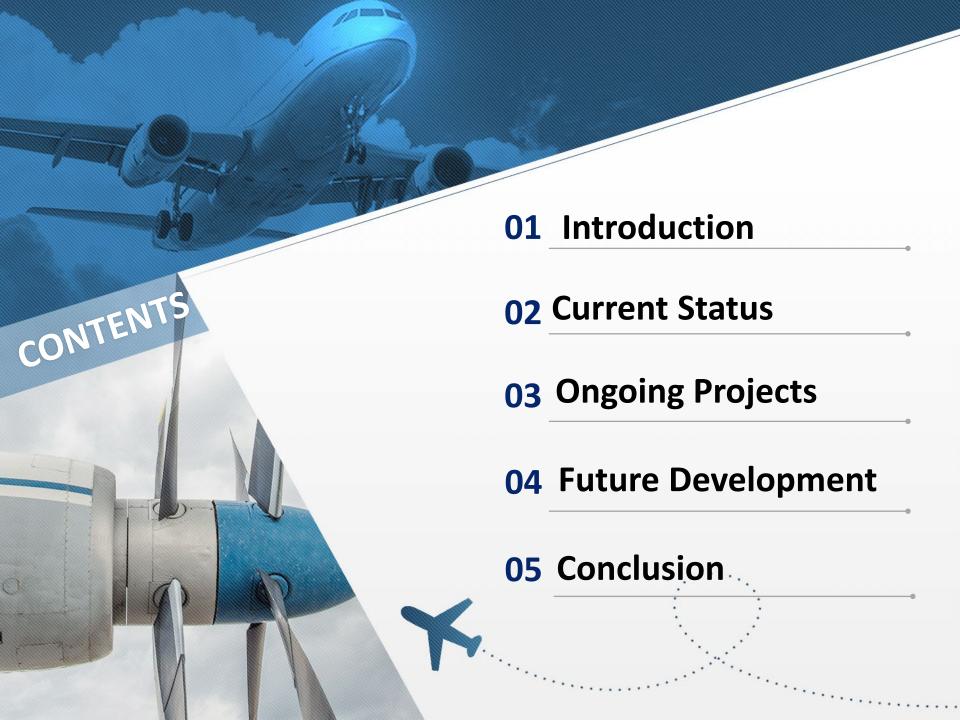


Tenth Meeting of the MIDANPIRG Air Traffic Management Sub-Group (ATM SG/10) (Jeddah, Saudi Arabia, 20 – 23 October 2024)

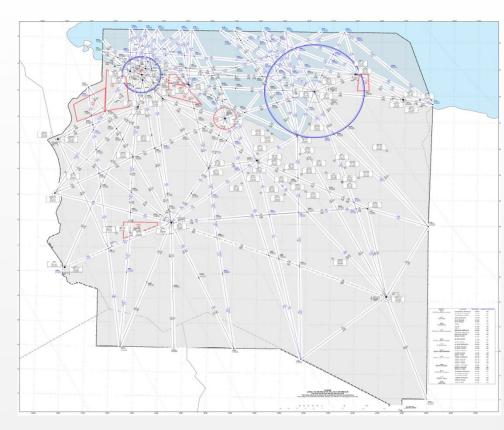




Introduction

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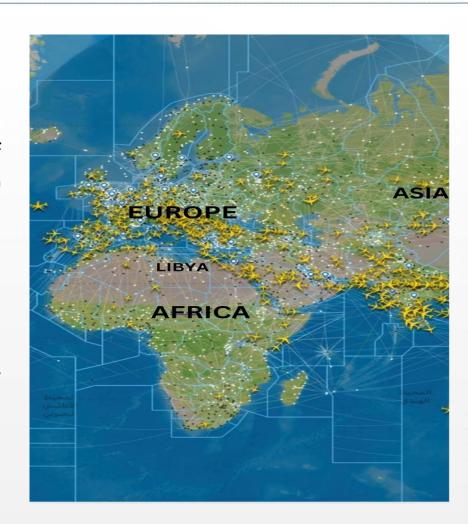
Libya, is located in the center of North Costal African Countries, it holds a crucial location in the air traffic volume, With an Air Space of almost 2.5 Million km². However, there is a need for improvement in the air navigation system nowadays to maximize the benefits for customers. The LYCAA aims to explore the potential advantages that customers can gain through the development in the aviation industry.



