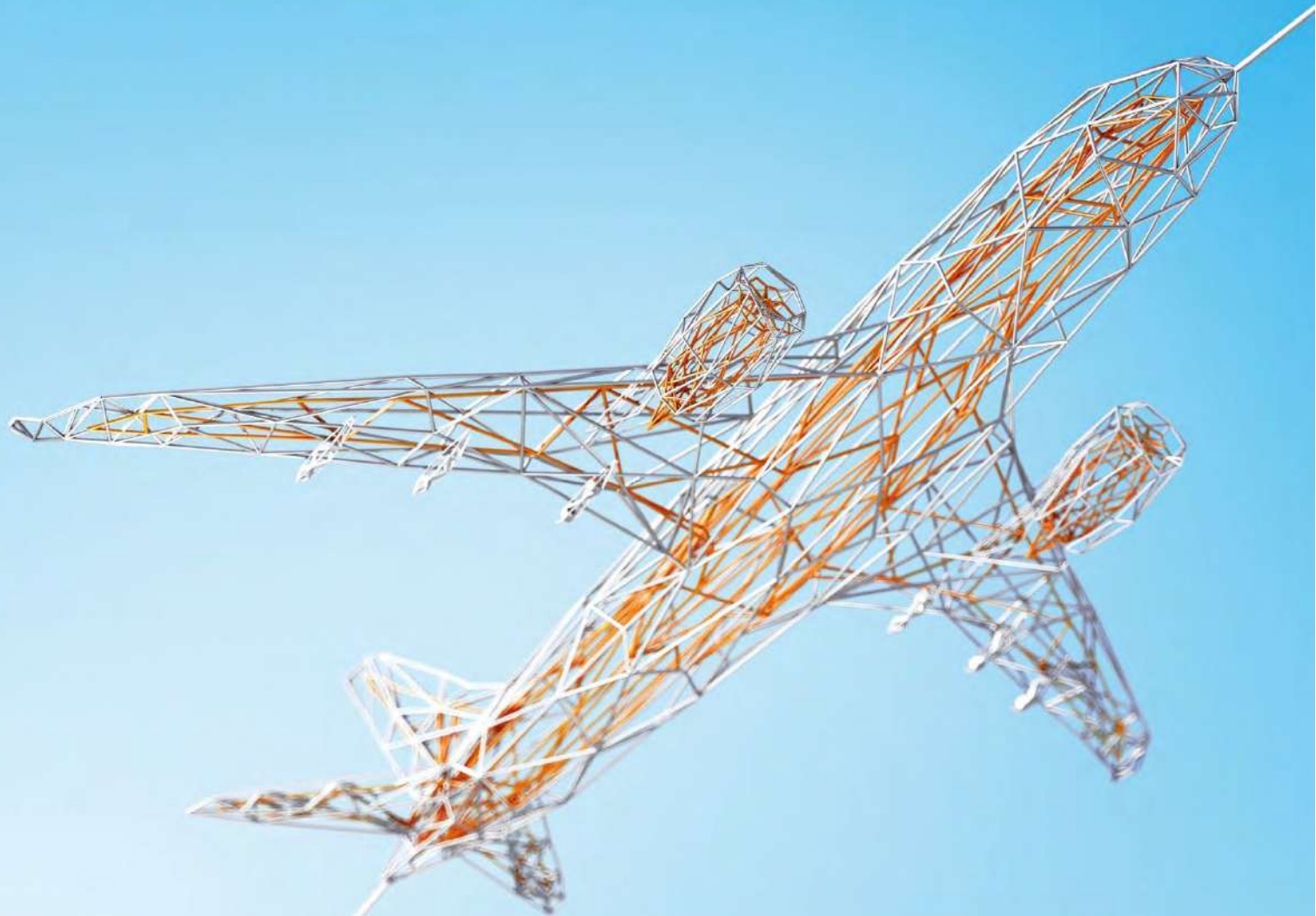


AIRCRAFT MANUAL



 **DUBAI**
AIRSHOW

17-21 NOVEMBER 2019

DWC, DUBAI AIRSHOW SITE

WWW.DUBAIAIRSHOW.AERO | [@DUBAIAIRSHOW](https://twitter.com/DUBAIAIRSHOW)

FCC: Flying Control Committee

Brig. Gen. S. Pilot	Abdul Salam R Al Mehairbi	Chairman
Mr.	Ibrahim Ahli	Deputy Chairman
Mr.	Thani Al Thani	FCC Member
R.Lt.Col.	Mohammed Al Zarouni	FCC Member
Mr.	Faisal Fayis	FCC Member
Mr.	Faisal Butt	FCC Member
Mr.	John Taylor	FCC Member

INTRODUCTION:

The 2019 edition of Dubai Airshow takes place at DWC – Al Maktoum International airport from Sunday 17th November to Thursday 21st November 2019.

1. This manual covers the operation and regulation of aircraft for both flying and static display and is intended for the use of pilots participating in the flying display activities of the air show and complies with the UAE Civil Aviation Regulations (CARs) CAAP 15 Flying Display Regulations.
2. Flying Displays will be held over, and in the area of Al Maktoum International Airport (DWC). Procedures have been designed to enable participants to display their aircraft to the fullest. However, every precaution must be taken to protect the attendees from the inconvenience of noise and the risk of accident.
3. The Flying Regulations and Air Forms for presenting aircraft at the Dubai Airshow can be downloaded from the official website www.dubaiairshow.aero
4. Pilots are advised to study this manual carefully and where queries arise seek clarification from the Deputy Chairman, Flying Control Committee, who is contactable at the following telephone and email address:

Tel: +971 50-6445553
E-mail: ibrahim.ahli@dans.gov.ae

5. For queries regarding Static Aircraft Park contact:

Keith Barthelot
Tel: +971 56-7343155
Email: aircraft@dubai.aero

- For the avoidance of doubt, use of words 'may' 'must' 'shall' or 'will' within this manual are to be understood as mandatory requirements.
- All 'time' mentioned in this manual are in local time. (UAE Local = UTC+4 Hour)
- Throughout this Manual the Flying Control Committee will be referred to as the FCC.

TERMINOLOGY:**THE EVENT****DUBAI AIRSHOW 2019**

Flying Display	Any flying activity deliberately performed for the purpose of providing an exhibition or entertainment at the event.
Crowd Line	The forward edge of the area intended for spectators to which the public has access during a Flying Display.
Display Line	A line defining the closest a display aircraft should approach the Crowd Line.
FCC Chairman	The person responsible for the safe conduct of a Flying Display.
Display Pilot	A pilot who holds a Display Authorization or Exemption, issued by the appropriate national authority, which allows him to take part in a Flying Display.
Spectator	A person watching the Flying Display and remaining in the areas set aside for attendees.
Display Authorization	A national document detailing the types or groups of aircraft in which a pilot is authorized to display, together with any limitations and other specific endorsements.
Airside	The area of the airfield within which aircraft manoeuvring takes place and to which the attendees DO NOT have access.
Landside	The area of the airfield within which aircraft manoeuvring does not take place and the attendees may have access.
Event site	The area where the Chalets and Static Aircraft Displays are located.
Static Aircraft Park	A park for aircraft to which the attendees have access.
Maintenance Park	A park for aircraft to which the attendees have NO access.

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GENERAL INFORMATION:

FLYING DISPLAY

1. APPLICATION FOR SLOTS

All flights arriving/departing Al Maktoum International airport (DWC) for the Dubai Airshow event from 17–21 November 2019 and also those planning in advance for demonstration flights are required to have prior slot approval.

All flights related to Airshow arriving/departing Al Maktoum International Airport (DWC) before and after the Airshow should have prior approval.

No operator shall operate to or from Al Maktoum International Airport (DWC) without first obtaining confirmed slots from Airport Coordination Limited (ACL).

ACL Slot Authority

Slot authority gives permission to operate at a specific date and a specific time and includes time on the ground. Slot times are on/off block times.

Slot requests for exhibitor's aircraft will be processed after **01 September 2019**, on a first come first served basis. All slot requests should be agreed and finalised by **01 November 2019**.

Requests should be sent to ACL's slot request email address, as detailed below using the IATA SSIM chapter 6 format. If you are not accustomed to SSIM please send a completed Slot Request Form to the email address below. Please be aware the manual processing times of the Slot Request Form may result in lower priority of slot allocation. All requests must include arrival and departure information.

For further information please contact ACL on:

Dubai Office: +971 4 504 5824

International Office: +44 208 5640 626

SSIM SLOT REQUESTS

Email: slots@acl-international.com

SLOT REQUEST FORM

Email: dxbstaff@acl-international.com

Website: <http://www.acl-uk.org/acl-international/>

Exhibitors are required to submit the following Air forms by 10th September 2019 for presenting aircraft at the Dubai Airshow.

AIR FORMS DESCRIPTIONS

- AIR1 Aircraft Information.
Application to present Air 1 form required for each aircraft being exhibited.
- AIR2 Aircraft Clearance and Flight Display.
To be completed for all for all aircraft accepted for Flying Display and Customer Demonstration.
- AIR3 Aircraft maintenance park storage cabins.
To be completed by Exhibitors to apply for maintenance area passes, storage cabins.
- AIR4 Confirmation of Aircraft insurance.
To be completed for each aircraft being exhibited.
- AIR5 Aircraft Security Fencing.
To be completed by Exhibitors to apply for Security Fencing.

2. DESCRIPTION OF FLYING DISPLAY

Exhibitors presenting aircraft in the flying display must submit for each aircraft a full written description on Form Air 2 with accompanying sketch of the flight manoeuvres and linking manoeuvres to be used in the proposed display in both good and bad weather conditions. Should it subsequently become necessary to change or reduce the length of the flight display, only those maneuvers shown may be performed.

3. DEFINITION OF AEROBATIC MANOEUVRE

An aerobatic manoeuvre is defined as any manoeuvre exceeding 60° of roll or pitch.

4. CHANGES TO THE FLYING DISPLAY

The FCC has the authority to exclude any particular manoeuvre, manoeuvres or the complete flight display. In this event, a revised flight display form (FORM AIR 2) must be submitted and will have to be demonstrated to the satisfaction of the FCC before the aircraft can participate in the flying displays. Additionally, if the pilot wishes to alter his flight display, FORM AIR 2 must be amended with all new manoeuvres and linking manoeuvres not previously authorized on the Form.

All alterations must be signed by the pilot concerned and by a member of the FCC. The revised flight display will then have to be demonstrated to the satisfaction of the FCC before the aircraft is cleared to take part in the Flying Displays.

5. AIRCREW CURRENCY

Pilots must be in current flying practice on the type of aircraft they will be presenting. Pilots must be able to satisfy the FCC of their flying currency at the time of the Flying Display by presenting authenticated evidence of their flying hours on type during the previous three months, total flying hours and previous display experience. Civilian pilots must hold the appropriate National License/Authority to Fly.

6. WEATHER CONDITIONS GOVERNING DISPLAY

Bad weather conditions, when the display is permitted, are defined as cloud base at or below 1500 feet and visibility less than 5000 meters. In all weather conditions pilots shall maintain 1,000 feet horizontally and vertically clear of cloud.

7. CONTROL OF THE PRESENTATION OF AIRCRAFT

Control of aircraft flying displays including all individual and combined rehearsals is vested by the Organisers in the Flying Control Committee (FCC). Exhibitors presenting aircraft and their pilots must comply with the Organisers' regulations governing the presentation and flying of aircraft and all subsequent instructions issued by the FCC. The Organisers reserve the right to change and interpret any regulation governing the presentation and flying of aircraft.

The Flying Control Committee is empowered to withdraw the flight display approval of any pilot who willfully disregards instructions or disobeys the regulations.

8. BRIEFING/DEBRIEFING REQUIREMENT

During the period of the exhibition, and for the Dress Rehearsal, all pilots taking part in the flying display activities shall attend the daily briefing held at **1200 hours local time in the FCC Briefing Room**. They are to sign the Display Authorization Sheet to signify that they have received and understood the Briefing.

Note:

Pilots will not be allowed to participate in the day's display unless they have attended the daily Briefing.

Debriefings will be conducted whenever the need arises. Pilots will be informed accordingly.

9. PRACTICE REQUIREMENTS – INDIVIDUAL PRACTICES & VALIDATIONS

To enable pilots to familiarise themselves with the display area, time will be allocated for individual practices. These practices may be conducted between 1000hrs – 1200hrs local time and 1500hrs to 1700hrs on Wednesday 13th Nov, Thursday 14th Nov and Friday 15th Nov. The FCC will arrange individual practice times for pilots upon request, after initial briefing.

Allocation of flying time slots for display aircraft during the practice and validation period will be strictly controlled by the FCC.

Participating pilots must ensure adherence to the slot procedures at all times.

To avoid disruption of commercial traffic at Al Maktoum International (DWC), the following procedures will apply.

- a) Under normal circumstances only one nominated pilot per display aircraft will be permitted and it is expected that each display pilot will require no more than 3 practices inclusive of a validation flight.
- b) Approval to carry out additional practice flights and/or for additional pilots to fly will be dependent on the number of display aircraft participating in the event plus the total number of slots available.
- c) Late arrival during the practice and validation period may result in insufficient practice slots available and render the aircraft/pilot ineligible to participate in the Flying Display.
- d) Practice and/or validation flights are not permitted outside the times stated above.

Failure to complete a satisfactory validation will disqualify the pilot from participation in the Flying Displays.

Acceptance for Flying Display:

Participants will be advised in writing of the FCC's acceptance of their proposed flying displays upon successful completion of validation flights.

Pilots' undertaking:

After having their flight display approved by the FCC, pilots must undertake that their flight displays during the Flying Display will conform in every respect to the approved demonstration.

