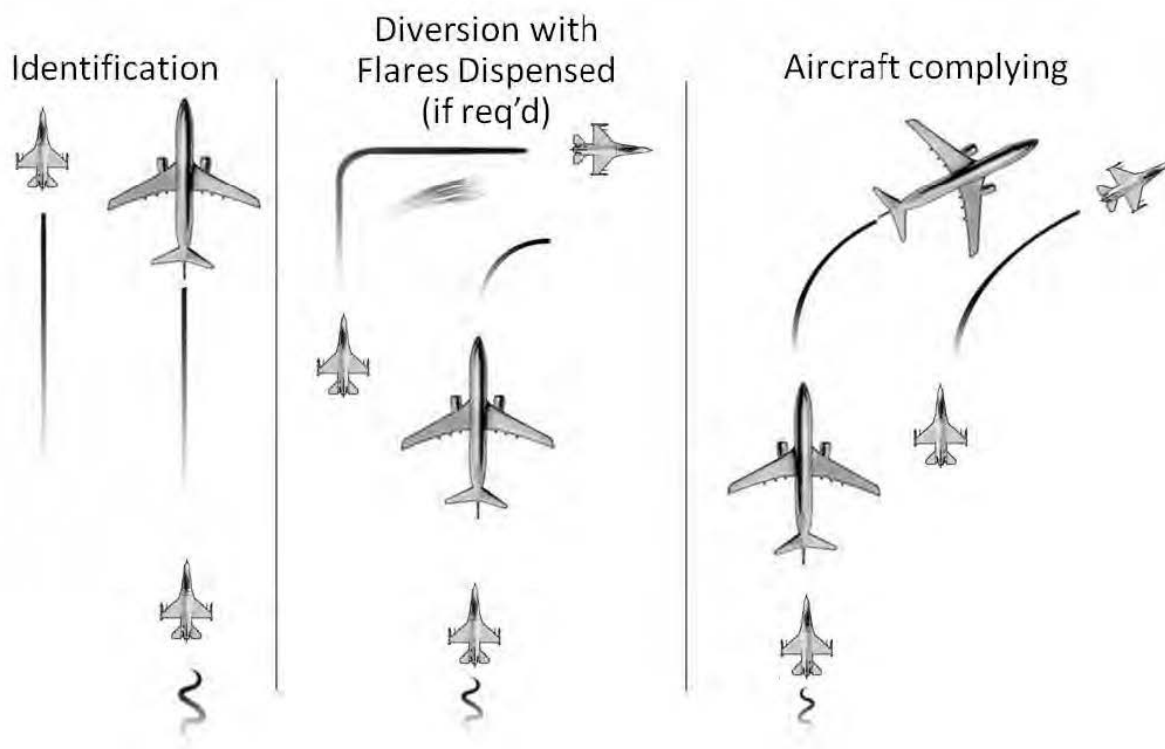


Fig.3.2. Interception Procedure (FAA)

Be aware with this:

- ILS-Z RWY36 needs transition at QIT VOR CONDORCOCHA.
- IAF is QIT, the altitude at this point is 18 000 Ft.
- Max speed during the ILS procedure is 180 KIAS.
- As you will be at the pilot's right hand all the time, you are going to fly over Pichincha Volcano (13 107 Ft), fly close to Paschoa (13 780 Ft), and finally the mountains east of SEQM (~ 12 000 Ft). (See Fig.3.4.)

After landing

At that moment you will fly to **QIT VOR – CONDORCOCHA, at 18 000 Ft, and join holding as published.** You will continue flying the perimeter established by:

QIT VOR/DME 'Cóndorcocha' – S00° 33' 00" W078° 38' 00 – S00° 33' 00' W078°20'00" – N00°05'00" W078°13'00" and QIT VOR/DME 'Cóndorcocha'.

