

الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



MIDANPIRG ATM SG/3 MEETING CAIRO, 22-25 MAY 2017



ATS Routes improvements implemented

- New ATS routes M/UM550 (GOGLU-MIGMA) on AIRAC 6/17 dated 25 May 2017.
- M/UM550 is 16.4 NM shorter than the existing route
- Benefit analysis indicates operators will save at least 317000 kg of fuel which is 922604.95 kg of CO₂ annually
- Approved by the regulator through the UAE CAAP 41 e-services



ATS Routes planned for implementation

- The UAE Airspace Restructuring Project (ARP) Phase 3 (Integration and implementation of Phase 1 & 2) is planned for implementation on 7th December 2017.
- GCAA SZC has sent a letter to ICAO MID office to accommodate (300) 5LNC.
 - Total change of routes and flight procedures (RNAV-1 and RNP-APCH)
 - Regulatory challenge to manage the review and approvals within a limited time frame
 - Partially mitigated by full involvement of the regulator in the project
 - Effective date 7 December 2017
- GNSS on board aircraft mandated from 7 December 2017 in order to ensure RNAV-1 compliance.
- ADS-B (OUT) Mandated from 1 January 2020.



Brief regarding the ongoing ATM projects/initiatives

GCC Upper FIR project

- Operational plan – final draft submitted for review
- Technical Plan - final draft submitted for review
- Institutional plan - final draft submitted for review
- Project is expected to be completed by July 2017

UAE ATM system project

Three Technical Proposals were received

Received proposal are under review by SZC Technical team



Other Updates

- FUA concept implemented in OMR61 for training areas shared by Military and Civil users
- UAE Training Areas were published in the e-AIP on 11th November 2016
- Emirates ACC sector YANKEE to improve holding management during arrival peak to the Northern Emirates airports from the east (BUBIN)
- Emirates ACC sector MIKE to increase the capacity and reduce frequency congestion for overflying traffic in the Northern part of the Airspace.
- Update the current LoA with Bahrain ACC, Muscat ACC, Doha, Jeddah ACC and Tehran ACC
- Implementation of OLDI with Abu Dhabi Airport, Bahrain ACC (effective date 13 June 17)
- Full implementation of EMAN system for both Dubai & Abu Dhabi



SAR GCAA Obligations:

- GCAA Comprehensive Surveillance on SAR service provider for regulatory compliance
- SAR Service provider certification
- Addressing ICAO ICVM PQs & Deficiency
- Bilateral Arrangements between ANSPs/ACCs
- SZC SAR agreements signed with Tehran and Bahrain and contingency agreements with Jeddah and Muscat

NSRC (UAE SAR Service provider):

- Communication with Ministry of Foreign Affairs for signature with Neighboring State. (*Communication established with Oman & KSA*)
- NSRC equipped with SAR MASTR (*incident management System*) planning managing all SAR operations.
- MCC equipped with OCC 600 (Operation Control Console) receiving all emergency bacon on 406.
- Highly qualified personal



Current Proactive Activities to Reduce and Limit Drone Threats:

- Regulations / Restrictions / Law Enforcement
- UAS Organisation Approval
- Drone Registration
- UAS Operational Approval
- Drone No Fly Zone Sign
- UAE Drone Fly Zone Map (APP) & Drone Mobile Application
- UAS Safety Brochure
- Awareness Programmes (GCAA & GCAA with MOI)
- Specific Drone Flying Areas / Drone Clubs



Lessons learned and outcomes:

- Consolidate all GCAA regulations in to one comprehensive regulation
- Continuation of the Awareness Programmes (GCAA & GCAA with MOI)
- Full Automated System for registration & operation approval with UAE external entity
- RPAS Tracking or Jamming ??
- It is envisioned that the UAE will require a UTM Airspace management system for the control and monitoring of all UAS movements below 500 ft in the foreseeable future



Airspace Closures

Location	Date	Local Time	Length of delay
Abu Dhabi	16 Dec 2015	1616	5 minutes
Abu Dhabi	05 Dec 2015	1645	65 minutes
Abu Dhabi	26 Nov 2015	1645	65 minutes
Dubai	11 Jun 2016	1120	80 minutes
Dubai	28 Sep 2016	0805	45 minutes
Dubai/ Sharjah	29 Oct 2016	1945	80 minutes
Dubai/ Sharjah	18 Nov 2016	1325	-
Abu Dhabi/ Bateen	18 Nov 2016	0800	-



Current GCAA Drone Regulations

CAR PART VIII Subpart 10 (UAS Operation)

CAR PART II CHAPTER 10, LIGHT SPORTS AVIATION ACTIVITIES (LSA)

- Chapter 8 Article 41, Issued April 2016.