10. DRESS REHEARSAL

A dress rehearsal will take place on Saturday 16th November, 2019 at Al Maktoum International Airport (DWC) between the hours of 1400–1700 local time.

11. FLYING DISPLAY

Flying Display will take place daily from Sunday 17th to Thursday 21st November, 2019 at Al Maktoum International Airport between hours of 1400–1700 local time.

12. STATIC AIRCRAFT

Static aircraft must be exhibited for the full period of the Dubai Airshow, i.e. Sunday 17th to Thursday 21st November 2019 inclusive.

13. ESSENTIAL CREW

Only essential aircrew will be approved by the FCC to fly during the demonstrations (i.e. no passengers).

14. CUSTOMER DEMONSTRATIONS

Pilots wishing to carry out demonstration flights will have access to ATC Flight Briefing office located in the FCC block and must file a standard ICAO flight plan. Approval will be subject to availability of slot times.

Name: Amir AlMaeeni
Email: Amir.AlMaeeni@dans.gov.ae
Mobile: +971 506916696

Repositioning of aircraft must be arranged in advance with the Airside Airshow Senior Manager, who is contactable at the following Email and telephone numbers:

Email/Mobile: TBC 14 days prior to show

15. TOWBARS

Exhibitors are required to provide a tow bar for each aircraft presented, suitably identified and available for all of the aircraft's movements. Exhibitors are responsible for the connection and disconnection of tow bars and the pilot or a member of the Exhibitor's ground crew will be required to operate the aircraft's brakes during ground movements.

16. AIRCRAFT PARKING

Upon arrival, aircraft taking part in either or both of the Static and Flying Displays will be allocated a parking position within the Aircraft Park. Exhibitors are required to ensure that either a pilot or a member of the ground crew is contactable at all times in the event that the FCC should require the aircraft to be moved. Exhibitors are also to ensure that aircraft are moved promptly and as directed by the Aircraft Park Officials of the FCC.

17. ARRIVAL PROCEDURE

Upon arrival, or at the first opportunity thereafter, the Captain of each exhibited aircraft, whether for static display only and/or flying display, is to report to the FCC Office for registration and briefing. The office is located on the first floor of the air show control tower block and will be operational daily between the hours of 0800–1800 local time.

The Engineering Ground Crew of any Aircraft operating from the Maintenance Area or in the Flying Display, are required to contact the Airside Airshow Senior Manager, on TBC, to schedule a mandatory briefing upon arrival at the Airshow before any Maintenance is permitted on any Aircraft. The Chief Engineer will be responsible for ensuring that the information from the briefing is passed to all members of their team and for compliance with any procedures stated within the briefing.

18. IMMIGRATION AND CUSTOMS

After landing at DWC Al Maktoum, the Crew will be met by Jetex courtesy vehicles and escorted for Immigration and Customs formalities. There are no custom charges for Dubai Airshow Exhibitors.

19. DEPARTURE PROCEDURE

Exhibited aircraft are required to remain in the Aircraft Park area until the show closes at 1730 hours local time on the last day of the Exhibition. Departures should be planned accordingly and Flight Plans can be submitted to ATC through the Operations Room of the FCC.

After the exhibition day all departures to be planned after 1100hrs to avoid departure congestion at exit gates. The Dubai CTA will be busy with commercial OMDB and OMSJ departures between 0700hrs to 1100hrs.

20. SECURITY

Exhibitors are required to ensure that aircraft in the Static Park are attended at all times during the Exhibition open hours.

21. BIRD ACTIVITY

Flocks of gulls are active in the vicinity of the airport from November to March with maximum numbers between early December and mid-February.

Note: Bird Concentration Chart is attached for your reference. Information above is based on predicted activity from the Wildlife Hazard Management Study.

22. UNMANNED AERIAL SYSTEM (UAS) DEMONSTRATIONS

Participants proposing to demonstrate UAS vehicles at the Event should advise the Organizers as soon as possible.

23. UAS VEHICLE FLYING TIMES

Specific times, to be advised, will be set aside for flying of UAS vehicles during which all other aircraft flying movements will be suppressed.

24. PROPOSAL TO DISPLAY A UAS VEHICLE

Participants will be required to provide the following detailed information

- a) A technical description of the UAS including size, weights, speeds, control systems, emergency systems etc
- b) A detailed description of the proposed display flights including the planned heights, speeds and manoeuvres that will be carried out during the display.
- c) A clear indication of how control of the UAS will be maintained during the launch, flying and recovery of the UAS.
- d) A description of the various failure modes with the UAS and details on how public safety will be maintained throughout the described failure modes.
- e) Details (including copies) of any license or certification held by the UAS operator and a resume of the operators experience in operating UAS vehicles.
- f) A risk assessment/safety case to specifically cover the UAS flying at a public event and to detail the mitigations to eliminate, as far as is reasonably practicable, any risk to the public by both normal flight conditions, failure modes and any possible emergency event.
- g) How the participant plans to position the UAS into Airshow area.
- h) Any other information which the participant believes will be useful in determining the safety aspects of the planned display flight.
- i) The FCC reserve the right to refuse to permit any UAS vehicle to fly at the Event if, in the opinion of the FCC, the appropriate level of public safety cannot be achieved.
- j) UAS demonstrations will be required to validate the display for the FCC in the same manner as manned aircraft during the period.
- k) UAS vehicle operators will be required to attend the daily pilot briefings.

The FCC shall provide the following facilities:

- a) The link between display crews and all other functions for the purpose of Display Flights, Validation flights and Customer Demonstration Flights.
- b) Allocation of slot times for Practice and Validation Flights and also Customer Demonstration flights.
- c) Arranging facilities for self-briefing, flight briefing, meteorology, and matters pertaining to general flying.
- d) Local NOTAMs, maps and charts (for reference)
- e) The daily flying programme will be confirmed by 17.30 on the preceding day and be published via the official airshow website.
- f) A dedicated meteorological office will be situated in the FCC block. A meteorological briefing shall be included in the pilots briefing each day.

FLYING LIMITATIONS:

DURING FLYING DISPLAYS

1. FLIGHT SAFETY

- a) During the Flying Display, it is the intention of the FCC to permit skillful and convincing displays, but flight safety and the safety of the attendees are of paramount importance. Only manoeuvres consistent with the design role of the aircraft will be permitted.
- b) The display area has been graded by height, and has a minimum height of 300 feet AGL.
- c) In the interest of the safety of the attendees, it is essential that the new parameters are adhered to at all times. The shape of the aerobatic boxes emphasizes the rule that all aircraft must climb to 300 feet AGL before crossing the airfield boundary.

2. FLIGHT MANOEUVRE / HEIGHT RULES

These rules define the ultimate limits never to be exceeded. Aircrew must provide themselves with the necessary margin so as not to risk exceeding these rules.

These rules will be firmly enforced. The FCC has the authority to tailor these rules to each type of aircraft presented. The Committee is authorised to dictate particular constraints to certain types of aircraft. Professionalism and flight discipline are essential. In particular, all manoeuvres contrary to the normal usage of the aircraft are prohibited.

- a) Only manoeuvres which have been agreed by the FCC may be performed.
- b) No manoeuvre is to be attempted which is likely to jeopardise the safety of spectators in the event of mishap or misjudgment.
- c) Aircraft may not be turned towards the spectators unless the turn is completed north of the Display Line.
- d) Aircraft are not to be flown outside the aircraft's proven limitations.
- e) Aircraft are not to be flown under asymmetric power.
- f) Aircraft are not to exceed a true airspeed of $M=0.90$.
- g) Aircraft may not be flown closer to the spectators than the display line of the display (see Appendix A).
- h) Flying displays must be carried out at or above a minimum height of 300 feet above ground level. After take-off, aircraft are to be climbed to that height or above, before any aerobatic manoeuvres are carried out.
- i) Manoeuvres in the looping plane which involve pulling through, or recovery from, the vertical must be completed by 500 feet above ground level.

- j) All helicopter aerobatics must be executed and completed by 500 feet above ground level.
- k) Helicopter aerobatics are permitted only by those helicopters which have a certified capability proved to the satisfaction of the FCC.
- l) Helicopters are not permitted to perform more than one rolling or looping manoeuvre during any one pass.
- m) Due to the limitations of the flying display area, any proposals for helicopters to carry under slung loads during their display must be put forward to the FCC for consideration and possible approval.
- n) During demonstrations aircraft must commence a climb from the minimum display height and be above 500 feet above ground level before crossing outside the airfield boundary line.

Notes:

- 1. The above limitations do not affect any more stringent limitations imposed by national authorities, manufacturers or other operating authorities.
- 2. The FCC is empowered to impose increased limitations on individual aircraft at their discretion.
- 3. Dispensations will only be given in exceptional circumstances.
- 3. **CARRIAGE OF LIVE ORDNANCE/ARMAMENT**
No live ordnance/armament or radioactive material may be carried on aircraft during the flying display. No equipment transmitting powerful electromagnetic signals or lasers are to be operated during flight.
- 4. **BREACH OF FLYING DISCIPLINE**
Breaches of flying discipline are liable, in the first instance, to result in the pilot being required to break off his display and land. It may also result in the aircraft being suspended from flying for the remaining period of the Exhibition.

ATC PROCEDURES & FLYING DISPLAYS:

- 1. **DISPLAY AREA/AEROBATIC AREA**
Special use area (SUA) restricted area around DWC, whose lateral and vertical limits are indicated in Appendix B, will be 'sterile' during rehearsal and display timings. (refer to Dubai CTA Chart for minimum altitudes). Aerobatic displays will be confined to an inner area called the 'Display box' (see Appendix C)
- 2. **AIR TRAFFIC CONTROL**
 - a. During the Flying Display, control will be exercised by the FCC at all times, on the discreet radio frequency allocated for this purpose. The authority of the FCC is absolute in that instructions given in the interest of safety, such as "abort take-off", "abort display", "clear the area", etc., are mandatory and must be complied with immediately.
 - b. Control of flying will be exercised by R/T using the English language and all pilots participating in the presentation of aircraft must be adequately fluent in this language.
- 3. **R/T PHRASEOLOGY**
Standard ICAO phraseology will be used. Limited R/T procedure for the purpose of the display will be defined at the daily briefings.

4. ORDER OF APPEARANCE

The order of appearance of flying display aircraft will be provided to participating pilots at the daily briefing.

5. TIMINGS

At the daily briefings, pilots will be informed of timings relevant to individual displays.

6. SEQUENCING PROCEDURE

Sequencing procedures will be defined daily at the pre-display briefing. Pilots must start-up and taxi accordingly to make good their take-off times.

7. FUEL REQUIREMENTS

Whilst every effort will be made to sequence aircraft smoothly, disruptions may occur. Pilots are required to carry sufficient fuel for their display and a minimum of 30 minutes reserve to cater for such disruptions. If, for any reason, this should not be possible or practical, the pilots concerned are to request exemption to the rule from the FCC.

DIVERSIONS:

AERODROMES

In the unlikely event that the runway at Al Maktoum International airport (DWC) is not available then the primary diversion airfield for military aircraft will be Minhad Military Airfield (OMDM) and for civilian registered aircraft it will be Dubai International Airport (OMDB). If an aircraft is instructed to divert to Minhad, a radar control service RADAR will be provided by ATC, together with the weather and essential aerodrome information. Aerodrome data for both Minhad and Dubai International will be displayed in the FCC Operations room.

EJECTION AREA, RESCUE FACILITIES & FUEL SUPPLIERS:

1. Any pilot with an emergency necessitating abandoning the aircraft but which is still controllable should set course for the Ejection Area shown in Appendix D.
2. Whenever possible aircraft should be abandoned in straight flight and clear of populated areas, provided that this does not jeopardise the chance of successful abandonment.
3. The pilot should set the aircraft controls to facilitate such that the aircraft impact in the designated area after he/she has abandoned it.
4. The pilot should give the maximum possible warning of ejection to improve the chances of rescue.
5. Rescue Facilities: A Search and Rescue helicopter will be on standby at Al Maktoum International Airport throughout the period of the flying display to facilitate search and rescue requirements should they be needed.

AIRSPACE RESERVATION REQUEST-ARR

Units that represent airspace user entities which wish to utilise are identified as Approved Agencies (AAs) and are authorised by UAE Armed Forces GHQ.

Approved Agencies (AAs) are required to:

1. Plan submission of airspace use activities in advance so as to be able to notify their needs for airspace to the Airspace Management Cells (AMC) on the day before the activity;
2. Submit to the AMC, on the day before the proposed activity (D -1), requests for airspace utilisation and allocation;
3. Ensure, on the day of the activity, that the airspace usage is in accordance with the AMC's airspace allocation;
4. Cancel any airspace allocation which is no longer required. Information is forwarded to the AMC for the promulgation of an Updated Airspace Use Plan (UUP);
5. Change previously promulgated airspace allocation by coordinating with AMC the promulgation of an UUP;
6. Submit a new request for airspace allocation to the AMC for the promulgation of an UUP.