SAFE LEG ALTITUDE: 16 000 FT

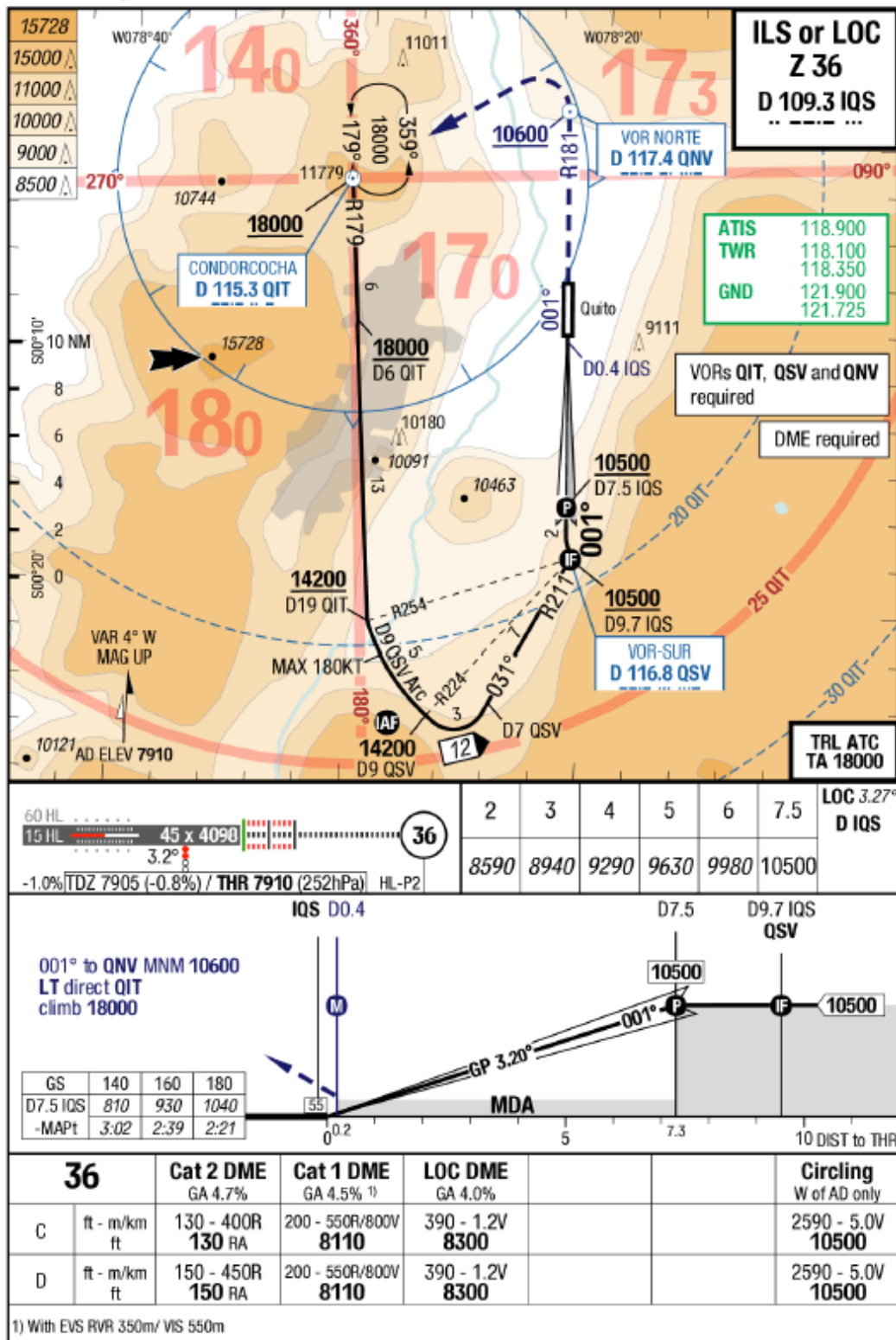
Effective 27-FEB-2020

Ecuador Quito Mariscal Sucre Intl

IAC

UIO-SEQM

ILS or LOC Z 36



Changes: MAPt, APL, ROD

ChartVersionID 1282410 (E)

You must remain under VFR conditions. This perimeter is designed to protect VIP helicopters during their mission. You could return to SETA – Taura as soon as the helicopters land again at **SEBB – La Balbina**. For this task, a leadership team will be assigned.

SkyVector doesn't recognize SETA in its database. However, you can use ICAO from SEBF which is a small airport near Taura.

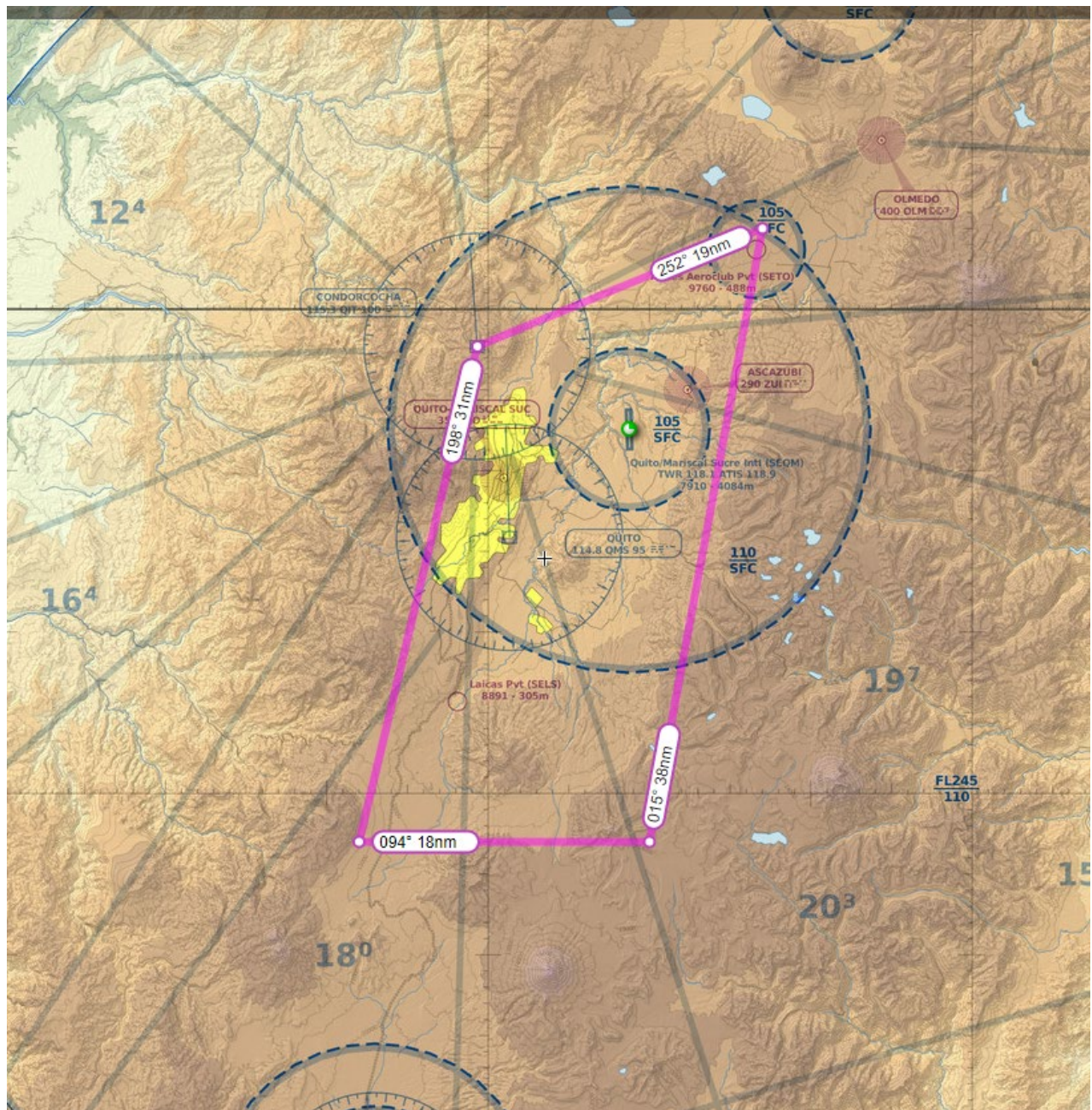


Fig.3.3. Fighters overfly perimeter.

MISSION C

Aircraft: Helicopter.

Place: SEQM – Quito.

Time: 20h40 UTC.

Flight Rules: VFR.

Mission Description:

Ecuador Army oversees the security along the event, Ecuador president has asked to Army the transport of diplomatic corps from the airport (SEQM) to the Ecuador National Assembly located at coordinates: **S00° 12' 47" W078° 29' 55"** or **Radial 180° at 10 NM out from QIT VOR/DME 'Condorcocha'**.