The Importance of Tripoli FIR



- Reopening Libya's airspace could save airlines up to 25 minutes of flight time and 450kgs of fuel per flight.
- This translates into annual savings of \$200 million for airlines and 170,000 tons of CO2 emissions.
- IN the other side there are many Airlines came to Libya and audited the ADs to restart their flights on the other hand we received many overfly permissions request like Turkish Airlines, Qatar Airways, MEA Airlines, Etihad Airways, Iraqi Airways and Egypt Air etc.



Civil - Military Cooperation



Civil-Military Cooperation and Coordination are vital elements in the efficient use of airspace. By means of successful civil-military coordination, it is possible to gain benefits for both civil and military aviation despite their obvious different needs and interests.

- ☐ The Libyan Civil Military Committee (CMC) has been established.
- ☐ The Coordination Protocol Between ATS and Electronic Aviation Authority (UAVs) has been Approved.
- ☐ SAR Plan and Agreements Established and Ready to Implement.





Security Assessment by International **Organizations**



Security Concerns and Risks

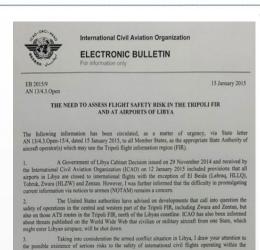
Despite facing numerous challenges such as:

Some Countries recommended not to fly within the airspace of Libya (EASA) CZIB Issued on 31/04/2024).

LYCAA Mitigation Strategies

- Collaborative Efforts
- Diplomatic Solutions

LYCAA working in order to eliminate all challenges that hinder the restoration of the air traffic flow to Tripoli FIR and Aerodromes.



assess flight safety risk in the Tripoli FIR and at airports of Libya. You are also encouraged to contact

ICAO (Mr. Catalin Radu, Deputy Director, Aviation Safety, Air Navigation Bureau, by email at

cradu@icao.int) to share any additional information you may receive regarding the threat and risk to

TEL/FAX: +218 21 5632338 AFS: HLLLYNYN. site: www. Caa.gov.ly/ais /

CIVIL AVIATION AUTHORITY AIR NAVIGATION SERVICES DEPARTMENT AERONAUTICAL INFORMATION SERVICE

You are therefore strongly urged to use this, and any other pertinent information, to

ICAO will continue to monitor the situation and I will notify you of any significant

Effective Date 16 JUN 2021

THE AIRSPACE OF STATE OF LIBYA FROM GROUND TO UNLIMITED IS OPEN TO ALL INTERNATIONAL COMMERCIAL FLIGHTS HOWEVER, IT IS RECALLED THAT ADS-B AND/OR RADAR TRANSPONDERS MUST REMAIN ON FOR ANY FLIGHT TAKING PLACE IN THE LIBYAN AIRSPACE.

ON THE OTHER HAND, MILITARY OR PRIVATE FLIGHTS MUST OBTAIN PRIOR PERMISSION FROM THE RELEVANT AUTHORITIES BEFORE ENTERING THE AIRSPACE.

Conflict Zone Information CZIB No.: CZIB-2017-02R15

Subject: Airspace of Libva

30/04/2024

31/10/2024

- · 31/01/2024 The recommendations were amended and the validity of the CZIB
- 31/10/2023 The validity of the CZIB was extended until 31 January 2024. No additional changes in relation to the content were introduced
- 20/07/2023 German AIC 12/23 issued on 13 July 2023 superseding AIC 09/23.
- 23/05/2023 German AIC 07/23 issued on 18 May 2023 superseding AIC
- 05/23. Canada AIC 13/23 issued on 18 May 2023 replacing AIC 3/23.
- . 28/04/2023 The validity of the CZIB was extended until 31 October 2023. No

- additional changes in relation to the content were introduced • United Kingdom AIP ENR 1.1 issued 16 June 2022 (see Appendix 1)
- United States Federal Aviation Administration NOTAM KICZ A0042/20 issued 27 July 2020 & SEAR 112 issued 27 July 2020 (see Appendix 2)
- AIC France Circular A 24/22 issued 24 November 2022 (see Appendix 3)
- . German AIC 12/23 issued 13 July 2023 (see Appendix 4)

Transport Canada AIC 13/23 issued 18 May 2023 (see Appendix 5)

Affected Airspace:

Libyan airspace, all altitudes

(A0067/21 NOTAMN

Q) HLLL/ QXXXX/IV/NBO/AE/000/999/2800N01754E999

A)HLLL

AIC Series B

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E) THE AIRSPACE OF STATE OF LIBYA FROM GROUND TO UNLIMITED IS OPEN TO ALL INTERNATIONAL COMMERCIAL FLIGHTS HOWEVER, IT IS RECALLED THAT ADS-B AND/OR RADAR TRANSPONDERS MUST REMAIN ON FOR ANY FLIGHT TAKING PLACE IN THE LIBYAN AIRSPACE. ON THE OTHER HAND, MILITARY OR PRIVATE FLIGHTS MUST OBTAIN PRIOR PERMISSION FROM THE RELEVANT AUTHORITIES BEFORE ENTERING THE AIRSPACE

Current Status (Communications)



CNS Infrastructure

We work to enhance the resilience of the CNS infrastructure to deliver safe, secure, predictable, efficient and sustainable operations that improve the Region's network performance.

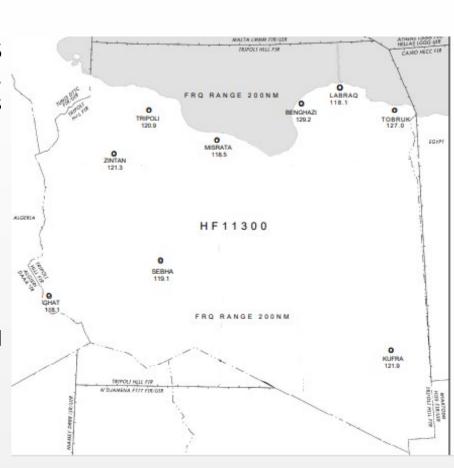
Communications:

Air-ground communication and backup:

- VHF Communications.
- HF Communications.

Ground-ground communication with concerned ATS units specifically adjacent FIRs:

- Direct Telephones.
- Hotlines.
- AFTN/AMHS.



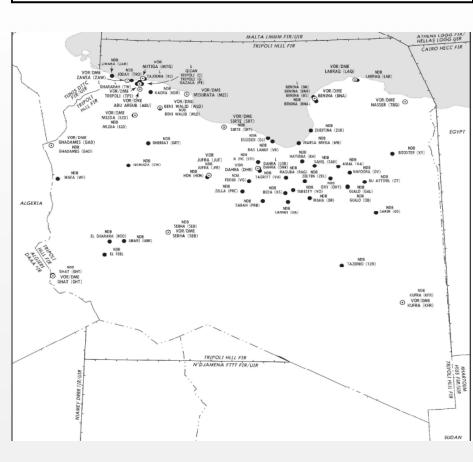
Current Status (Navigation)



Ground-Based Navigation Aids:

- VOR-DME Stations: we have several VOR-DME stations that provide directional guidance to aircraft. These are typically located at major airports and key locations to aid en-route navigation.
- NDB Stations: Non-Directional Beacons are used for navigation in Tripoli FIR, especially in regions where VOR coverage might be limited.
- Instrument Landing System (ILS): Major airports in Libya, such as Mitiga, Benina, Misrata and Labraq Airports, are equipped with ILS-DME.

NAV Aids Chart

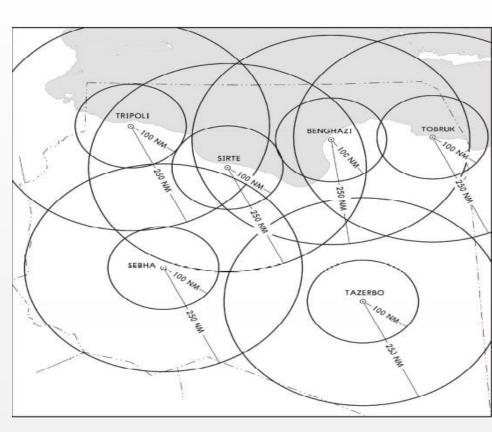


Current Status (Surveillance)



Area of radar coverage (2010)

Many airports and air navigation facilities in Libya have suffered from neglect and damage due to conflict. This has led to challenges in maintaining and upgrading air navigation systems.



Current Status (Air Traffic Services)



Libyan Civil Aviation Authority (LYCAA) Responsible for providing air traffic services.

- Air traffic control service.
- Air traffic advisory service.
- Flight information service.
- Advisory service.

Tripoli Flight Information Center		
ACC	(2) ACCs	
Approach	(4) APPs	
Tower	(14) TWRs	

Airspace Classification

Class A,C,F and G

Day and Time of Service

24/7 availability of ATS services, guaranteeing continuous support and guidance aircraft operations.