SPECIAL EVENTS-SUA/TRA

In case of special events and/or special use airspace allocation request a promulgation of the allocated airspace into the AUP is mandatory unless otherwise indicated by the Military Authority. The AMC will book the airspace (SUA/TRA) on behalf of AAs and promulgate the planned activity as per AUP criteria. The below information shall be included

- **SUA Coordinates and related activity**
- Vertical Limits
- Timing
- ATC unit of jurisdiction
- POC

ABBREVIATIONS AND ACRONYM

Abbreviations & Acronym	Description
AGL	Above Ground Level
ATC	Air Traffic Control
ARR	Airspace Reservation Request
AMC	Airspace Management Cell
AUP	Airspace Use Plan
CAR	Civil Aviation Regulations
CAAP	Civil Aviation Advisory Publication
DWC	Dubai World Central
GCAA	UAE General Civil Aviation Authority
SUA	Special Used Airspace
UUP	Updated (Airspace) Use Plan
UAS	Unmanned Ariel System

FUEL SUPPLIERS:

COMPANY	NAME	TELEPHONE	MOBILE	EMAIL
Shell	Ziad Sousso	04-3035275	050-6533572	Ziad.soussou@shell.com
Shell	Mohamed El Fatatry	04-303 5279	056-4049771	Mohamed.Elfatatry@shell.com
Emarat	Lila Kazim Emojet Business Specialist	04-4061524 & 04-3434444		Laila_kazim@emarat.ae
Emarat	Salem Bin Suloom Senior Manager Aviation Sales	04-4061521	050-6449953	Salem_BinSuloom@emarat.ae
Chevron	Santosh Kumar	04-3133947	050-6402152	skumar@chevron.com
ENOC	Ms Tatev Avetikyan	04-3134641	050-2579008	Tatev.avetikyan@enoc.com
BP Middle East	Mr. Michel Saba	04-3079223	056-6034485	michel.saba@uk.bp.com
ADNOC	Mohamed Mahfoudh	02-6901420	050-6622273	mohamed.mahfoudh@adnocdistribution.ae
ADNOC	Hareb Khamis Al Dhaheri	02-6770469	050-6225536	Hareb.aldhaheri@adnoc-dist.ae
ADNOC	Mohd Ali Al Hosani	02-6766424 02-6901422	050-3298932	mohammed.ali@adnocdistribution.ae

GROUND SUPPORT EQUIPMENT, SERVICES & DETAILING (GSE):

AEM INTERNATIONAL & AEM LOGISTICS

Official Ground Support

Equipment provider for

Aircraft Detailing

Mr Ulrich Koch

Email: ukoch@aeminternational.com & support@aemlogistics.com

Office: +1 514 695 1331

Mob: +1 514 887 0798

DUBAI 2019 Airshow - Dubai, UAE.

November 17-21, 2019.

GPU Reservation Sheet, Static Display

Your Order Information

Ground Power Units

Final billing will reflect an additional \$200 setup charge per unit.

	Company	Space #	Quantity	Price / Unit	Total
28V DC Unit 220V 3phase 25Amp 10 KVA (50 or 60Hz)				\$3,300	
AC 400hz Unit 380V 3phase 40Amp 30 KVA (50 or 60Hz)				\$4,300	

*ELECTRICAL POWER TO SUPPORT EACH UNIT WILL NEED TO BE ORDERED SEPARATELY.

PLEASE REFER TO THE ELECTRICAL ORDER FORM TO PLACE YOUR ELECTRICAL REQUIREMENTS FOR EACH UNIT

Your company Information

(or paste business card here)

Company Name:

Address:

Contact Name:

Phone Number:

Fax Number:

For order confirmation please attach completed Method of Payment Form.

**Please fax your order to Ulrich Koch at (514) 695-1344
before October 17, 2019.**

Availability and price per unit is not guaranteed after October 17, 2019.

For further information please contact Ulrich Koch at (514) 695 1331
or email: ukoch@aeminternational.com

DUBAI 2019 Airshow - Dubai, UAE.

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Air Conditioning Reservation Sheet, Static Display

Your Order Information

HIGH PRESSURE Air Conditioning Units

Final billing will reflect an additional \$200 setup charge per unit.

	Company	Space #	Quantity	Price / Unit	Total
50 Ton				\$18,900	

High Pressue Unit

400V 3phase 100amp **70KVA (60Hz)**

*ELECTRICAL POWER TO SUPPORT EACH UNIT WILL NEED TO BE ORDERED SEPARATELY.

PLEASE REFER TO THE ELECTRICAL ORDER FORM TO PLACE YOUR ELECTRICAL REQUIREMENTS FOR EACH UNIT

Your company Information

(or paste business card here)

Company Name:

Address:

Contact Name:

Phone Number:

Fax Number:

For order confirmation please attach completed Method of Payment Form.

Please fax your order to Ulrich Koch at (514) 695-1344 before October 17, 2019.

Availability and price per unit is not guaranteed after October 17, 2019.

For further information please contact Ulrich Koch at (514) 695 1331 or email: ukoch@aeminternational.com

DUBAI 2019 Airshow - Dubai, UAE.
November 17-21, 2019.

Method Of Payment Form

NAME OF SHOW: _____

COMPANY NAME: _____ BOOTH#: _____

ADDRESS: _____
(STREET) (P.O. BOX)

PHONE #: _____ EXT.: _____ FAX#: _____ E-MAIL: _____

ORDERED BY: _____ PRINT NAME: _____ DATE: _____

Ensure all payments are received prior to the event

☐ **COMPANY CHECK**

Please make check payable to: AEM International. Checks must be in U.S. funds drawn on a U.S. or Canadian bank. ("U.S. FUNDS" MUST BE PRE-PRINTED on Canadian checks.)

☐ **CREDIT CARD**

For your convenience, we will use this authorization to charge your credit card account for your advance orders, and any additional amounts incurred as a result of show site orders placed by your representative.

Please complete the information requested below:

☐ **BANK TRANSFER**

Royal Bank of Canada (514)856 8900, 3131 Cote Vertu - Local F1
St-Laurent, Qc. Canada, H4R 1Y8 - Bank # 003 - Transit # 03051
■ Account # 400-444-6 - ABA # 021000021

■ BIC/SWIFT* ROYCCAT2

■ Recipient: AEM International (450) 424 2202

Please reference Name of Show and company name on all Bank Transfers so we may properly credit your account.
Note: Customers are responsible for any bank processing fees.

MASTERCARD

VISA

Account No.: _____ Exp. Date: _____
☐ Personal Credit Card ☐ Company Credit Card

Cardholder Name: (Print) _____ Signature: _____

Cardholder Billing Address: _____

City/State/Zip: _____

E-mail Address for Invoice Notification: _____

Total =

Aircraft Detailing Request Form

Aircraft Model	Services Requested	Price
	Total	

***Pricing provided is based on event, aircraft type and services requested.**

Show Cleaning Includes:

- Interior detail and vacuum, cockpit cleaning and exterior detail prior to event.
- Interior and exterior touch-ups during event.
- Interior touch-up at conclusion of event.

Additional Services Available:

Carpet Protection Film - replaced as needed during event.

Brightwork - polishing of leading edges and engine inlets.

Boots - to be cleaned and coated / shined.

**Further services are available at your request.*

Your company information:

Company Name:

Phone Number:

Fax Number:

***For order confirmation please attach completed Method of Payment Form.**

Please email tharper@aemlogistics.com for service requests.

For further info please contact us at (514) 695 1331 or email: support@aemlogistics.com



Method Of Payment Form

NAME OF SHOW: _____
COMPANY NAME: _____ BOOTH: _____
ADDRESS: _____
PHONE #: _____ EXT: _____ FAX #: _____ E-MAIL: _____

Ensure all payments are received prior to the event

COMPANY CHECK

Please make check payable to: AEM Logistics. Checks must be in U.S. funds drawn on a U.S. or Canadian bank. ("**U.S. FUNDS**" MUST BE PRE-PRINTED on Canadian checks.)

CREDIT CARD

For your convenience, we will use this authorization to charge your credit card account for your advance orders, and any additional amounts incurred as a result of show site orders placed by your representative.

**** (VISA and Mastercard are only accepted)**

BANK TRANSFER

Royal Bank of Canada, 610 St. Jean Blvd., Pointe Claire, Quebec
Canada, H9R 3K2 - Institution number: # 003 - Transit: # 02755
Account # 07191-4001921 - ABA # 021000021

BIC/SWIFT* ROYCCAT2

Recipient: AEM Logistics Inc. (514) 695 1331

Please reference Name of Show and company name on all Bank Transfers so we may properly credit your account. Note: Customers are responsible for any bank processing fees.

MASTERCARD

OR

VISA

Account No: _____ Exp. Date: _____
Cardholder Name: (Print) _____ Signature: _____
Cardholder Billing Address: _____
City/State/Zip: _____

Total =

DUBAI 2019 Airshow - Dubai, UAE.

November 17-21, 2019.

Air Conditioning Reservation Sheet, Static Display

Your Order Information

Air Conditioning Units

Final billing will reflect an additional \$200 setup charge per unit.

	Company	Space #	Quantity	Price / Unit	Total
3 Ton Unit 220V 1phase 30amp 10KVA (60Hz)				\$3,300	
5 Ton Unit 220V 1phase 30amp 10KVA (60Hz)				\$4,300	

*ELECTRICAL POWER TO SUPPORT EACH UNIT WILL NEED TO BE ORDERED SEPARATELY.

PLEASE REFER TO THE ELECTRICAL ORDER FORM TO PLACE YOUR ELECTRICAL REQUIREMENTS FOR EACH UNIT

Your company Information

(or paste business card here)

Company Name:

Address:

Contact Name:

Phone Number:

Fax Number:

For order confirmation please attach completed Method of Payment Form.

Please fax your order to Ulrich Koch at (514) 695-1344 before October 17, 2019.

Availability and price per unit is not guaranteed after October 17, 2019.

For further information please contact Ulrich Koch at (514) 695 1331 or email: ukoch@aeminternational.com

Static Electrical form

Deadline: October 17, 2019.

Stand name:

Invoice to
(Company Address)
.....
.....
.....

Contact:
Tel.:
Fax:
E-mail:

Return to:

AEM International
3535 St. Charles Blvd. - suite 303
Kirkland, QC, Canada, H9H 5B9

Fax: 1 514 695 1344
Tel.: 1 514 695 1331
E-mail: ukoch@aeminternational.com

Code	Refer to AEM's GPU-Aircon order forms for KVA requirements		Unit price		Total
			Price until Oct. 17, 2019	After Oct. 17, 2019 ①	
e321	Main Electrical service, including generator and connections for air-conditioners and GPU, per KVA	___ KVA	\$185.00	\$195.00	_____
2EL-02134	Additional Labor <input type="checkbox"/> Additional labor per hour		\$104.00	\$124.00	_____
① Orders received after October 17, 2019 are subject to additional charges ② Additional labor charges apply to equipment not supplied by AEM International			Total electrical	\$	_____
			Total additional labor	\$	_____
			Total amount	\$	_____

Date: **Signature:**



JETEX

Official FBO Service provider

Ossama Al Azem, Ground Handling Manager

T:+971 56 171 7060

E:ossama.azem@jetex.com

Faisal Nizamuddin, DWC Quality & Safety Manager

T: +971 50 494 2404

E:faisal.nizamuddin@jetex.com

Osama Shibly, Pricing Department Manager

T:+971 56 433 45111

E: pricing@jetex.com - osama.shibly@jetex.com

Operation 24/7

T: +971 56 171 7225

E: das2019@jetex.com

Sufiyan Asif, Deputy Manager - Fuelex Division

T:+971 56 171 7062

E:sufiyan.asif@fuelex.aero - fueldispatch@Jetex.com - fuelpricing@Jetex.com

A) Basic Ground Handling and Airport Services (all prices are in USD):

Basic Ground Handling Charges	
MTOW in Ton	Stay over flight
0-4	370
4.1-13	540
13.1-35	685
35.1-50	1005
50.1-90	2900
90+	3500
Wide bodies	5000
A380	6000
Airport Services	
Landing/Take-off	Price per ton
Up to 4.5	3.7
4.5-45	4.2
45+	4.7

B) Ramp Services and Equipment (all prices are in USD):

Ramp Service Equipment		
Additional labor (skilled)	Per person/per hour	\$75
Additional labor (unskilled)	Per person/per hour	\$69
Airside passes	Per pass	\$60
Assistance for visa issue	Per service	\$60
ASU: Aircraft N-Bodied	Per aircraft start	\$455
ASU: Aircraft W-Bodied	Per aircraft start	\$595
Conveyor belt	Per hour or part thereof	\$359
Customs & immigration charges	Per service	\$186
Dolly-trolley	Per hour or part thereof	\$67
Filing flight plan	Per service	\$16
Forklift (5 ton)	Per hour or part thereof	\$300
Headset	Per service	\$125
Nitrogen cart	Per use	\$426
Oxygen cart	Per use	\$477
Passenger fee	Per Passenger	\$20
Provision of Wing Walker	Per Service	\$20
Push back	Per push	\$375
Slot application	Per application	\$35
Slot modification	Per Service	\$15
Steps (inside static area)	Per day	\$4000
Toilet services N-Bodied	Per service	\$165
Toilet services W-Bodied	Per service	\$246
Towing (above 30tons)	Per one way tow	\$595
Towing (below 30tons)	Per one way tow	\$393
Tractor (with driver)	Per hour or part thereof	\$184
Water services	Per service	\$165
Steps (outside static area)	Per hour or part thereof	\$295
ACU N-Bodied (outside static area)	Per hour or part thereof	\$400
GPU N-Bodied (outside static area)	Per hour or part thereof	\$350
Headset	Per Use	\$100
Airside Bus Transportation	Per Way	\$200



Other Terms and Conditions:

- A 9% disbursement fee will be added to all third party charges (for services not provided by Jetex)
- A 20% nighttime surcharge will be applied on ground handling charges for flights operating between 22:00 and 06:00 local time.
- FBO flight transfer charges: USD 750 per flight.