Your mission is: Take a VIP transport helicopter from **SEBB – La Balbina** in Sangolquí, then fly to Quito Airport in Tababela, finally boarding all VIP diplomatic corps into the helicopter and fly to Ecuador National Assembly.

Departure time from SEBB – La Balbina efficiently is 20h25 UTC

Maintain VFR all the time. You must contact SEQM_APP in the air. It is not mandatory to contact in ground for FPL clearance.



SEQM – Mariscal Sucre Airport General Aviation ramp and Helipad.

Some minor ranges diplomatic members won't be able to take a VIP helicopter, so they will travel by a VIP diplomatic car escorted by Ecuador National Police. For that reason, **you must overfly the route following the caravan on the ground.**

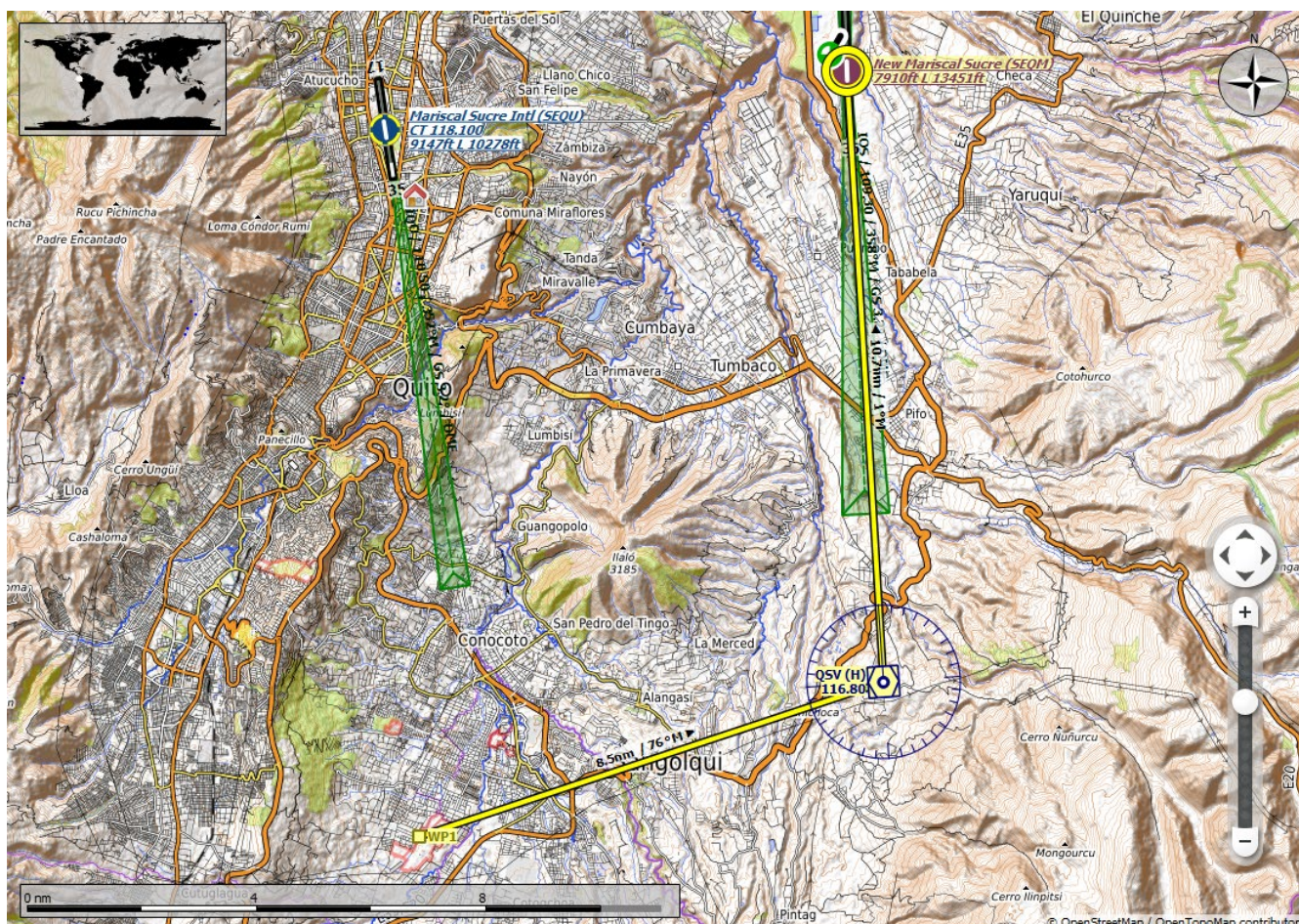
LEG 1: SEBB – SEQM

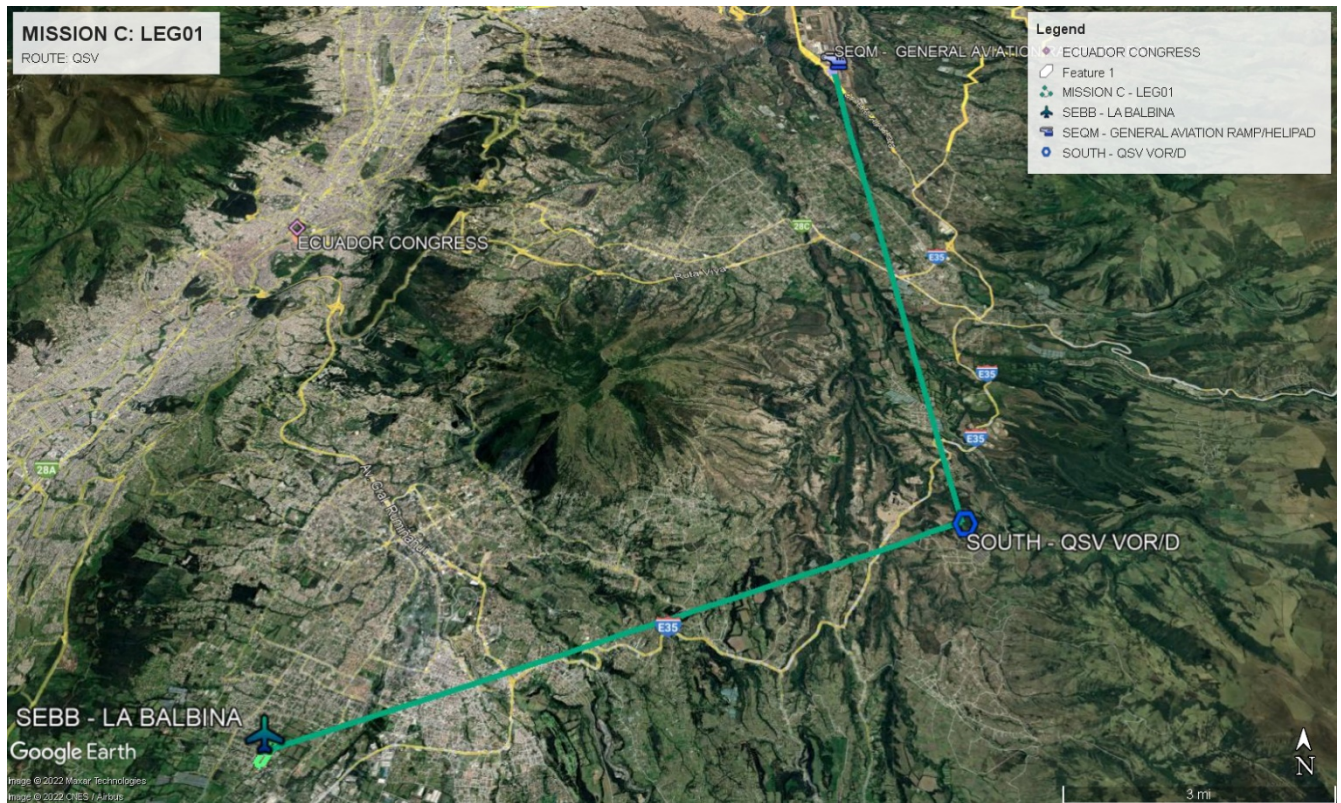
For this leg, you could fly direct to **SOUTH VOR – QSV VOR** and then join final to Runway 36 at SEQM. Beware with 'Ilalo Hill' elevation: 3 185 m / 10 450 Ft.

Another way could be planning your route as usual, following highways and villages avoiding Ilalo on both sides. Or even flying direct between SEBB to SEQM taking care with Ilalo.

SAFE LEG ALTITUDE: 11 000 FT

ETA: 20h45 UTC



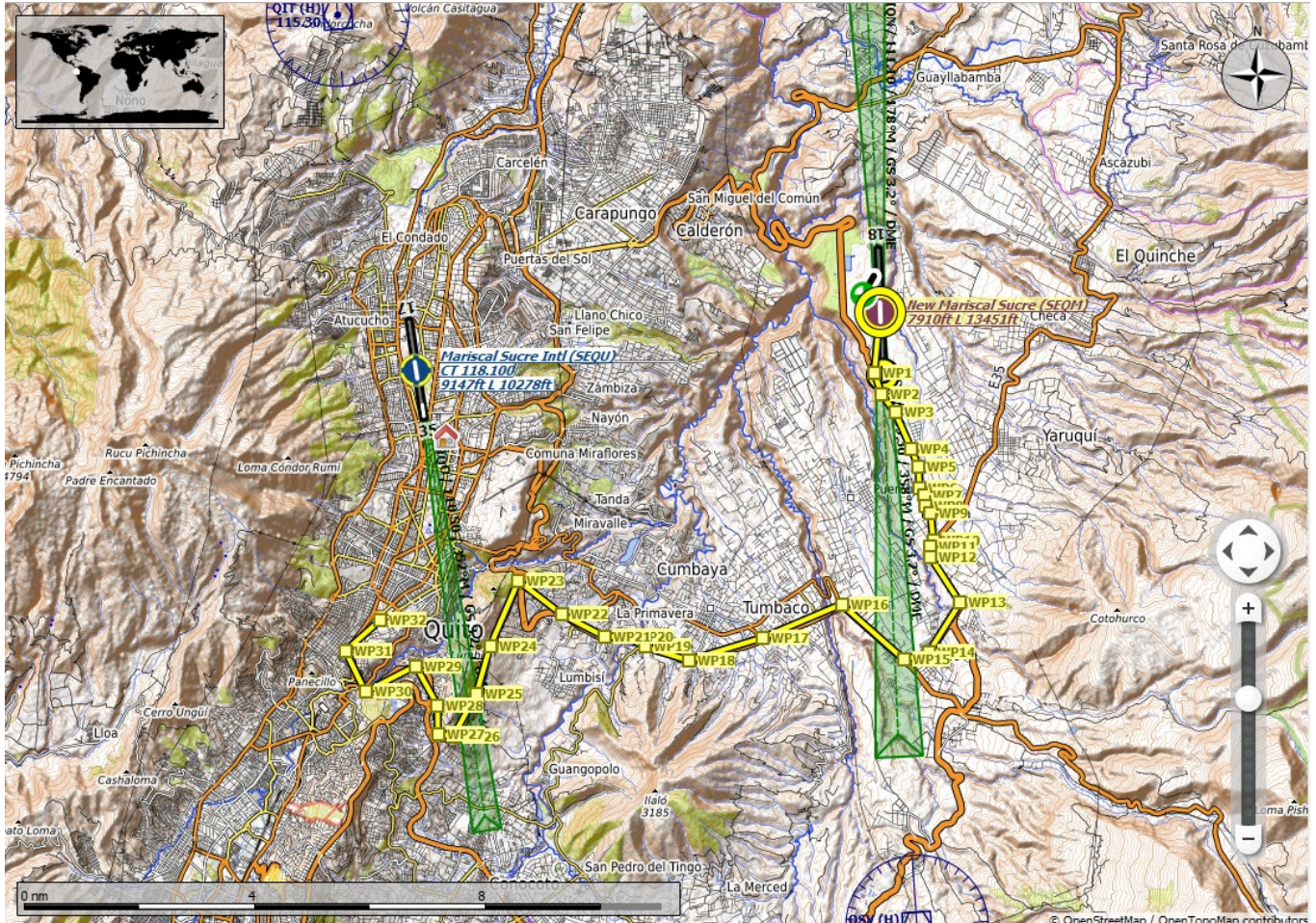


LEG2: SEQM – ECUADOR NATIONAL ASSEMBLY.