- **CAR PART II CHAPTER 11**

- Experimental and Demonstration Purposes, issued May 2016.

- **CAR PART IV Unmanned Aircraft System (UAS)**

- Organization Requirements, issued September 2106.

GCAA ANA Safety Alert 04/2016

- For UAE ANSP Units Issued: 29th June 2016



SAFETY ALERT 04/2016

Issued: 29th June 2016

SUBJECT:

Contingency measures for unauthorised UAS operation or unknown/unidentified aircraft within controlled airspace.

REFERENCE PUBLICATION:

CAR PART II Chapter 10
CAR Part VIII, Subpart 4
CAR Part VIII, Subpart 10
GM 03 CONTINGENCY PLANNING FOR AIR TRAFFIC SERVICES

CATEGORY:

Attention and Recommendation

REASON:

The purpose of this Safety Alert is to:

- ensure civil aviation regulations are adhered to when unauthorised UAS operation or unknown/unidentified aircraft, either reported or observed, affect aircraft safety in controlled airspace, and
- provide recommendation and guidance on contingency measures to be implemented.

APPLICABILITY:

- UAE Air Traffic Services Units (ATSU)
- Air Traffic Controller Supervisors (SUP)
- Air Traffic Controllers (ATCOs)

DESCRIPTION:

The penetration by a manned or unmanned aircraft into a portion of controlled airspace without prior permission from the air traffic services provider may result in multiple safety, efficiency, environmental and security risk concerns. Such infringements:

- are potentially hazardous to other airspace users;
- may immediately result in a significant increase in ATCO's and Supervisor's workload such as coordination, the need to break-off an approach, change aircraft sequence for landing or implement other contingency measures, etc.;
- may cause an unacceptable cost to industry, incurred through closures of airports and airspace due to numerous delays and diversions; and
- may pose a significant threat to national security since such flights will not be under normal communications and surveillance.



Brief regarding the ongoing ATM projects/initiatives

RPAS Threats:

UAE Drone Mobile Application:

UNITED ARAB EMIRATES
MINISTRY OF INTERIOR



الإمارات العربية المتحدة
وزارة الداخلية

UNITED ARAB EMIRATES
MINISTRY OF INTERIOR



الإمارات العربية المتحدة
وزارة الداخلية



قم بتحميل تطبيق الطائرات بدون طيار في هاتفك النقال

يتيح تطبيق الهواتف الذكية للمستخدم بتحديد المناطق التي يسمح بتشغيل الطائرات بدون طيار فيها والمناطق المحظورة والتي يمنع الطيران فيها، وللإطلاع على المناطق المسموح فيها الطيران يرجى تحميل تطبيق UAE Drone Fly Zone والمتوفر على أنظمة الهواتف الذكية.

#انت_المسؤول
#you_are_responsible

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Download the application for drones on your mobile phone

Please download the Mobile application UAE Drone Fly Zone

The application allows you to see areas where you are allowed to fly drones and the restricted areas, where you are not allowed to fly