HANDLING REQUEST FORM

Please complete and return all sections of this application form and return to das2019@jetex.com

Reservation Number: _____

Customer : _____

Operator : _____

Billing To : _____

Payment Method : _____

☐ Cash

☐ Credit

For handling confirmation, please advise the method of payment

Company Name : _____

(As it will appear on exhibitor listing)

Company Address: _____

Contact Person: _____

Job Title: _____

Tel. : _____

Fax: _____

Website : _____

Email: _____

Invoice Address : _____

(If different)

Company Address: _____

Contact Person: _____

Job Title: _____

Tel. : _____

Fax: _____

Website : _____

Email: _____

EXHIBITOR INFORMATION

Additional Names: _____

Aircraft Type: _____

Registration: _____

Call Sign: _____

MTOW: _____

Schedule: _____

ETA: _____

ETD: _____

Handler: _____

Static Stand Allocation Reference: _____

FOR OFFICE USE ONLY

Trip Number : _____

Payment Method: _____

TCE Number : _____

OMDW — DUBAI / AL MAKTOUM INTERNATIONAL

*Note: The following sections in this chapter are intentionally left blank:
AD 2.21.*

OMDW AD 2.1 AERODROME LOCATION INDICATOR AND NAME**OMDW — DUBAI / AL MAKTOUM INTERNATIONAL****OMDW AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site at AD	245506N 0551032E At centre of existing and future RWYs, perpendicular to midpoint of RWY 12 / 30
2	Direction and distance from (city)	20 NM south west of Dubai city
3	Elevation/Reference temperature	171 FT / 42.5° C
4	Geoid undulation at AD ELEV PSN	-112 FT
5	MAG VAR/Annual change	2° E (2018) / NIL
6	AD Administration, address, telephone, telefax, telex, AFS	Post: Dubai Airports P.O. BOX 2525 DUBAI UNITED ARAB EMIRATES AIRPORT OPERATIONS CONTROL CENTRE Tel: +971 4 504 5000 Email: aocc@dubaiairports.ae SITA: DWCADXH
7	Types of traffic permitted (IFR/VFR)	IFR / VFR
8	Remarks	OMDW operates as a IATA level 2 slot coordinated airport. No operator shall operate to or from OMDW without first obtaining clearance from Airport Coordination Limited (ACL) and subject to landing permission from the DCAA. Schedules should be sent in IATA SSIM format to ACL in the time scales specified by the IATA schedules calendar to the address below. Email: slots@acl-international.com FAX: +44 (0) 208 564 0691 Aircraft greater in size than ICAO Code F (Wingspan Greater than 80 M) must provide 72 hour advance notice to the aerodrome in addition to a slot request to ACL. Email: complianceteam@dubaiairports.ae EFTA operates to the South of OMDW RWY 12 / 30. EFTA RWY 13/31 is not available for commercial aircraft. Operators are to be aware of high intensity training activities in this area.

OMDW AD 2.3 OPERATIONAL HOURS

←	1	AD Administration	H24
←	2	Customs and immigration	H24
	3	Health and sanitation	H24
	4	AIS Briefing Office	H24
	5	ATS Reporting Office (ARO)	H24
	6	MET Briefing Office	H24
	7	ATS	H24
	8	Fuelling	H24
	9	Handling	H24
	10	Security	H24
	11	De-icing	NIL
	12	Remarks	Prior permission required for training flights. EFTA operations between 0200 - 1800 UTC only.

OMDW AD 2.4 HANDLING SERVICES AND FACILITIES

	1	Cargo-handling facilities	Complete semi - automatic facilities
	2	Fuel/oil types	Jet A1: Emojet, ENOC, Shell, Air BP, Total, Chevron <i>Note: Chevron fuel must be arranged in advance. H24 telephone +971 50 5526 712</i> Oil: All grades
←	3	Fuelling facilities/capacity	Hydrant fuelling available, on all stands with the exception of: S804-S812, G100-G102 and G3-G16, EFTA: 11E-14E, 11W-14W, 21E-24E, 21W-24W, 31E-34E, 31W-34W, 41E-44E, 41W-44W, 51E-54E and 51W-54W. Limited bowser service also available.
	4	De-icing facilities	NIL
	5	Hangar space for visiting aircraft	NIL
	6	Repair facilities for visiting aircraft	NIL
	7	Remarks	NIL

OMDW AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotel accommodation available in Dubai City and Jebel Ali
2	Restaurants	H24
3	Transportation	Taxis, buses and rental cars.
4	Medical facilities	Medical Centre at airport. Emirates Medical Centre (EFTA only). Hospitals in Dubai City and Jebel Ali.
5	Bank and Post Office	ATM available, Post Office N/A
6	Tourist Office	Available
7	Remarks	NIL

OMDW AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 9 (CAT 10 on request). EFTA: CAT 3.
2	Rescue equipment	3 Major Foam Vehicles, 1 Incident Command Vehicle, 1 Mobile Incident Command Centre, 2 Water/Foam Support Vehicles and 1 Rescue Stairs. EFTA: 1 Major Foam Vehicle.
3	Capability for removal of disabled aircraft	Lifting and hydraulic jacks supplied through SLA (Service Level Agreement) with Emirates Airlines for aircraft sizes upto and including A380
4	Remarks	3 Airside Fire Stations in operation 1 reserve Major Foam Vehicle will be activated if CAT 10 is requested. Advanced notice is required during slot request to ACL. In the event of an unscheduled requirement, ATC is required to be notified on approach. EFTA: 1 Airside Fire Station in operation

OMDW AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	NIL
2	Clearance priorities	NIL
3	Remarks	Aerodrome is available all season. There is no requirement for clearing.

OMDW AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron surface and strength	Refer Table 1 for Apron details Refer Table 2 for EFTA-Apron details
2	Taxiway width, surface and strength	Refer Table 3 for Taxiway details Refer Table 4 for EFTA-Taxiway details
3	Altimeter checkpoint location and elevation	Each APRON area is designated as altimeter check location. Declared elevations as follows are the average for that location. Sierra 2: 116 FT, Sierra 3: 121 FT, Sierra 4: 132 FT, Sierra 8: 157 FT, Golf 100 - Golf 102 149 FT, Golf 152 FT APRON 1 – APRON 5: 152 FT.
4	VOR checkpoints	NIL
5	INS checkpoints	see Parking /Docking Charts

6	Remarks	<p>There is a change in gradient of 2.5% when crossing TWY V from TWY W1 and between TWY W16 to TWY W21. Additional engine thrust may be required. Following aircraft should maintain a safe distance.</p> <p>All taxiways/taxilanes are code F compliant except for taxiways TXL Z9, TXL Z10, TXL Z13, TXL Z14, TXL Z15, TXL Z16, TXL Z17, TXL Z20, TWY Z91 and TWY Z92 which are code C.</p> <p>APRON 1 – APRON 5 are exclusive for EFTA use only.</p> <p>TWY A, TWY A1 to TWY A7, TWY Z12S and TWY L1 to TWY L6 are exclusive for EFTA use only.</p> <p>All EFTA taxiways/taxilanes: Code B compliant except for taxiways A1, A2, A6, A7 and Z12S, which are Code A.</p> <p>Taxilanes Z13 and Z14 only available during special events.</p> <p>All EFTA aprons: Maximum ramp weight 5,700 KG</p> <p>Maximum tyre pressure 1.14 MPa / 166 psi.</p>
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Apron Designation	Surface	PCN	Notes
S2	Concrete	72/R/B/W/T	
S3	Concrete	90/R/A/W/T	Stands S320-323 are used for based rotary operations only and are not included. Stands S340 and S341 are dual-use (designated H1 and H2 for itinerant helicopter parking). 36 stands if MARS configuration used for: S342L, S342R, S343L, S343R, S346L and S346R.
S4	Concrete	90/R/A/W/T	
S8	Concrete	90/R/A/W/T	
G (1-17)	Concrete	62/R/B/W/T	G10-G11; G14-15 and G17 box stands
G (100-103)	Concrete	86/R/B/W/T	Box stands

Table 1: Apron details

Apron Designation	Number of Stands	Surface	PCN	Notes
APRON 1	4	Interlock paving	6/R/B/Y/T	Aircraft can park on each stand either east or west.
APRON 2	4	Interlock paving	6/R/B/Y/T	Aircraft can park on each stand either east or west.
APRON 3	4	Interlock paving	6/R/B/Y/T	Aircraft can park on each stand either east or west.
APRON 4	4	Interlock paving	6/R/B/Y/T	Aircraft can park on each stand either east or west.
APRON 5	4	Interlock paving	6/R/B/Y/T	Aircraft can park on each stand either east or west.

Table 2: EFTA-Apron details

Designation	ICAO Code	Length (M)	Width (M)	Shoulder either side (M)	Strip (M) (minimum)	Surface	PCN
U	F	466	25	18	115	Asphalt	140 F/A/X/T
U4	F	570	25	18	115	Asphalt	140 F/A/X/T
V	F	4526	25	18	115	Asphalt	140 F/A/X/T
	F		25	18	115	Concrete	120 R/A/W/T
V1	F	215	25	18	115	Asphalt	140 F/A/X/T
	F	100	25	18	115	Concrete	120 R/A/W/T
V2	F	215	30	18	115	Asphalt	140 F/A/X/T
	F	100	30	18	115	Concrete	120 R/A/W/T
V3	F	215	30	18	115	Asphalt	140 F/A/X/T
	F	100	30	18	115	Concrete	120 R/A/W/T
V4	F	215	30	18	115	Asphalt	140 F/A/X/T
	F	100	30	18	115	Concrete	120 R/A/W/T
V6	F	430	25	18	115	Asphalt	140 F/A/X/T
V7	F	430	25	18	115	Asphalt	140 F/A/X/T

* Taxilane

Table 3: Taxiway details

Designation	ICAO Code	Length (M)	Width (M)	Shoulder either side (M)	Strip (M) (minimum)	Surface	PCN
V8	F	430	25	18	115	Asphalt	140 F/A/X/T
V9	F	430	25	18	115	Asphalt	140 F/A/X/T
V10	F	430	25	18	115	Asphalt	140 F/A/X/T
V11	F	430	25	18	115	Asphalt	140 F/A/X/T
V12	F	430	25	18	115	Asphalt	140 F/A/X/T
V13	F	430	25	18	115	Asphalt	140 F/A/X/T
V16	F	215	30	18	115	Asphalt	140 F/A/X/T
	F		30	18	115	Concrete	120 R/A/W/T
V17	F	215	30	18	115	Asphalt	140 F/A/X/T
	F		30	18	115	Concrete	120 R/A/W/T
V18	F	215	30	18	115	Asphalt	140 F/A/X/T
	F		30	18	115	Concrete	120 R/A/W/T
V19	F	215	30	18	115	Asphalt	140 F/A/X/T
	F		30	18	115	Concrete	120 R/A/W/T
V20	F	215	30	18	115	Asphalt	140 F/A/X/T
	F		30	18	115	Concrete	120 R/A/W/T
V21	F	215	25	18	115	Asphalt	140 F/A/X/T
	F		25	18	115	Concrete	120 R/A/W/T
W	F	4526	25	18	115	Asphalt	140 F/A/X/T
	F		25	18	115	Concrete	120 R/B/W/T
W1	F	100	25	18	115	Concrete	140 R/B/W/T
W2	F	100	25	18	115	Concrete	140 R/B/W/T
W3	F	100	25	18	115	Concrete	140 R/B/W/T
W4	F	100	25	18	115	Concrete	140 R/B/W/T
W7	F	312	25	18	115	Asphalt	140 F/A/X/T
W8	F	312	25	18	115	Asphalt	140 F/A/X/T
W9	F	100	25	18	115	Asphalt	140 F/A/X/T
W10	F	312	25	18	115	Asphalt	140 F/A/X/T
W11	F	312	25	18	115	Asphalt	140 F/A/X/T
W12	F	100	25	18	115	Asphalt	140 F/A/X/T
W13	F	100	25	18	115	Asphalt	140 F/A/X/T
W14	F	312	25	18	115	Asphalt	140 F/A/X/T
W15	F	312	25	18	115	Asphalt	140 F/A/X/T
W16	F	100	25	18	115	Asphalt	140 F/A/X/T
	F	212	25	18	115	Concrete	140 R/A/W/T
W17	F	100	37	18	115	Asphalt	140 F/A/X/T
	F	212	37	18	115	Concrete	140 R/A/W/T
W18	F	100	38	18	115	Asphalt	140 F/A/X/T
	F	212	38	18	115	Concrete	140 R/A/W/T
W19	F	312	37	18	115	Concrete	140 R/A/W/T
W20	F	312	37	18	115	Concrete	140 R/A/W/T
W21	F	312	25	18	115	Concrete	140 R/A/W/T
Z*	F	4552	25	18		Asphalt	140 F/A/X/T
	F		25	18		Concrete	90 R/A/W/T
Z5*	F	1223	25	18		Concrete	72 R/B/W/T
Z6*	F	1223	25	18		Concrete	90 R/A/W/T
Z7*	F	1223	25	18		Concrete	90 R/A/W/T
Z8*	F	1223	25	18		Concrete	90 R/A/W/T
Z9*	C	710	18	5		Concrete	86/R/B/W/T
Z10*	C	710	18	12		Concrete	86/R/B/W/T
Z11*	F	1515	25	18		Concrete	86 R/B/W/T
Z12*	F	1515	25	18		Asphalt	71 F/B/W/T
Z13*	C	443	18	16		Asphalt	55 F/B/W/T

* Taxilane

Table 3: Taxiway details

Designation	ICAO Code	Length (M)	Width (M)	Shoulder either side (M)	Strip (M) (minimum)	Surface	PCN
Z14*	C	542	18	16		Asphalt	55 F/B/W/T
Z15*	C	572	18	16		Asphalt	55 F/B/W/T
Z16*	C	431	18	16		Asphalt	55 F/B/W/T
Z17*	C	431	18	16		Asphalt	55 F/B/W/T
Z20*	C	572	18	16		Asphalt	55 F/B/W/T
Z21*	F	100	25	18		Concrete	86 R/B/W/T
Z22*	F	100	25	18		Concrete	86 R/B/W/T
Z23*	F	100	25	18		Concrete	86 R/B/W/T
Z24*	F	100	25	18		Concrete	86 R/B/W/T
Z51	F	306	25	18		Concrete	72 R/B/W/T
Z52	F	306	25	18		Concrete	72 R/B/W/T
Z53	F	306	25	18		Concrete	72 R/B/W/T
Z54	F	306	25	18		Concrete	72 R/B/W/T
Z71	F	306	25	18		Concrete	90 R/B/W/T
Z72	F	306	25	18		Concrete	90 R/B/W/T
Z73	F	306	25	18		Concrete	90 R/B/W/T
Z74	F	306	25	18		Concrete	90 R/B/W/T
Z91	C	190	18	4		Concrete	86 R/B/W/T
Z92	C	190	18	4		Concrete	86 R/B/W/T