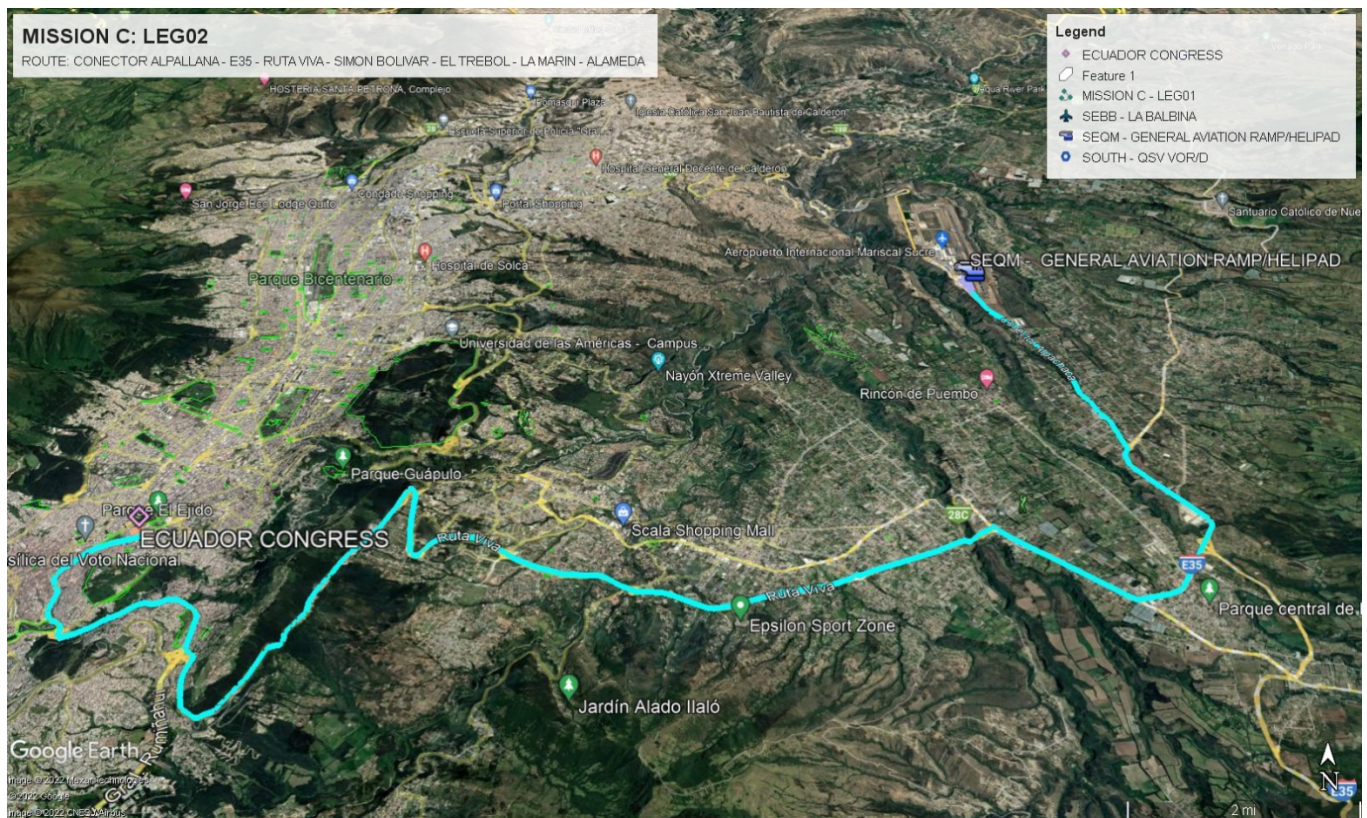
For this route, as mentioned above, you must follow the following route to cover the ground caravan. The helicopters will depart after all VIP planes have landed. The city of Quito has closed all intersections, streets, and avenues along the planned route, and on the highways, police will separate all traffic along the route. The estimated average speed for ground vehicles is **150 kph (about 81 knots)**. No delays are expected for logit ground transport services.

The designed route is: *Before leaving the terminal at 16h05 ECT (21h05 UTC) the convoy will take Autopista Conector Alpachaca, up to the roundabout with Autopista E-35 'Troncal de la Sierra', then join Autopista E-28C 'Interoceánica', at the roundabout join 'Avenida Ruta Viva' up to Avenida Simón Bolívar and then continue to Autopista General Rumiñahui to head towards 'El Trébol'. Finally, continue along Av. Pichincha and Av. Gran Colombia to destination.*