Current Status (Search & Rescue)

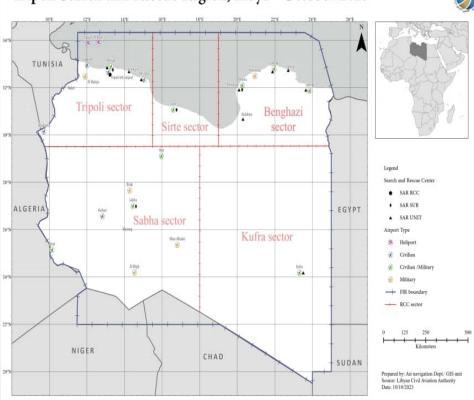


Ensure the state's ability to protect and save lives and aircraft to respond quickly and effectively in a timely manner.

Legislations and Regulations:

- Law No. (6) of 2005 on civil aviation.
- Minister of Transport and Transport's decision in 2012 on the internal organization of the Civil Aviation Administration
- Council of Ministers decision for the year 1973 to establish a search and rescue coordination center at Tripoli FIC.

Tripoli Search and Rescue Region, Libya - October 2023



Current Status (Search & Rescue)



- ICAO Annex 12, International Convention for the Safety of Life at Sea (SOLAS).
- ICAO Doc 9731 Vol 3.
- LYCAR-SAR.
- Operation manual and plan.
- Agreements (Local Authorities and Adjacent SRRs).

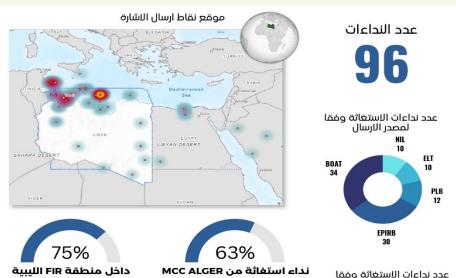
Tripoli RCC Equipment:

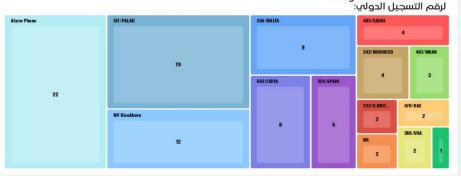
- ✓ AFTN-VHF-HF, Telephones and e-mails.
- ✓ Receiving distress signals issued by the international system through ALG MCC.



خدمات تنسيق نداءات الاستغاثة بقسم البحث و الانقاذ

من 01 يوليو الى 31 يوليو 2023





Current Status (Human Resources)



Technical and Operational

Investing in specialized training programs for personnel to operate and maintain advanced air navigation system effectively.

		ANS Man	power		
	ATCOs	AIS/AIM	ATSEP	SAR	MET
Total	287	150	140	20	55

ANS training plan.xlsx



Current Status (ATC Licensing)



ATC LICENSING			
	ATCOs 192	Student ATC 95	
Refreshments Course	YES	-	
ELP	YES	-	
Medical Class 3	YES	YES	





Lib	yan Civil Aviatio	n Authority		L
	Medical Cert	ificate		nd Last name of ho UHA SALAN
	Class 1/2	/3		
	Pertaining to a Par Part-ATCO lice		XIV. Date	of birth:
Issued	in accordance with Part-ATCO.M		VI. Nation	LIBYAN
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	Single prof operations carrying passangers	Other commercial agerations		
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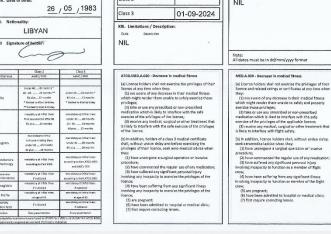
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	Class 3
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Certificate Number	:
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Date of birth:	
	26 / 05 / 1983
Nationality:	
LIBYA	.N
Signature of helder	f
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	NOUHA SA Date of birth: Nationality: LIBYA

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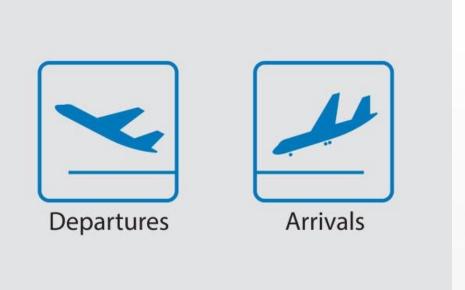






Current Status (Major Operative Airports)

There are 4 international airports and each one operates a different number of domestic and international flights as shown in the table below.