* Taxilane

Table 3: Taxiway details

	Designation	ICAO Code	Length (M)	Width (M)	Shoulder either side (M)	Strip (M) (minimum)	Surface	PCN
←	A	B	1838	10	N/A	40	Asphalt	6/F/B/Y/T
←	A1	A	88	10	N/A	31	Asphalt	6/F/B/Y/T
	A2	A	88	11	N/A	31	Asphalt	6/F/B/Y/T
	A3	B	130	11	N/A	40	Asphalt	6/F/B/Y/T
←	A4	B	90	12	N/A	40	Asphalt	6/F/B/Y/T
	A5	B	130	11	N/A	40	Asphalt	6/F/B/Y/T
	A6	A	90	11	N/A	31	Asphalt	6/F/B/Y/T
←	A7	A	90	10	N/A	31	Asphalt	6/F/B/Y/T
	Z12S	A	232	11	N/A	31	Asphalt	6/F/B/Y/T
←	L1*	B	118	8	N/A		Interlock paving	6/R/B/Y/T
←	L2*	B	118	8	N/A		Interlock paving	6/R/B/Y/T
←	L3*	B	118	8	N/A		Interlock paving	6/R/B/Y/T
←	L4*	B	118	8	N/A		Interlock paving	6/R/B/Y/T
←	L5*	B	140	11	N/A		Interlock paving	6/R/B/Y/T
←	L6*	B	118	8	N/A		Interlock paving	6/R/B/Y/T

*Taxilane

Table 4: EFTA-Taxiway details

OMDW AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	see AD 2.23.3
2	RWY and TWY markings	<p>RWY 12/30: designation, side stripes, pre - THR, transverse stripe, CL, TDZ, aiming point</p> <p>RWY 13/31 : designation, side stripes, displaced THR, transverse stripe, CL, TDZ, aiming point.</p> <p>TWY: CAT I and CAT II/III holding positions.</p>
3	Stop bars	Standard ICAO markings
4	Remarks	RWY 13/31 exclusively used for EFTA operations.

OMDW AD 2.10 AERODROME OBSTACLES

To acquire Area 2 electronic obstacle data, contact details are available in [GEN 3.1.6](#)

Electronic obstacle data for Area 3 are not available.

In approach/TKOF areas					
Obstacle ID Designation	Obstacle type	Obstacle Position	Elevation	Lighting Type/Color	Remarks
30_LOC_FFM	NAVAID	245304.6N 0551058.1E	183 FT	YES/RED	NIL
12_LOC_FFM	NAVAID	245431.0N 0550821.9E	126 FT	YES/RED	NIL
13 APPROACH LIGHT	NAVAID	245216.1N 0550905.9E	162 FT	NIL	NIL
31 APPROACH LIGHT	NAVAID	245141.9N 0551007.6E	162 FT	NIL	NIL

In circling area and at AD					
Obstacle ID Designation	Obstacle type	Obstacle Position	Elevation	Lighting Type/Color	Remarks
ATC TOWER	CONTROL_TOWER	245320.0N 0550926.2E	443 FT	YES/RED	NIL
30_GP_OBS	NAVAID	245319.0N 0551040.4E	221 FT	YES/RED	NIL
12_GP_OBS	NAVAID	245424.0N 0550842.9E	172 FT	YES/RED	NIL
RADAR	NAVAID	245358.9N 0550947.4E	245 FT	YES/RED	NIL
GMR_EAST	NAVAID	2453353.3N 0551030.1E	274 FT	YES/RED	NIL
GMR_WEST	NAVAID	245422.5N 0550904.7E	236 FT	YES/RED	NIL
VHF_MAST	NAVAID	245347.1N 0551008.7E	227 FT	YES/RED	NIL
VHF_MAST	NAVAID	245410.7N 0550926.1E	209 FT	YES/RED	NIL
FIRE STATION FLOODLIGHT	NAVAID	245204.2N 0550942.8E	229 FT	YES/RED	NIL
EFTA ATC TOWER	CONTROL_TOWER	245203.4N 0550944.2E	229 FT	YES/RED	NIL
MAST	MAST_LIT	245028.6N 0550903.2E	308 FT	YES/RED	NIL

OMDW AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	Dubai MET
2	Hours of service MET Office outside hours	H24 NIL
3	Office responsible for TAF preparation Periods of validity	OMDB MET 30 HR, issued every 6 HR
4	Trend forecast and Interval of issuance	TREND H24, issued every 1/2 HR
5	Briefing/consultation provided	T, D Internet
6	Flight documentation Language(s) used	C, TB English
7	Charts and other information available for briefing or consultation	P _{50 - 450} , SWH, SWM, SWL
8	Supplementary equipment available for providing information	Satellite Imagery, Weather Radar
9	ATS units provided with information	OMDW
10	Additional information (limitation of service, etc.)	Tel: +971 4 504 2990 Tel: +971 4 504 2987 Wind Shear Warnings. Refer to OMDW AD 2.23.7

Abbreviations (from Doc 8126)

P = Personal, T = Telephone, D = Self-Briefing Display, C = Charts,
 TB = Tabular Data, P_{50 - 450} = Prognostic Upper Air Chart FL50-FL450,
 SWH = Significant Weather High (Chart), SWM = Significant Weather Medium (Chart),
 SWL = Significant Weather Low (Chart) Internet: www.avmet.ae - Registration required

Mean daily maximum and minimum temperatures (°C) for each month of the year

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Maximum	25	27	30	35	40	41	44	43	41	37	31	26
Minimum	13	14	16	21	24	26	30	29	27	23	18	15

OMDW AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE & MAG BRG	Dimensions of RWY(M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
12	121° / 119°	4500 x 60	140/F/A/X/T Asphalt	245425.74N 0550831.45E -111.5 FT	115.2 FT 118.4 FT
30	301° / 299°	4500 x 60	140/F/A/X/T Asphalt	245309.88N 0551048.54E -111.5 FT	170.7 FT 170.7 FT
13	121° / 119°	1838 x 30	6/F/B/Y/T Asphalt	245211.90N 0550913.41E 245143.45N 0551004.82E -111.5 FT	155.4 FT NIL
31	301° / 299°	1838 x 30	6/F/B/Y/T Asphalt	245145.98N 0551000.25E 245214.43N 0550908.84E -111.5 FT	155.4 FT 155.0 FT

Slope of RWY-SWY			SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA (M)	Arresting system
7			8	9	10	11	12
12	+0.11% (first 1762.5 M) +0.5% (next 2737.5 M)	NIL	NIL	NIL	4620 x 300	237 x 150	Not Implemented
30	-0.5% (first 2737.5 M) -0.11% (next 1762.5 M)	NIL	NIL	NIL	4620 x 300	237 x 150	
13	0%	NIL	NIL	NIL	1958 x 150	120 x 80	
31		NIL	NIL	NIL	1958 x 150	120 x 80	

Obstacle Free Zone		Remarks
13		14
12	Provided in accordance with UAE Civil Aviation Regulations, Part IX, 3.4.11 - Obstacle Control Compliant with ICAO Annex 14, Chapter 4 Compliant with PANS-OPS Volume II	1. RWY 12/30 will be closed for planned maintenance every Monday from 11:00 to 14:00 UTC
30		2. RWY 13/31 will be closed daily from 18:00 to 02:00 UTC
13		3. RWY 13/31 exclusively used for EFTA operations.
31		4. RWY strip surface for both runways are asphalt & compacted earth 5. RWY 13/31 THR displaced by 150 M

OMDW AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
12	4500	4500	4500	4500	NIL
30	4500	4500	4500	4500	NIL
12	4452	4452	4452		Take-off from V2
12	4352	4352	4352		Take-off from V3
12	4252	4252	4252		Take-off from V4
12	3030	3030	3030		Take-off from V6
12	3030	3030	3030		Take-off from U4
12	2580	2580	2580		Take-off from V8
12	2122	2122	2122		Take-off from V10
12	1672	1672	1672		Take-off from V12
30	4390	4390	4390		Take-off from V20
30	4288	4288	4288		Take-off from V19
30	4188	4188	4188		Take-off from V18
30	4088	4088	4088		Take-off from V17
30	3995	3995	3995		Take-off from V16
30	2980	2980	2980		Take-off from V13
30	2530	2530	2530		Take-off from V11
30	2072	2072	2072		Take-off from V9
30	1622	1622	1622		Take-off from V7
13	1838	1838	1838	1688	EFTA
31	1838	1838	1838	1688	EFTA
13	1804	1804	1804		Take-off from A2 EFTA
31	1804	1804	1804		Take-off from A6 EFTA

OMDW AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT Type LEN INTST	THR LGT Colour WBAR	VASIS (MEHT) PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, Colour, INTST	RWY edge LGT LEN, spacing, Colour INTST	RWY End LGT Colour WBAR	SWY LGT LEN (M) Colour	Remarks
1	2	3	4	5	6	7	8	9	10
← 12	ICAO CAT IIIB LIH precision approach lighting system including distance coded CL with sequence flashing lights from 900 M to 330 M. Flashing RTIL	LIH uni - directional green with wing bars	PAPI 3°, PAPI / ILS disharmony - on slope ILS flight may show fly up PAPI indications	LIH white uni - directional 900 M long, 30 M spacing	LIH bi - directional, 15 M spacing, first 3600 M white, next 600 M alternate red / white, last 300 M red	LIH bi - directional, 60 M spacing, first 3900 M white, last 600 M yellow	11 LIH uni - directional red lights, spaced 6 M across RWY end	NIL	Side row lights - red side row barrettes extending 270 M from THR. RET indicator lights - LIH yellow lights with 2 M lateral spacing at distances of 300 M (3 lights), 200 M (2 lights) and 100 M (1 light) from the RET point of tangency
← 30	ICAO CAT IIIB LIH precision approach lighting system including distance coded CL with sequence flashing lights from 900 M to 330 M. Flashing RTIL	LIH uni - directional green with wing bars	PAPI 3°, PAPI / ILS disharmony - on slope ILS flight may show fly up PAPI indications	LIH white uni - directional 900 M long, 30 M spacing	LIH bi - directional, 15 M spacing, first 3600 M white, next 600 M alternate red / white, last 300 M red	LIH bi - directional, 60 M spacing, first 3900 M white, last 600 M yellow	11 LIH uni - directional red lights, spaced 6 M across RWY end	NIL	Side row lights - red side row barrettes extending 270 M from THR. Runway exit taxiways V17 to V20 are not lit in the direction viewed from the runway. RET indicator lights - LIH uni - directional yellow lights with 2 M lateral spacing at distances of 300 M (3 lights), 200 M (2 lights) and 100 M (1 light) from the RET point of tangency
← 13	ICAO SALS, 420 M LIH.	LIH Uni - directional green with wing bars	PAPI 3° LEFT only	NIL	NIL	LIH bi - directional, 60M spacing, first 150M red, white until 600M from RWY end, last 600M yellow	6 LIH uni - directional red lights, spaced 4.4M across RWY end	NIL	NIL

RWY Designator	APCH LGT Type LEN INTST	THR LGT Colour WBAR	VASIS (MEHT) PAPI	TDZ, LGT LEN	RWY Centre Line LGT Length, spacing, Colour, INTST	RWY edge LGT LEN, spacing, Colour INTST	RWY End LGT Colour WBAR	SWY LGT LEN (M) Colour	Remarks
1	2	3	4	5	6	7	8	9	10
31	ICAO SALS, 420 M LIH	LIH Uni - directional green with wing bars	PAPI 3° LEFT only	NIL	NIL	LIH bi - directional, 60M spacing, first 150M red, white until 600M from RWY end, last 600M yellow	6 LIH uni - directional red lights, spaced 4.4M across RWY end	NIL	NIL

OMDW AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and operational hours	NIL
2	LDI location and LGT Anemometer location and LGT WDI	<p>NIL</p> <p>Anemometers RWY 12/30 installed mid - point of the RWY located 220 M (N) of RWY CL.</p> <p>WDI RWY 12 THR: located 120 M from the RWY CL on the left side (N) and 335 M beyond the THR abeam to TWY V5.</p> <p>WDI RWY 30 THR: located 120 M from the RWY CL on the right side (N) and 400 M beyond the THR abeam to TWY V18.</p> <p>WDI FATO 12: located 120 M from TWY Z CL on the left side (N) and 383 M beyond THR abeam TWY Holding Point ZC.</p> <p>WDI FATO 30: located 120 M from TWY Z CL on the right side (N) and 436 M beyond THR abeam TWY Holding Point ZD.</p> <p>AWOS (Anemometer) RWY 13 THR: located 71 M from the RWY CL on the left side (N) and 300 M beyond the THR.</p> <p>AWOS (Anemometer) RWY 31 THR: located 75 M from the RWY CL on the right side (N) and 345 M beyond the THR.</p> <p>WDI RWY 13 THR: located 80 M from the RWY CL on the left side (N) and 265 M beyond the THR.</p> <p>WDI RWY 31 THR: located 77 M from the RWY CL on the left side (S) and 138 M beyond the THR.</p>
3	TWY lighting	<p>Edge: Variable intensity blue Omni directional inset lights only at intersections and turns, excluding TWY Z9 and TWY Z10.</p> <p>EFTA: blue Omni directional elevated fittings.</p> <p>Centreline: Variable intensity green bi-directional lights are provided for all taxiways except exit taxiways; 15 M spacing on straight sections, 7.5 M spacing on curved sections; Exit taxiways provided with variable intensity alternate Green / Yellow lights from the beginning near the runway centreline to the perimeter of the ILS critical / sensitive area; The light nearest the perimeter always shows yellow.</p> <p>EFTA: taxiways are not provided with centreline or exit taxiway lighting.</p>
4	Secondary power supply/switch-over time	Conforms fully with the requirements of ICAO Annex 14, chapter 8 for CAT III operations and CAT I for EFTA operations.
5	Remarks	Apron: High mast floodlights except EFTA aprons which provide canopy lighting. RWY 13 / 31 exclusively used for EFTA operations.