SAFE LEG ALTITUDE: 11 000 FT
ETA: 21h35 UTC



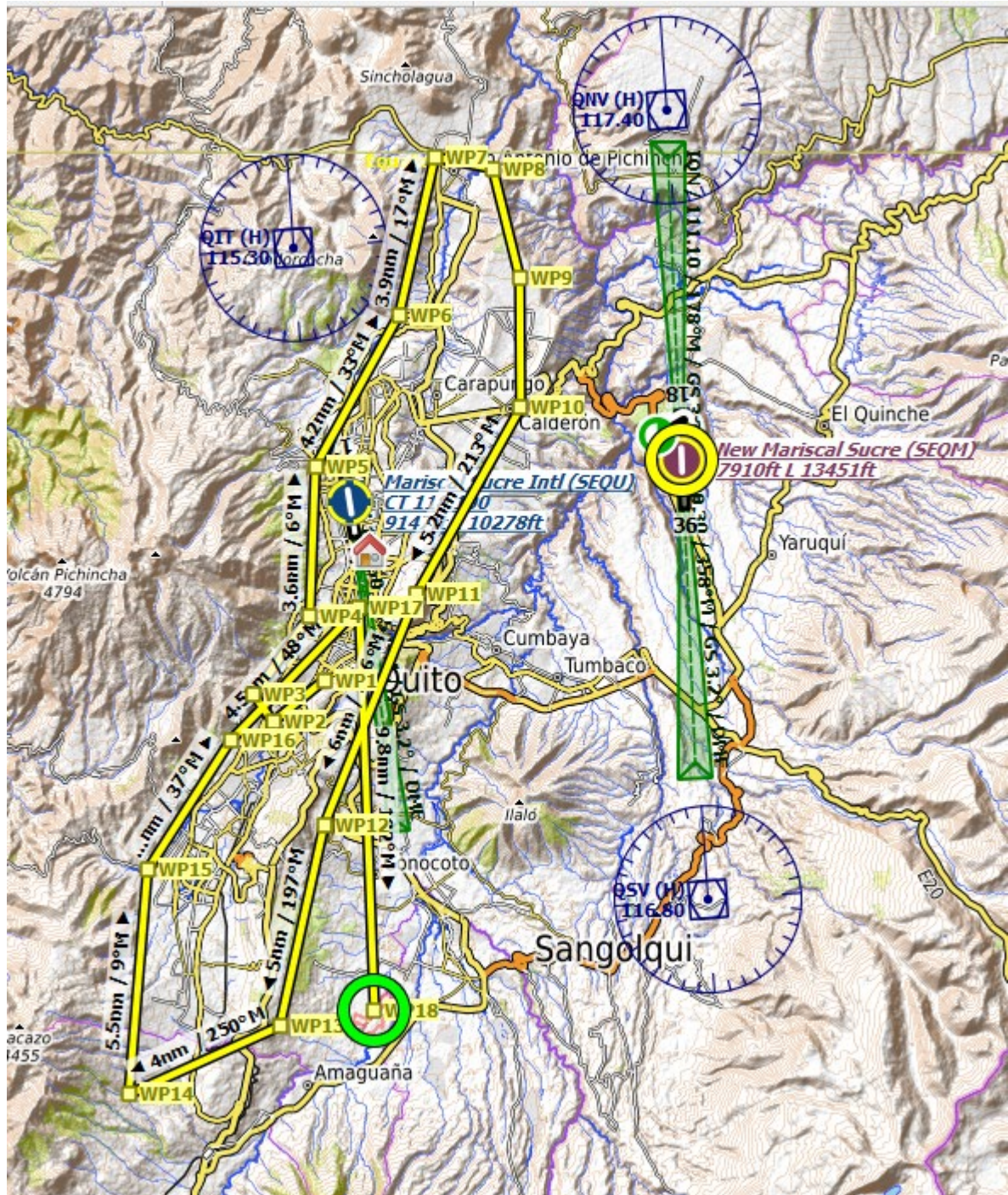
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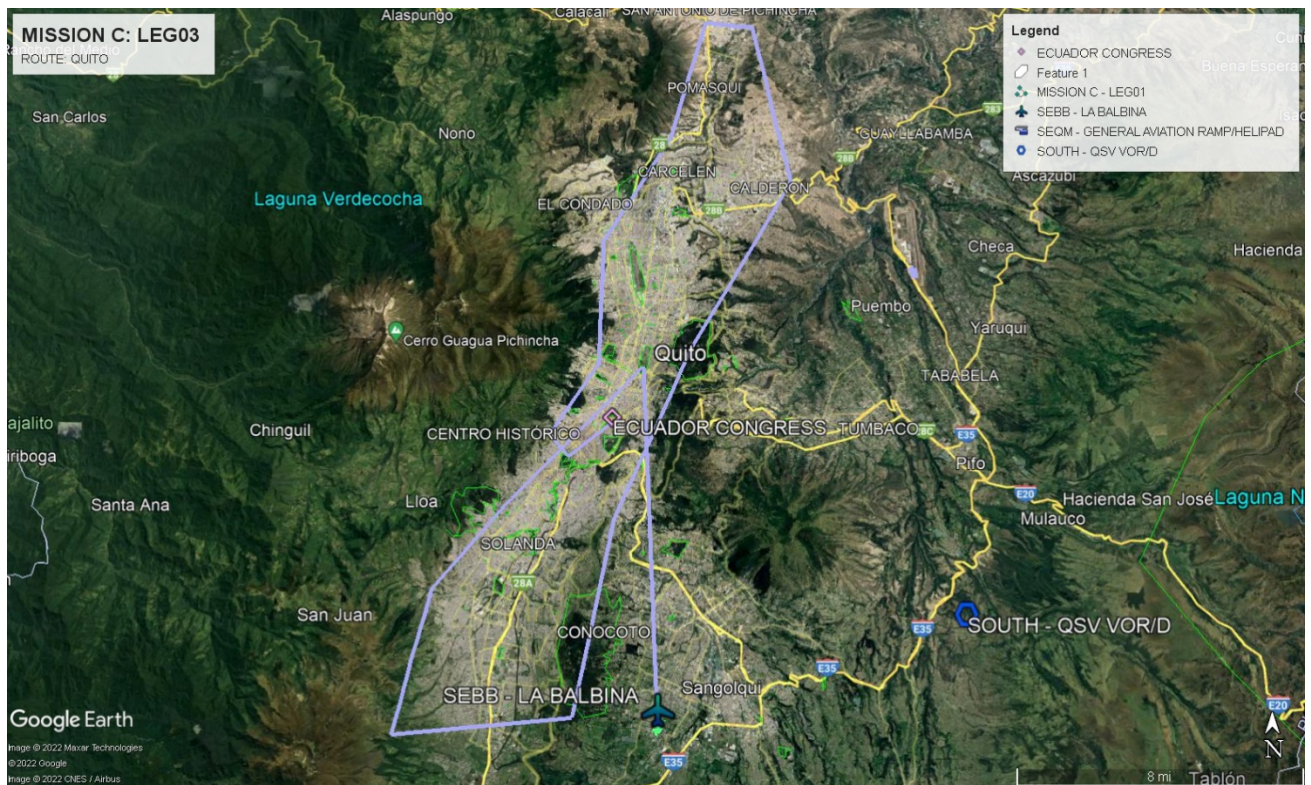
Once the 'package' has been left, you must take off and join in a formation with another VIP helicopter to overfly Quito for 15 minutes before returning to **SEBB – La Balbina**.

We invite to you take a tour around Quito landmarks and its mountains.

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As information. You can find attached a Topo chart of Quito.