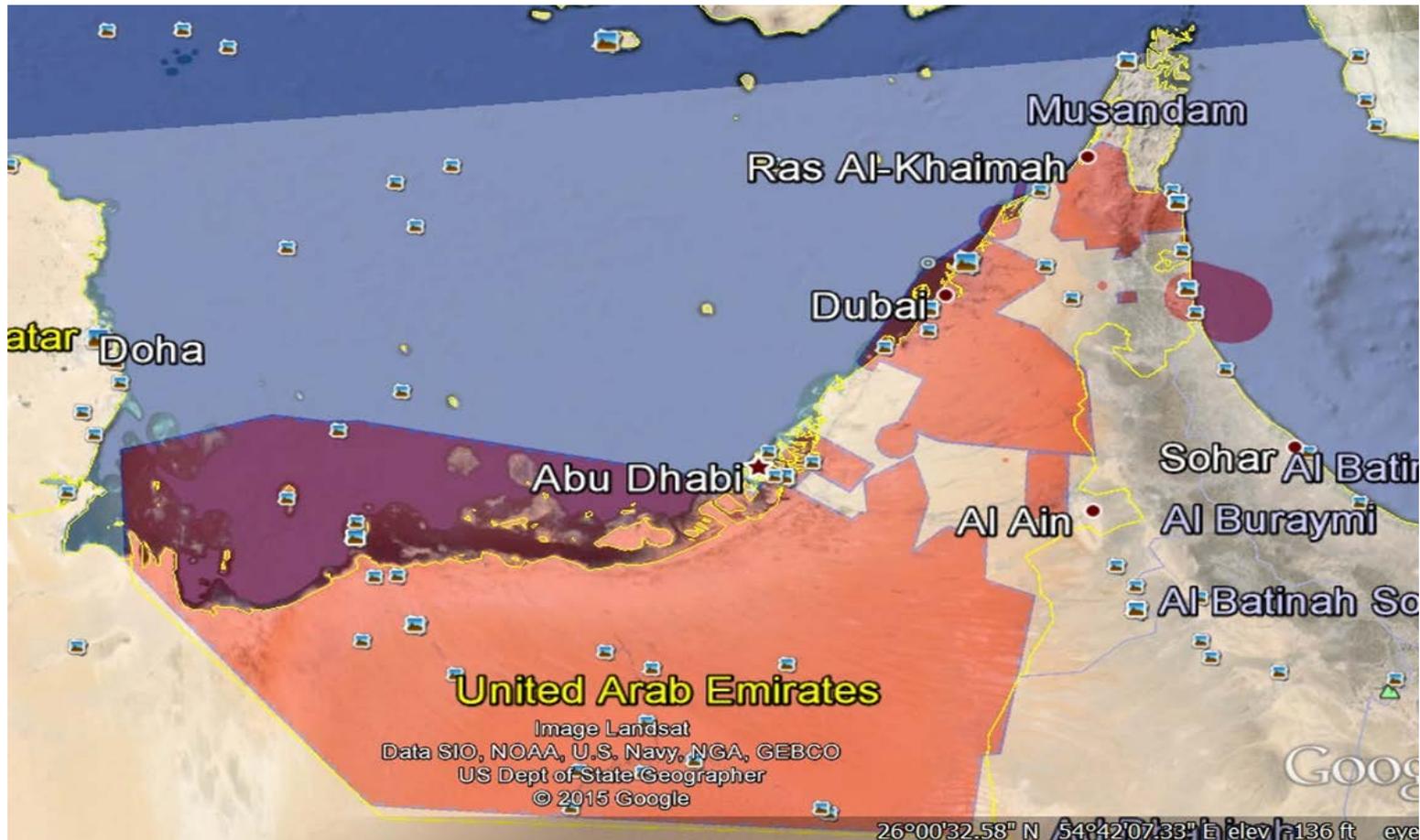
#انت_المسؤول
#you_are_responsible

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Always remember:

 <p>You are responsible for each flight</p>	<p>You are legally responsible for the safe conduct of each flight.</p> <p>Take time to understand the rules - failure to comply could lead to a criminal prosecution.</p>	 <p>Keep your distance</p>	<p>It is illegal to fly your unmanned aircraft over a congested area (streets, towns and cities).</p> <p>Also, stay well clear of all UAEs airports, airfields, Restricted areas, Heloports and Helicopter landing Sites.</p>
 <p>BEFORE each flight, check drone for damage</p>	<p>Before each flight check that your unmanned aircraft is not damaged, and that all components are working in accordance with the Supplier's User Manual.</p>	 <p>Keep your distance metres</p>	<p>Don't fly your unmanned aircraft within 200m of a person, vehicle, building or structure, or overhead groups of people at any height.</p>
 <p>Drone is in sight at all times</p>	<p>You must keep the unmanned aircraft within your sight at all times and not above 400ft AGL.</p>	 <p>Consider rights of privacy</p>	<p>Use of video or any image capturing devices is prohibited in UAE aerospace, as you may breach privacy and security laws.</p> <p>Using camera for commercial is subject GCAA approval.</p>
 <p>YOU are responsible for avoiding collisions</p>	<p>You are responsible for avoiding collisions with other people or objects - including aircraft.</p> <p>Do not fly your unmanned aircraft in any way that could endanger people or property.</p>	 <p>Permission to use drones for paid work</p>	<p>If you intend to use an unmanned aircraft for any kind of commercial activity, you must get a 'Permission' from the General Civil Aviation Authority. For more details, visit www.gcaa.gov.ae</p>





Brief regarding the ongoing ATM projects/initiatives

RPAS Threats:

GCAA & MOI Awareness Campaign Video:

[Drones Clip.mp4](#)