OMDW AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO Geoid undulation	THR H12: 245345.7N 0550900.7E THR H30: 245338.5N 0550913.7E TLOF: NIL -112 FT
2	TLOF and/or FATO elevation M/FT	TLOF: NIL FATO: THR H12: 35.8 M / 117 FT THR H30: 37.1 M / 122 FT
3	TLOF and FATO area dimensions, surface, strength, marking	TLOF: NIL FATO: 425 M x 20 M, concrete, PCN 90 R/A/W/T FATO marking, Heliport identification
4	True BRG of FATO	H12: 121° H30: 301°
5	Declared distance available	TODAH = 425 M RTODAH = 425 M LDAH = 425 M
6	APP and FATO lighting	No FATO lighting, use green centreline lights of Taxilane Zulu for orientation
7	Remarks	For use by Dubai Police Airwing and Aerogulf Services helicopters only, as directed by ATC Helicopter operations at EFTA require pre-approval from the airport authority. MEDEVAC can expect landing at TWY A.

OMDW AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	AL MAKTOUM CTR 1: 250143N 0550744E 245552N 0551819E Clockwise arc radius 7.3 NM with centre at 245310N 0551049E till 244551N 0551143E 245145N 0550103E Clockwise arc radius 7.3 NM with centre at 245426N 0550831E till 250143N 0550744E AL MAKTOUM CTR 2: 250241N 0550558E 250143N 0550744E Counter clockwise arc radius 7.3 NM with centre at 245426N 0550831E till 245145N 0550103E 245244N 0545917E Clockwise arc radius 7.3 NM with centre at 245524N 0550645E till 250241N 0550558E
2	Vertical limits	CTR 1: 1500 FT / SFC CTR 2: 1500 FT / 1000 FT
3	Airspace classification	D
4	ATS unit call sign Language(s)	AL MAKTOUM TOWER English
5	Transition altitude	13000 FT
6	Remarks	NIL

OMDW AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	SATVOICE	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
APP	AL MAKTOUM RADAR	Primary 124.025 MHz	Not Implemented	Not Implemented	H24	EMERG 121.500 MHz/243.000 MHz
		Secondary 126.025 MHz				
	DUBAI DEPARTURES NORTH	Primary 126.200 MHz			H24	EMERG 121.500 MHz/243.000 MHz
		Secondary 120.250 MHz				
	DUBAI DEPARTURES SOUTH	Primary 121.025 MHz			H24	EMERG 121.500 MHz/243.000 MHz
		Secondary 126.025 MHz				
	DUBAI SOUTH RADAR	Primary 120.400 MHz			0200 - 1800	EMERG 121.500 MHz/243.000 MHz
		Secondary 126.025 MHz				
	MINHAD APPROACH	Primary 122.500 MHz			H24	EMERG 121.500 MHz/243.000 MHz
		Secondary 126.025 MHz				
TWR	AL MAKTOUM TOWER	Primary 118.625 MHz			H24	EMERG 121.500 MHz
		Secondary 118.725 MHz				
GND	AL MAKTOUM GROUND	Primary 118.375 MHz			H24	EMERG 121.500 MHz
		Secondary 118.725 MHz				
ATIS	AL MAKTOUM INTERNATIONAL	126.475 MHz			H24	NIL
EFTA TWR	ACADEMY TOWER	Primary 118.775 MHz			0200 - 1800	EMERG 121.500 MHz
		Secondary 119.000 MHz				
EFTA GND	EFTA GROUND INFORMATION	119.175 MHz			0200 - 1800	EMERG 121.500 MHz

OMDW AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, CAT of ILS/MLS (For VOR/ILS/MLS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
LOC RWY 12 (2° E / 2018) CAT III	IJEA	111.750 MHz	H24	245304.9N 0551057.6E		MAINT on runway closure
GP RWY 12		333.350 MHz	H24	245424.0N 0550842.8E		3°, RDH 50 FT, MAINT on runway closure
DME RWY 12	IJEA	CH 54Y	H24	245424.0N 0550842.8E	134 FT	Co - located with GP; Zero indication at TDZ
LOC RWY 30 (2° E / 2018) CAT III	IJWA	109.750 MHz	H24	245430.7N 0550822.4E		MAINT on runway closure
GP RWY 30		333.050 MHz	H24	245318.9N 0551040.4E		3°, RDH 50 FT, MAINT on runway closure
DME RWY 30	IJWA	CH 34Y	H24	245318.9N 0551040.4E	184 FT	Co - located with GP; Zero indication at TDZ
DME RWY 31	IDEF	CH 42Y	0200 - 1800 UTC	245154.3N 0550953.5E	153 FT	Exclusive use for EFTA aircraft.
LOC RWY 31 (2° E / 2018) CAT I	IDEF	110.550 MHz		245217.5N 0550903.3E	165 FT	Exclusive use for EFTA aircraft.
GP RWY 31 (2° E / 2018)		329.450 MHz		245154.3N 0550953.5E	153 FT	3°, RDH 53 FT Exclusive use for EFTA aircraft.

OMDW AD 2.20 LOCAL TRAFFIC REGULATIONS

2.20.1 Local VFR Regulations

2.20.1.1 Maximum speed on published VFR routes is 125 KIAS.

2.20.1.2 When the reported MET Visibility falls below 5000 M and / or the cloud ceiling is below 1500 FT, flight according to VFR is not permitted. Special VFR clearance may be issued.

2.20.1.3 Due to limited availability of Visual Reference Points (VRP) Special VFR clearances to enter the AL MAKTOUM CTR (I) may be withheld for separation purposes.

2.20.1.4 Clearance for VFR flight within the AL MAKTOUM CTR (I) will be limited to the following:

- Flights inbound to or outbound from OMDW/EFTA
- Flights inbound to or outbound from a landing site within the AL MAKTOUM CTR (I)
- Flights with an operational requirement to operate within the AL MAKTOUM CTR (I) e.g. Police patrol, aerial survey etc.
- Training flights carrying out practice instrument procedures or visual circuits at OMDW/EFTA

2.20.1.5 VFR flights not included in the above criteria must plan a route that remains clear of the AL MAKTOUM CTR (I). In addition, pilots of such flights are requested not to establish communications with AL MAKTOUM TOWER or ACADEMY TOWER unless an emergency situation requires otherwise.

2.20.2. Visual and instrument training at DUBAI / AL MAKTOUM INTERNATIONAL is subject to prior ATC approval. Any requests for training should be made to the ATC Watch Manager (+971 4 813 3579) prior to departure.

2.20.2.1 Visual and instrument training at EFTA is for the use of the EFTA only.

2.20.3 Minimum Runway Occupancy:

a. Arrivals

Rapid exit from the runway enables the achievement of maximum runway utilisation. On exiting the RWY pilots are reminded not to stop until the entire aircraft has passed the runway holding point. Pilots should anticipate joining TWY V in the same direction as arrival unless otherwise instructed. Pilots are reminded to pay particular attention to ATC taxiing instruction when vacating to avoid deviations from clearance resulting in taxiway incursions.

b. Departures

Pilots are reminded to pay particular attention to conditional line up clearances to avoid RWY incursions. Aircraft are assumed to be ready for departure on reaching the holding point unless otherwise stated. Cockpit checks shall be completed prior to completing the line up so that take-off roll can be commenced without delay.

Note: Aircraft that cannot comply with these requirements are to notify ATC as soon as possible.

2.20.4. When on approach to RWY 30 and RWY 12, pilots shall reconfirm DME/GP information and ensure that they have correctly identified the landing runway. Do not confuse with EFTA RWY 13 and RWY 31 in close proximity approximately 1.6 NM South of OMDW.

2.20.4.1 When on an ILS approach to RWY 31, pilots shall reconfirm DME/GP information and ensure that they have correctly identified the landing runway. Do not confuse with OMDW RWY 30 in close proximity, approximately 1.6 NM North of EFTA.

2.20.4.2 When on a GNSS approach to EFTA RWY 31 and RWY 13, pilots shall ensure that they have correctly identified the landing runway. Do not confuse with OMDW RWY 30 and RWY 12 in close proximity, approximately 1.6 NM North of EFTA.

2.20.5 Pilots to exercise caution as High intensity VFR traffic to the South East of the AL MAKTOUM CTR transiting between OMR 53 and EFTA.

2.20.6 Before entering AL MAKTOUM CTR-Class D airspace, the pilot in command of a VFR or SVFR aircraft shall establish two-way radio communication as follows:

- a. Traffic approaching AL MAKTOUM CTR from the South between 0200 -1800 UTC shall establish contact with the ACADEMY TOWER on 118.775 MHz and shall maintain contact while in Class D airspace unless otherwise advised. Outside of these hours contact shall be established with AL MAKTOUM TOWER on 118.625 MHz.

- b. Traffic approaching AL MAKTOUM CTR from the North shall establish contact with AL MAKTOUM TOWER on 118.625 MHz H24 and shall maintain contact while in Class D airspace unless otherwise advised.

Note: Radio contact must be initiated far enough from the Class D airspace boundary to preclude entering the Class D airspace before two-way radio communication is established. If the controller responds with instructions to enter the CTR then radio communications have been established and the pilot may enter the Class D airspace.

OMDW AD 2.22 FLIGHT PROCEDURES

2.22.1 RNAV 1 performance required for IFR flights

Note: Aircraft flying IFR shall be certified for RNAV 1 with GNSS operations.

2.22.2 Initial Ground Contact - IFR

2.22.2.1 Prior to requesting a pushback clearance from OMDW ATC, flight crews are instructed to contact the GMC frequency on 118.375 MHz. Departing aircraft shall establish contact no more than 10 minutes prior to startup and obtain an ATC clearance. The following information will be required:

- a. Aircraft callsign
- b. Aircraft type
- c. Parking stand
- d. Destination
- e. DUBAI CTA exit point
- f. ATIS letter & QNH

2.22.2.2 EFTA Operations: - prior to requesting a start or taxi clearance from EFTA ATC, flight crews are instructed to contact EFTA ATC on frequency on 118.775 MHz. Departing aircraft shall establish contact no more than 10 minutes prior to startup and obtain an ATC clearance. The following information will be required:

- a. Aircraft callsign
- b. Aircraft type
- c. Parking stand
- d. Destination
- e. DUBAI CTA exit point
- f. QNH

2.22.3 Initial contact instructions-Airborne

2.22.3.1 On initial call IFR aircraft shall pass the following information to DUBAI DEPARTURES:

- a. Aircraft callsign
- b. Passing level

2.22.3.2 On initial call IFR aircraft shall pass the following information to DUBAI ARRIVALS:

- a. Aircraft callsign
- b. Passing level
- c. Aircraft Type

Note: Inbound traffic shall advise DUBAI ARRIVALS on first contact if full runway length is required.

2.22.4 RNAV (GNSS) Approaches to RWY 12/30 and EFTA RWY 13/31

2.22.4.1 These procedures may only be flown using significant position co - ordinates that are stored in the aircraft's navigational data base.

2.22.4.2 Significant points are published in [ENR 4.4](#)

2.22.5 Standard Instrument Departures (SID)

2.22.5.1 ATC clearances issued to IFR traffic departing from OMDW will normally include Standard Instrument Departure.

2.22.5.2 Initial climb is restricted to 3000 FT for departures from RWY 12 / 30. Further climb clearance as instructed by AL MAKTOUM RADAR.

Note: See [ENR 1.6.1.3](#) for action in the event of radio failure.

2.22.5.3 Departing IFR traffic leaving DUBAI CTA while on SID or under radar control are required to:

- a. Climb at a minimum gradient of 5% to 8,000 FT (300 FT per NM)
- b. Observe a maximum IAS of 250 KT whilst below 10000 FT
- c. Carry out all turns with a 25° angle of bank.
- d. Advise ATC at start-up if unable to comply with the above, and with any part of the SID requirements and restrictions.

Note: Special speed restrictions apply on some SID and STAR.

2.22.5.4 Special navigation performance requirements:

Aircraft flying SIDs shall be certified for RNAV 1 with GNSS operations.