*For this mission, you could fill a Flight Plan as:
 VFR military flight, from SEBB to SEBB with route 'LOCAL' or 'QUITO'*

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<https://en-gb.topographic-map.com/maps/lpzw/Quito/>

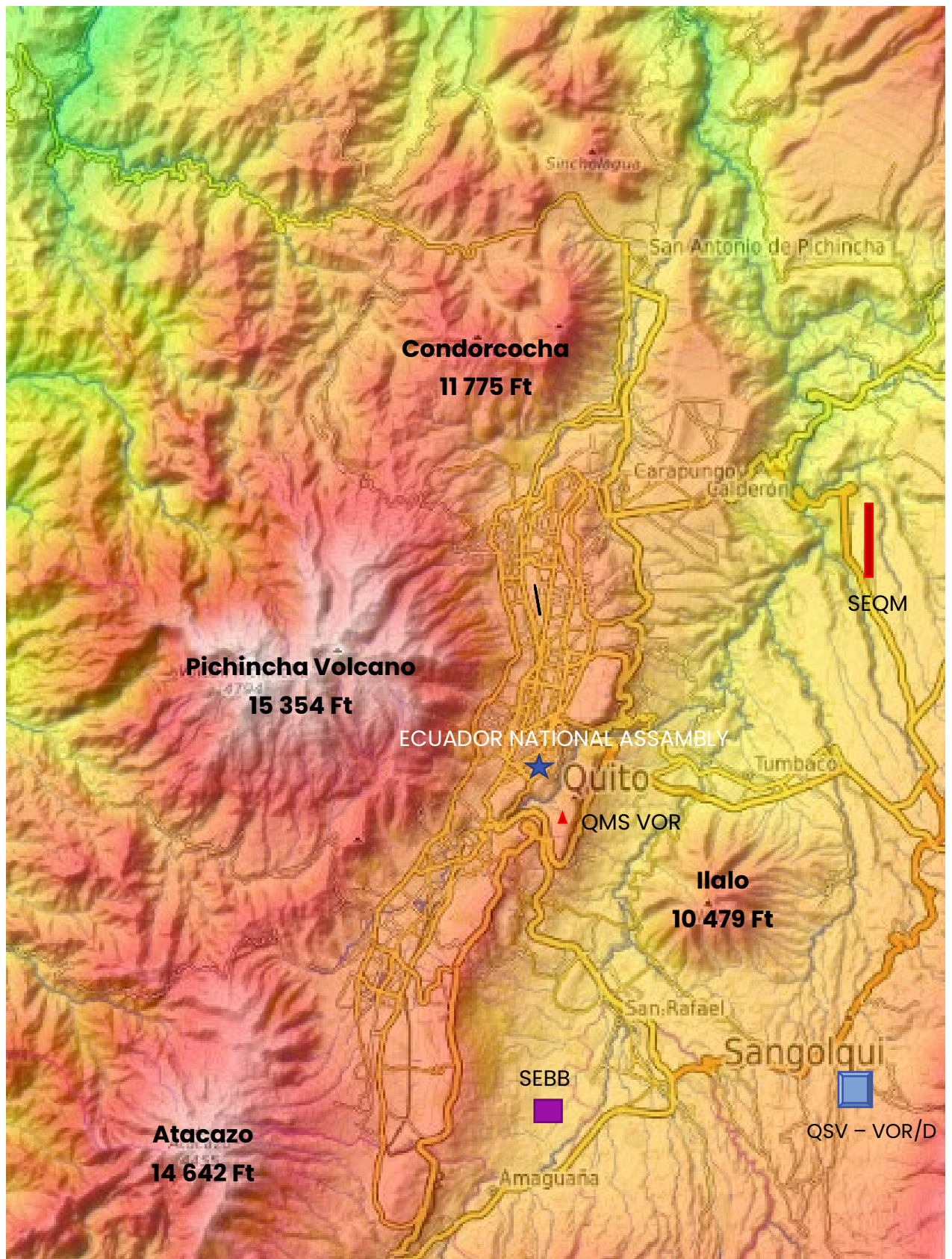


Fig.3.4. Toppo Chart Quito.

4. Airports

SETA

Taura Air Base

S02° 15' 39.79" W079° 40' 48.96"

RUNWAY	LENGTH	COURSE	ELEVATION
03	3 066 m	027°	832 Ft
21		207°	834 Ft



SEBB

La Balbina Helipad

S00° 20' 46.77" W078° 28' 42.93"

RUNWAY	LENGTH	COURSE	ELEVATION
02	285 m	020°	8 274 Ft
20		200°	8 271 Ft



SEQM - UIO

Quito – Mariscal Sucre Intl.