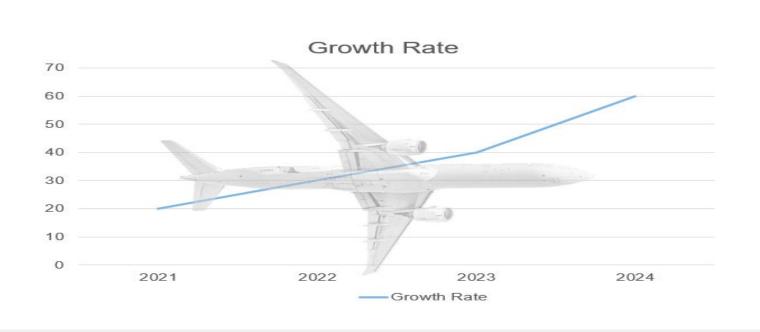


AD	International Take-Offs per week	International Landings per week	Domestic Take-Offs per week	Domestic Landings per week
Mitiga	180	170	114	105
Benina	76	64	67	56
Misrata	42	37	10	6
Sebha	-	-	13	12

Current Status (Air Traffic Growth Rate)

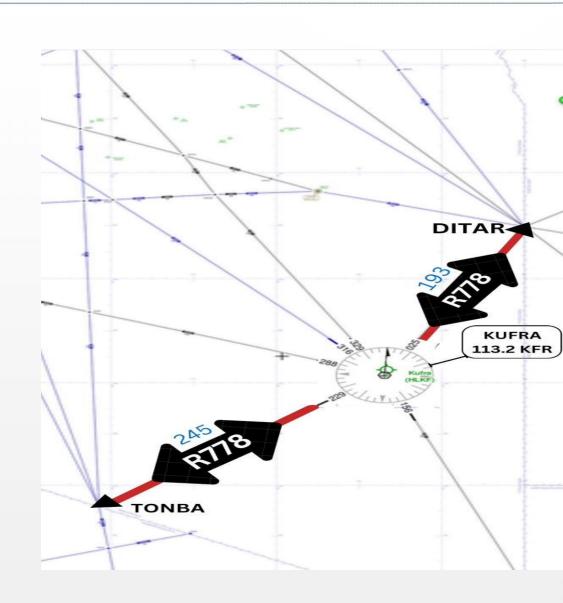


Since 2021, we have observed a significant increase in the number of flights due to the use of our FIR for overflying and scheduled flights to our airports by both national and international operators. that was a result of the efforts made by LYCAA, the rate of flights (over flying, landing and take off) increased by 60% in 2024 compared to 2023 and there are many airlines granted a permissions to operate within HLLL FIR and ADs (Turkish airlines, Etihad Airways, Iraqi Airways, Royal Air Jordanian).



Current Status (Overflying Operations) -

- EGYPTAIR20 Flights per day.
- PEACE BIRD AIRLINES
 5 Flights per day.
- MIDDLE EAST AIRLINES
 4 Flights per day.
- Other AIRLINES
 10 Flights per day.



Current Status (Letter of Agreement with adjacent FIRs)



Adjacent FIR	Status of ATC LoA	Remarks
Cairo	V	Updated 2022
<u>Malta</u>	V	Updated 2024
Tunis	V	In progress
Algiers	V	2008
N'Djamena	٧	2008
Khartoum	٧	2008

Current Status (Cooperation with MIDRMA)

 TDS and routing options to MIDRMA for 2024.



Ongoing project

+=0

- ✓ Equipping 4 ATC TWRs in different ADs.
- ✓ Tripoli backup ACC.
- ✓ Tripoli Main ACC.
- ✓ Benghazi ACC.
- ✓ Benina ILS-DME.
- ✓ Ubari VOR-DME.
- ✓ AMHS/AIM (Wepub, CRONOS, PLX, AIM portal, eTOD and ICE).
- ✓ eTOD for Six airports (area 2, 3 and 4).
- ✓ Communication equipment (receivers, transmitters, radios and recorders).



Further LYCAA Efforts



As part of the CAA commitment to advancing air navigation, a strategic collaboration with ANS specialized companies have been established.

- ✓ Equipping 5 ATC Towers in different aerodromes.
- ✓ Deploy 3 PSR & SSR stations.
- ✓ Deploy 15 ADS-B stations.
- ✓ Deploy 15 E-VHF stations providing full coverage for Tripoli FIR.
- ✓ Migration to EAD.
- ✓ NAV aids next phase installation (VORs-DME and ILS).
- ✓ GNSS Establishment and implementation.