2.22.6 SID FMS coding tables2.22.6.1 Significant point co-ordinates are published in [ENR 4.4](#)

2.22.6.2 SID RWY 12

i) ANVIX 5J (RNAV 1 SID RWY 12)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4		+5000	8.4	-220
DW457	TF	No	071.2		+6000	6.4	
DW458	TF	No	071.3			6.5	
LOPUV	TF	No	082.2			10.9	
ANVIX	TF	No	126.6		+10000	6.0	

ii) DAVMO 4J (RNAV 1 SID RWY 12)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
GINLA	TF	No	360.0		+10000	6.9	
DW467	TF	No	049.2		+12000	9.2	
MITIX	TF	No	049.2		+13000	5.0	
LOVEM	TF	No	036.0		+FL 150	11.1	
OBROG	TF	No	040.2			17.4	
DAVMO	TF	No	043.6			15.6	

iii) EMERU 2J (RNAV 1 SID RWY 12)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
EMERU	TF	No	209.9			10.6	

iv) **KUTLI 3J (RNAV 1 SID RWY 12)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
KUTLI	TF	No	220.8		+8000	8.1	

v) **MIROT 3J (RNAV 1 SID RWY 12)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
DW412	TF	No	301.0			5.0	
ORGUR	TF	No	301.3			4.0	
MIROT	TF	No	269.7			14.8	

vi) **NABIX 3J (RNAV 1 SID RWY 12)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
DW412	TF	No	301.0			5.0	
ORGUR	TF	No	301.3			4.0	
NABIX	TF	No	294.8			15.4	

vii) **NOLSU 3J (RNAV 1 SID RWY 12)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	-220
IMGIL	TF	No	007.6		+9000	6.3	
ULADO	TF	No	069.6		+11000	8.5	
DW474	TF	No	069.6			7.7	
DW475	TF	No	069.7		+12000	7.1	
NOLSU	TF	No	069.8		+FL 150	18.5	

viii) **RIDAP 3J (RNAV 1 SID RWY 12)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
DW412	TF	No	301.0			5.0	
ORGUR	TF	No	301.3			4.0	
LOPAP	TF	No	348.5			5.8	
IVILI	TF	No	348.5			5.0	
KIXOG	TF	No	348.4			7.5	
RIDAP	TF	No	287.4			5.8	

ix) **SENPA 3J (RNAV 1 SID RWY 12)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY12	CA		121.3		+570		
DW452	DF	No			+2000		
DW456	TF	No	121.4	Left	+5000	8.4	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
DW412	TF	No	301.0			5.0	
ORGUR	TF	No	301.3			4.0	
LOPAP	TF	No	348.5			5.8	
IVILI	TF	No	348.5			5.0	
SENPA	TF	No	285.5			11.9	

2.22.6.3 SID RWY 30

i) ANVIX 4L (RNAV 1 SID RWY 30)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No		Left	+2000		
DW552	TF	No	211.2	Left	+3000	5.0	
DW465	TF	No	121.2		+4000	4.0	-220
DW423	TF	No	077.7			7.3	
DW466	TF	No	067.9		+7000	5.0	
IMGIL	TF	No	067.9		+10000	8.4	
ULADO	TF	No	069.6		+11000	8.5	
RAPMO	TF	No	120.7		+13000	9.2	
LOPUV	TF	No	126.0			10.1	
ANVIX	TF	No	126.6			6.0	

ii) DAVMO 4L (RNAV 1 SID RWY 30)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No			+2000		
XARTA	TF	No	301.2			6.9	-220
GINLA	TF	No	360.0			6.9	
DW467	TF	No	049.2		+10000	9.2	
MITIX	TF	No	049.2		+11000	5.0	
LOVEM	TF	No	036.0		+FL 150	11.1	
OBROG	TF	No	040.2			17.4	
DAVMO	TF	No	043.6			15.6	

iii) EMERU 1L (RNAV 1 SID RWY 30)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No		Left	+2000		
DW552	TF	No	211.2	Left	+3000	5.0	
DW465	TF	No	121.2		+4000	4.0	-220
EMERU	TF	No	179.5			3.1	

iv) KUTLI 3L (RNAV 1 SID RWY 30)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No			+2000		
XARTA	TF	No	301.2	Left		6.9	-220
TATMO	TF	No	211.2			5.0	-220
KUTLI	TF	No	149.1		+8000	6.3	

v) MIROT 3L (RNAV 1 SID RWY 30)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No			+2000		
XARTA	TF	No	301.2			6.9	-220
ORGUR	TF	No	301.1			9.0	
MIROT	TF	No	269.7			14.8	

vi) **NABIX 3L (RNAV 1 SID RWY 30)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No			+2000		
XARTA	TF	No	301.2			6.9	-220
ORGUR	TF	No	301.1			9.0	
NABIX	TF	No	294.8			15.4	

vii) **NOLSU 3L (RNAV 1 SID RWY 30)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No		Left	+2000		
DW552	TF	No	211.2	Left	+3000	5.0	
DW465	TF	No	121.2		+4000	4.0	-220
DW423	TF	No	077.7			7.3	
DW466	TF	No	067.9		+7000	5.0	
IMGIL	TF	No	067.9		+10000	8.4	
ULADO	TF	No	069.6		+11000	8.5	
DW474	TF	No	069.6			7.7	
DW475	TF	No	069.7		+12000	7.1	
NOLSU	TF	No	069.8		+FL 150	18.5	

viii) **RIDAP 3L (RNAV 1 SID RWY 30)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No			+2000		
XARTA	TF	No	301.2			6.9	-220
ORGUR	TF	No	301.1			9.0	
LOPAP	TF	No	348.5			5.8	
IVILI	TF	No	348.5			5.0	
KIXOG	TF	No	348.4			7.5	
RIDAP	TF	No	287.4			5.8	

ix) **SENPA 3L (RNAV 1 SID RWY 30)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY30	CA		301.2		+520		
KIRUK	DF	No			+2000		
XARTA	TF	No	301.2			6.9	-220
ORGUR	TF	No	301.1			9.0	
LOPAP	TF	No	348.5			5.8	
IVILI	TF	No	348.5			5.0	
SENPA	TF	No	285.5			11.9	

2.22.6.4 SID RWY 13

i) ANVIX 1N (RNAV 1 SID RWY 13)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit(KT)
RWY13	CA		121.2		+570		
EF801	DF	Yes					
EF802	TF	No	151.6			4.8	
EF803	TF	No	121.3	Left		9.4	
DW456	TF	No	031.2		+5000	4.0	-220
DW457	TF	No	071.2		+6000	6.4	
DW458	TF	No	071.3			6.5	
LOPUV	TF	No	082.2			10.9	
ANVIX	TF	No	126.6		+10000	6.0	

ii) MIROT 1N (RNAV 1 SID RWY 13)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY13	CA		121.2		+570		
EF801	DF	Yes					
EF802	TF	No	151.6			4.8	
EF803	TF	No	121.3	Left		9.4	
DW456	TF	No	031.2		+5000	4.0	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
DW412	TF	No	301.0			5.0	
ORGUR	TF	No	301.3			4.0	
MIROT	TF	No	269.7			14.8	

iii) NABIX 1N (RNAV 1 SID RWY 13)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
RWY13	CA		121.2		+570		
EF801	DF	Yes					
EF802	TF	No	151.6			4.8	
EF803	TF	No	121.3	Left		9.4	
DW456	TF	No	031.2		+5000	4.0	-220
DW459	TF	No	031.2	Left	+6000	4.9	
DW460	TF	No	302.2		+7000	5.4	
DW473	TF	No	301.3			3.0	
DW406	TF	No	301.3			7.5	
DW478	TF	No	272.9			4.4	
KIRUK	TF	No	272.8		+7000	6.1	
XARTA	TF	No	301.2		+8000	6.9	
DW412	TF	No	301.0			5.0	
ORGUR	TF	No	301.3			4.0	
NABIX	TF	No	294.8			15.4	

2.22.6.5 SID RWY 31

i) ANVIX 1P (RNAV 1 SID RWY 31)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit(KT)
RWY31	CA		301.2		+570		
EF851	DF	Yes					
EF852	TF	No	264.5			4.1	-130
EF853	TF	No	212.2	Left		2.0	-130
EF854	TF	No	121.2			6.4	-220
EF855	TF	No	067.7		+7000	9.8	
IMGIL	TF	No	044.7		+10000	9.1	
ULADO	TF	No	069.6		+11000	8.5	
RAPMO	TF	No	120.7		+13000	9.2	
LOPUV	TF	No	126.0			10.1	
ANVIX	TF	No	126.6			6.0	

ii) MIROT 1P (RNAV 1 SID RWY 31)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit(KT)
RWY31	CA		301.2		+570		
EF851	DF	Yes					
EF852	TF	No	264.5			4.1	-130
DW552	TF	No	282.4			3.1	
TATMO	TF	No	300.9			6.9	-220
EF856	TF	No	306.2			9.0	
MIROT	TF	No	285.6			13.1	

iii) NABIX 1P (RNAV 1 SID RWY 31)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit(KT)
RWY31	CA		301.2		+570		
EF851	DF	Yes					
EF852	TF	No	264.5			4.1	-130
DW552	TF	No	282.4			3.1	
TATMO	TF	No	300.9			6.9	-220
EF856	TF	No	306.2			9.0	
NABIX	TF	No	310.5			15.5	

2.22.7 Standard Instrument Arrivals (STAR)

2.22.7.1 Aircraft flying STARs shall be certified for RNAV 1 with GNSS operations.

2.22.7.2 STAR FMS coding tables below. Significant point co-ordinates are published in [ENR 4.4](#).

Speed control points depicted in STAR coding tables and on STAR charts are mandatory unless instructed by ATC.

2.22.7.2.1 STAR RWY 12/13**i) DATOB 5Y (RNAV 1 STAR RWY 12/13)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
DATOB	IF	No			-FL 160		@230
DW426	TF	No	109.6			12.7	
MITIX	TF	No	143.2		-FL 150	11.0	
DW427	TF	No	140.5		+10000	16.2	
DW406	TF	No	211.3		-10000	9.1	
DW423	TF	No	211.2			5.0	
DEDAX	TF	No	211.2	Right	-8000	5.0	@210
ORPAT	TF	No	301.1		-6000	7.4	
IVOPU	TF	No	301.2			5.7	
DW400	TF	No	301.1	Right		8.0	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

ii) ELOVU 3Y (RNAV 1 STAR RWY 12/13)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
ELOVU	IF	No			-12000		@230
MISOL	TF	No	120.5			7.2	
LORID	TF	No	078.7		-9000	11.1	@210
TOVLA	TF	No	052.2		-7000	4.0	
DW400	TF	No	073.6			5.3	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

iii) GERUL 3Y (RNAV 1 STAR RWY 12/13)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
GERUL	IF	No			-10000		@210
TOVLA	TF	No	096.7		-7000	14.5	
DW400	TF	No	073.6			5.3	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

iv) GIDIS 5Y (RNAV 1 STAR RWY 12/13)

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
GIDIS	IF	No			-12000		@230
RERAG	TF	No	306.3		-10000	6.8	@230
SINPU	TF	No	270.0			12.9	
DW416	TF	No	266.8			10.0	
DEDAX	TF	No	301.2		-8000	18.1	@210
ORPAT	TF	No	301.1		-6000	7.4	
IVOPU	TF	No	301.2			5.7	
DW400	TF	No	301.1	Right		8.0	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

v) **GONVI 5Y (RNAV 1 STAR RWY 12/13)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
GONVI	IF	No			-FL 160		@230
ALRAR	TF	No	109.4			5.1	
LOVEM	TF	No	140.7		-FL 150	18.3	
DW427	TF	No	170.0		+10000	21.8	
DW406	TF	No	211.3		-10000	9.1	
DW423	TF	No	211.2			5.0	
DEDAX	TF	No	211.2	Right	-8000	5.0	@210
ORPAT	TF	No	301.1		-6000	7.4	
IVOPU	TF	No	301.2			5.7	
DW400	TF	No	301.1	Right		8.0	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

vi) **LORID 3Y (RNAV 1 STAR RWY 12/13)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
LORID	IF	No			-9000		@210
TOVLA	TF	No	052.2		-7000	4.0	
DW400	TF	No	073.6			5.3	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

vii) **PUVAL 6Y (RNAV 1 STAR RWY 12/13)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
PUVAL	IF	No			-FL 160		@230
DETGU	TF	No	213.1		-FL 150	11.4	
SERSA	TF	No	213.1			7.9	
IVOXI	TF	No	217.9			9.0	
DW427	TF	No	217.9		+10000	9.4	
DW406	TF	No	211.3		-10000	9.1	
DW423	TF	No	211.2			5.0	
DEDAX	TF	No	211.2	Right	-8000	5.0	@210
ORPAT	TF	No	301.1		-6000	7.4	
IVOPU	TF	No	301.2			5.7	
DW400	TF	No	301.1	Right		8.0	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

viii) **UMAMI 4Y (RNAV 1 STAR RWY 12/13)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
UMAMI	IF	No			-12000		@230
DW422	TF	No	305.3			4.5	
DW425	TF	No	236.1		-10000	9.9	
SINPU	TF	No	236.1			14.8	
DW416	TF	No	266.8			10.0	
DEDAX	TF	No	301.2		-8000	18.1	@210
ORPAT	TF	No	301.1		-6000	7.4	
IVOPU	TF	No	301.2			5.7	
DW400	TF	No	301.1	Right		8.0	@185
DW412	TF	No	031.1	Right		5.0	
NITRI	TF	No	121.0		+3000	4.0	