RUNWAY	LENGTH	COURSE	ELEVATION
18	4 098 m	181°	7 776 Ft
*36		001°	7 910 Ft

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Effective 20-MAY-2021

Ecuador Quito Mariscal Sucre Intl

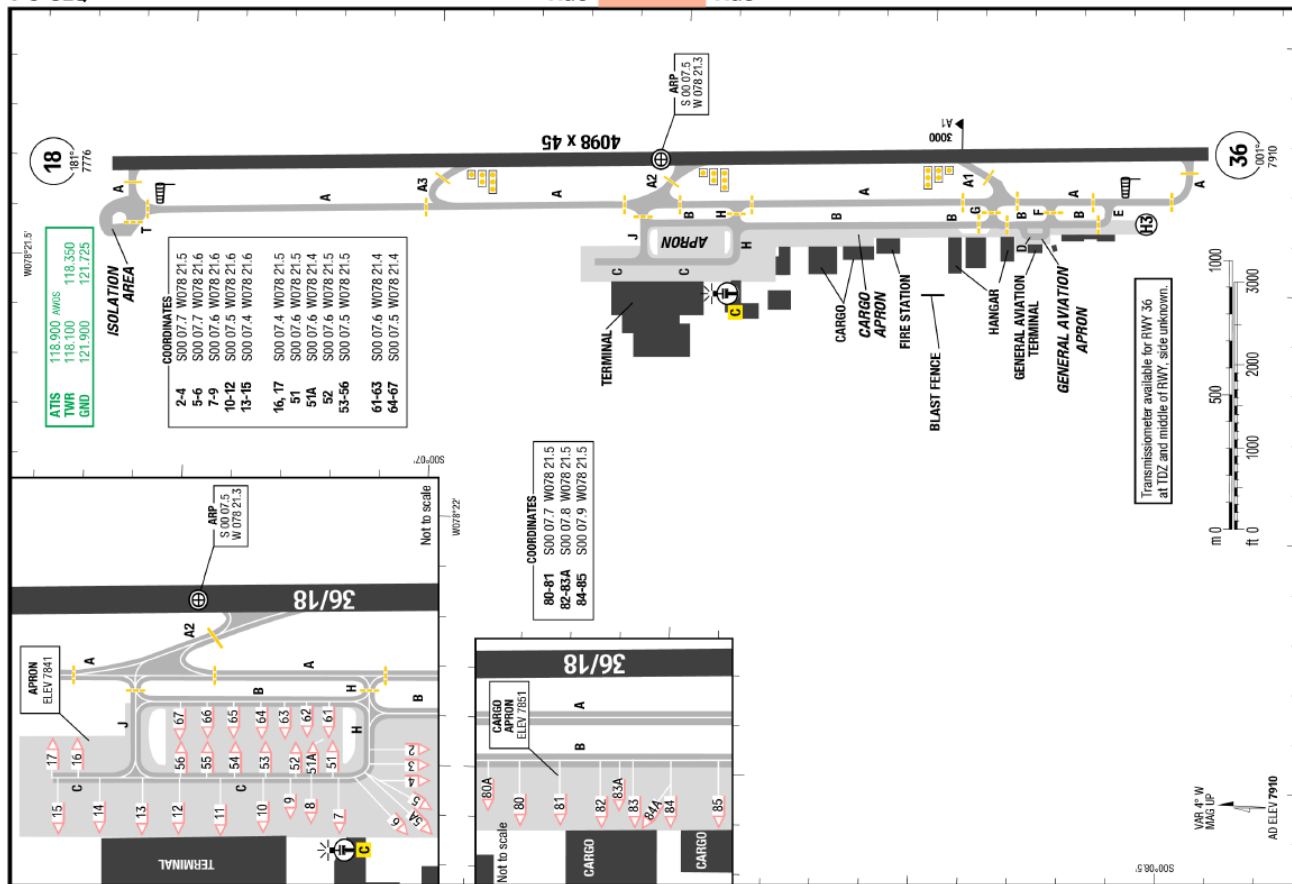
Ecuador Quito Mariscal Sucre Intl

UIO-SEQM

AGC

AGC

AGC



Changes: RI DG

ChartVersionID 1405536

5. ATC

Position	Callsign	Frequency
SEQM_GND	Quito Ground	121.900 MHz
SEQM_TWR	Quito Tower	118.300 MHz
SEQM_APP	Quito Approach	119.700 MHz
SEFG_CTR	Guayaquil Control	128.300 MHz
SETA_MIL_APP	Taura Control	120.000 MHz

6. Comms and NavAids.

All comms between parts involved will be done at [IVAO HQ-SOD Official Discord Server](#).

NAVAIDS

Identifier	Type	Name	Frequency
QIT	VOR/D	CONDORCOCHA	115.300 MHz
QSV	VOR/D	SOUTH	116.800 Mhz
QNV	VOR/D	NORTH	117.400 MHz
GYV	VOR/D	GUAYAQUIL	115.900 MHz
IQS	ILS	ILS RWY36	109.300 MHz
OLM	NDB	OLMEDO	400 KHz
*UIO	NDB	QUITO	350 KHz
*ZUI	NDB	ASCAZUBI	290 KHz
*QMS	VOR/D	MONJAS SOUTH	114.800 MHz

** These Nav aids are outdated. Nevertheless, some flight simulators still have them on its database (FS9, FSX, P3D former versions).*

7. Sceneries

FSX | P3D

- Taura (SETA) – Freeware
<https://drive.google.com/drive/folders/115-pFcGmuHE6595ZOtiPEeeLjSkNNfJY?usp=sharing>
- Quito (SEQM) – Freeware FSX (This scenario is courtesy of Jorge Zuñiga)
<https://drive.google.com/drive/folders/1pMCEqdz-Hj9vqechQu73YWOZnXtnxEES?usp=sharing>
- Quito (SEQM) – Freeware P3D
<https://library.avsim.net/eseach.php?DLID=216945>
- Quito (SEQM) – Payware
<https://secure.simmarket.com/fsxcenery-seqm-mariscal-sucre-fsx-p3d.phtml>
- Quito (SEQM) – Payware (P3D v4/v5)
<https://shop.flightbeam.net/products/flightbeam-seqm>

- Quito Photoreal – Freeware (Better Quality)
<http://boliviaescenariosfsxp3d.blogspot.com/2017/09/quito-fotoreal-hd.html>
- Ecuador Photoreal – Freeware (Low Quality)
<http://www.airhispania.com/phpBB3/viewtopic.php?t=4223>

We suggest downloading photoreal scenery to get better performance, especially for helicopters. It is not mandatory. There are two options. Quito Photoreal from Bolivia Sceneries covers an area of around 24 000 Km² around Quito. In my opinion is one of the best. You must download all the parts. All the scenery file size is near 8 GB.

On the other hand, you can download Air Hispania South America Part II Andes, Zones 019, 020, 012. They cover all of Ecuador's territory. There is the lowest quality and storage saver (due to low quality).

Also, we suggest downloading a mesh terrain for Ecuador or South America.

X-Plane 11


- Taura (SETA) – Freeware
<https://gateway.x-plane.com/airports/SETA/show>
- Quito (SEQM) – Freeware
<https://forums.x-plane.org/index.php?/files/file/75552-seqm-quito-mariscal-sucre-international-airport/>

8. Charts

Quito (SEQM) charts is available at our divisional website <https://ec.ivao.aero/> in private section. Login is required.

9. Other

[You could get the FPL file and Google Earth KLM file here.](#)

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Participant Pilots and ATC must register on SOD Event website to receive their points for Special Operations HQ Awards.



www.sod.ivao.aero/events

For this event, you could get the medal 'Aviation Celebration Tours and Events'.



<https://tours.at.ivao.aero/index.php?div=EC>

For this event is mandatory to send a mail to ec-specialops@ivao.aero with your VID + your aircraft intended to flight as soon as you register

Any doubt doesn't hesitate to ask me by mail or Discord

Alexander Duque Paramo

Ecuador – Special Operation Coordinator

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@Lukas11628#3100

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