2.22.7.2.2 STAR RWY 30/31

i) **DATOB 5Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
DATOB	IF	No			-FL 160		@230
DW426	TF	No	109.6			12.7	
MITIX	TF	No	143.2		-FL 150	11.0	
DW427	TF	No	140.5		+10000	16.2	
DW406	TF	No	211.3		-10000	9.1	
DW423	TF	No	211.2			5.0	
DEDAX	TF	No	211.2	Left	-8000	5.0	@210
SIBVA	TF	No	121.3			5.3	
ODGAK	TF	No	121.3			5.3	
SOBOB	TF	No	121.4	Left		6.0	@185
UKSUL	TF	No	031.4	Left		5.0	@185
GEXIK	TF	No	301.2		+3000	3.8	

ii) **ELOVU 3Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
ELOVU	IF				-12000		@230
MISOL	TF	No	120.5			7.2	
LORID	TF	No	078.7		-11000	11.1	@230
TOVLA	TF	No	052.2		-10000	4.0	
TATMO	TF	No	096.8			9.3	
ORPAT	TF	No	121.1			8.7	
DEDAX	TF	No	121.2		-8000	7.4	@210
SIBVA	TF	No	121.3			5.3	
ODGAK	TF	No	121.3			5.3	
SOBOB	TF	No	121.4	Left		6.0	@185
UKSUL	TF	No	031.4	Left		5.0	@185
GEXIK	TF	No	301.2		+3000	3.8	

iii) **GERUL 3Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
GERUL	IF	No			-11000		@230
TOVLA	TF	No	096.7		-10000	14.5	
TATMO	TF	No	096.8			9.3	
ORPAT	TF	No	121.1			8.7	
DEDAX	TF	No	121.2		-8000	7.4	@210
SIBVA	TF	No	121.3			5.3	
ODGAK	TF	No	121.3			5.3	
SOBOB	TF	No	121.4	Left		6.0	@185
UKSUL	TF	No	031.4	Left		5.0	@185
GEXIK	TF	No	301.2		+3000	3.8	

iv) **GIDIS 5Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (°T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
GIDIS	IF	No			-11000		@230
RERAG	TF	No	306.3		-10000	6.8	@230
SINPU	TF	No	270.0		-7000	12.9	@210
UKSUL	TF	No	297.6			9.8	@185
GEXIK	TF	No	301.2		+3000	3.8	

v) **GONVI 5Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (° T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
GONVI	IF	No			-FL 160		@230
ALRAR	TF	No	109.4			5.1	
LOVEM	TF	No	140.7		-FL 150	18.3	
DW427	TF	No	170.0		+10000	21.8	
DW406	TF	No	211.3		-10000	9.1	
DW423	TF	No	211.2			5.0	
DEDAX	TF	No	211.2	Left	-8000	5.0	@210
SIBVA	TF	No	121.3			5.3	
ODGAK	TF	No	121.3			5.3	
SOBOB	TF	No	121.4	Left		6.0	@185
UKSUL	TF	No	031.4	Left		5.0	@185
GEXIK	TF	No	301.2		+3000	3.8	

vi) **LORID 3Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (° T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
LORID	IF	No			-11000		@230
TOVLA	TF	No	052.2		-10000	4.0	
TATMO	TF	No	096.8			9.3	
ORPAT	TF	No	121.1			8.7	
DEDAX	TF	No	121.2		-8000	7.4	@210
SIBVA	TF	No	121.3			5.3	
ODGAK	TF	No	121.3			5.3	
SOBOB	TF	No	121.4	Left		6.0	@185
UKSUL	TF	No	031.4	Left		5.0	@185
GEXIK	TF	No	301.2		+3000	3.8	

vii) **PUVAL 6Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (° T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
PUVAL	IF	No			-FL 160		@230
DETGU	TF	No	213.1		-FL 150	11.4	
SERSA	TF	No	213.1			7.9	
IVOXI	TF	No	217.9			9.0	
DW427	TF	No	217.9		+10000	9.4	
DW406	TF	No	211.3		-10000	9.1	
DW423	TF	No	211.2			5.0	
DEDAX	TF	No	211.2	Left	-8000	5.0	@210
SIBVA	TF	No	121.3			5.3	
ODGAK	TF	No	121.3			5.3	
SOBOB	TF	No	121.4	Left		6.0	@185
UKSUL	TF	No	031.4	Left		5.0	@185
GEXIK	TF	No	301.2		+3000	3.8	

viii) **UMAMI 4Z (RNAV 1 STAR RWY 30/31)**

Waypoint ID	P/T	Fly-Over	Course (° T)	Turn Direction	Altitude (FT)	Distance (NM)	Speed Limit (KT)
UMAMI	IF	No			-12000		@230
DW422	TF	No	305.3			4.5	
DW425	TF	No	236.1		-10000	9.9	
SINPU	TF	No	236.1		-7000	14.8	@210
UKSUL	TF	No	297.6			9.8	@185
GEXIK	TF	No	301.2		+3000	3.8	

2.22.8 VFR routes

2.22.8.1 For VFR routes defined within DUBAI CTA including detailed information regarding the VFR reporting points established on those VFR routes, see charts ENR 6-4.1 and ENR 6-4.2.

2.22.8.2 The following procedures apply to VFR aircraft experiencing transmitter, or complete radio failure, intending to land at OMDW (See: [AD 2.22.11](#) for EFTA RCF Procedures):

VFR traffic operating to the North of OMDW:

1. Squawk 7600;
2. Proceed to the Bird Cage (BC) VRP and hold for 5 minutes, if able;
3. Ascertain the runway in use by ATIS or observing other aircraft;
4. Join the northern visual circuit in the downwind position, proceed to final and land;
5. After landing, vacate the runway at the earliest opportunity, hold on the taxiway and await a Follow-Me vehicle.

VFR traffic operating to the South of OMDW:

1. Squawk 7600;
2. Proceed to Industrial City Offices (IC) VRP and hold for 5 minutes, if able;
3. Ascertain the runway in use by ATIS or observing other aircraft;
4. Join the southern visual circuit in the downwind position, proceed to final and land;
5. After landing, vacate the runway at the earliest opportunity, hold on the taxiway and await a Follow-Me vehicle.

2.22.9 Approach Procedures

2.22.9.1 These procedures may only be flown using significant position co-ordinates that are stored in the aircrafts navigational data base. Significant point co-ordinates are published in [ENR 4.4](#)

2.22.9.2 RNAV_(GNSS) Approach Procedure Coding**2.22.9.2.1 RWY 12 (LNAV/Baro-VNAV) VPA 2.8°**

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
NITRI	IF	N				+3000	-185
PUSVO	TF	N	4.00	121.20		+3000	
DW660	TF	N	4.50	121.24		@2000	
RWY12	TF	Y	6.18	121.23			
REVUL	DF	Y				@3000	-210
REVUL	HM	Y	1 MIN	301.33	Left	@3000	-230

2.22.9.2.2 RWY 30 (LNAV/Baro-VNAV) VPA 2.8°

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
GEXIK	IF	N				+3000	-185
REVUL	TF	N	2.19	301.33		+3000	
DW760	TF	N	4.52	301.28		@2000	
RWY30	TF	Y	5.99	301.25			
LADMO	DF	Y				@3000	-210
LADMO	HM	Y	1 MIN	121.25	Left	@3000	-230

2.22.9.2.3 RWY 13 (LNAV/Baro-VNAV) VPA 2.8°

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
ORPAT	IF	N					
IVOPU	TF	N	5.68	301.15			
EF670	TF	N	4.00	301.13	Right	@2000	
EF671	TF	N	3.43	031.17	Right	@2000	
EF672	TF	N	4.00	121.19		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
TOVLA	IF	N					
DW400	TF	N	5.25	073.58		@2000	
EF671	TF	N	5.27	080.47		@2000	
EF672	TF	N	4.00	121.19		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
EF672	IF	N				@2000	
EF667	TF	N	6.34	121.23		@2000	
RWY13	TF	Y	6.03	121.24			
EF673	DF	N					
SEVNU	TF	Y	4.54	170.12		@2000	-130
SEVNU	HM	Y	1 MIN	301.00	Left	@2000	-150

2.22.9.2.4 RWY 31 (LNAV/Baro-VNAV) VPA 2.8°

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
SIBVA	IF	Y				+2000	
ODGAK	TF	N	5.26	121.32		+2000	
EF870	TF	N	3.61	121.37	Left	@2000	
PEBER	TF	N	3.44	031.34	Left	@2000	
EF871	TF	N	3.61	301.27		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
KUKPO	IF	Y				+3000	
EF870	TF	N	7.38	002.73		@2000	
PEBER	TF	N	3.44	031.34	Left	@2000	
EF871	TF	N	3.61	301.27		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
SINPU	IF	N				-7000	
EF869	TF	N	6.55	281.63			
PEBER	TF	N	5.97	301.29		@2000	
EF871	TF	N	3.61	301.27		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
EF871	IF	N				@2000	
EF866	TF	N	4.39	301.24		@2000	
RWY31	TF	Y	6.03	301.24			
EF868	DF	N			Left		
EF872	TF	N	2.98	211.21			
SIBVA	TF	Y	8.25	124.40		@2000	-130
SIBVA	HM	Y	1 MIN	121.32	Right	@2000	-150
KUKPO	HM	Y	1 MIN	090.95	Right	-4000 +3000	-150

2.22.9.3 ILS Approach Procedure Coding

2.22.9.3.1 RWY 12 ILS

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
NITRI	IF	N				+3000	-185
PUSVO	TF	N	4.00	121.20		+3000	
DW661	CF	N	5.00	121.19		@2000	
RWY12	CF	Y	5.68	121.23			
REVUL	DF	Y				@3000	-210
REVUL	HM	Y	1 MIN	301.33	Left	@3000	-230

2.22.9.3.2 RWY 30 ILS

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
GEXIK	IF	N				+3000	-185
REVUL	TF	N	2.19	301.33		+3000	
DW761	CF	N	5.00	301.29		@2000	
RWY30	CF	Y	5.51	301.25			
LADMO	DF	Y				@3000	-210
LADMO	HM	Y	1 MIN	121.25	Left	@3000	-230

2.22.9.3.3 RWY 31 ILS

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
SIBVA	IF	Y				+2000	
ODGAK	TF	N	5.26	121.32		+2000	
EF870	TF	N	3.61	121.37	Left	@2000	
PEBER	TF	N	3.44	031.34	Left	@2000	
EF871	TF	N	3.61	301.27		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
KUKPO	IF	Y				+3000	
EF870	TF	N	7.38	002.73		@2000	
PEBER	TF	N	3.44	031.34	Left	@2000	
EF871	TF	N	3.61	301.27		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
SINPU	IF	N				-7000	
EF869	TF	N	6.55	281.63			
PEBER	TF	N	5.97	301.29		@2000	
EF871	TF	N	3.61	301.27		@2000	

Waypoint ID	P/T	Fly-Over	Distance (NM)	Course (°T)	Turn Direction	Altitude (FT)	Speed Limit (KT)
EF871	IF	N				@2000	
EF813	CF	N	4.79	301.27		@2000	
RWY31	CF	Y	5.63	301.24			
EF868	DF	N			Left		
EF872	TF	N	2.98	211.21			
SIBVA	TF	Y	8.25	124.40		@2000	-130
SIBVA	HM	Y	1 MIN	121.32	Right	@2000	-150
KUKPO	HM	Y	1 MIN	090.95	Right	-4000 +3000	-150

2.22.10 Ground Movement Surveillance - Transponders Operation

2.22.10.1 In addition to the transponder requirements specified in [GEN 1.5.4](#) aircraft are required to switch on transponders when commencing push-back.

2.22.10.2 Aircraft not requiring push-back shall switch on transponders prior to commencing taxiing.

2.22.10.3 Arriving aircraft shall ensure that transponders remain switched on and transmit last assigned code until parked on stand.

2.22.11 EFTA Radio Failure Procedures

2.22.11.1 The following procedures apply to EFTA VFR aircraft experiencing transmitter, or complete radio failure, intending to land at EFTA :

2.22.11.1.1 Aircraft shall squawk 7600 ASAP and comply with [AD 2.22.11.2](#) , c) to f).

2.22.11.2 Traffic operating in the EFTA local circuit shall:

- Maintain circuit altitude
- Route via the initial point
- Overfly the RWY
- Complete a normal EFTA local circuit, while observing EFTA local circuit traffic
- Carry out a full stop landing
- Vacate the RWY on to TWY A, hold position and wait a follow me vehicle.

2.22.11.3 VFR Departures EFTA RWY 13/31.

2.22.11.3.1 If no radio contact is established with DUBAI APPROACH (AL MAKTOUM RADAR 124.025 MHz or DUBAI SOUTH RADAR 120.400 MHz), pilots are to remain within the confines of the EFTA Tower area of responsibility and to immediately return to the ACADEMY TOWER frequency for assistance. If no contact is established with the ACADEMY TOWER, pilots are to follow the procedures as per [AD 2.22.11.2](#).

2.22.11.3.2 Traffic departing to the general flying areas shall squawk 7600 and return to join via Initial at 2,000 FT and comply with [AD 2.22.11.2](#), c) to f).

2.22.11.4 IFR departure EFTA RWY 13/31

2.22.11.4.1 As per [ENR 1.6.1.3](#) Radio and radar failure procedures.

2.22.11.5 VFR arrivals EFTA RWY 13/31.

2.22.11.5.1 Traffic arriving from the general flying areas shall squawk 7600 and route to join via Initial at 2,000 FT and comply with [AD 2.22.11.2](#), c) to f).

2.22.11.6 IFR arrivals EFTA RWY 13/31

2.22.11.6.1 IFR arrivals shall follow the standard radio failure procedure. Once established on final approach, carry out a full-stop landing and comply with [AD 2.22.11.2](#), c) to f).

OMDW AD 2.23 ADDITIONAL INFORMATION

2.23.1 Bird activity

2.23.1.1 Bird hazard exists; activity in the vicinity of the airport increases from November to March with maximum numbers between early December and mid February.

2.23.2 Low visibility procedures

2.23.2.1 Low visibility operations shall commence when:

- a. Touchdown IRVR readings indicate a visibility of 600 M or less;
- b. The reported meteorological visibility indicates 800 M or less (if IRVR is not available);
- c. The reported cloud base is less than 300 FT.

2.23.2.2 Regulations require serviceable surface movement radar for operations to continue when meteorological visibility or IRVR is less than 300 M. Any unserviceability may result in delays in the affected areas of coverage.

2.23.2.3 Arriving aircraft shall delay reporting "Runway vacated" until the aircraft has completely passed the end of the green / yellow coded TWY CL lights.

2.23.2.4 Taxilanes Z11, Z12, Z13, Z14, Z15, Z16, Z17, Z20, Z21, Z22, Z23 and Z24 restricted to CAT II during LVO. Refer to local procedures.

2.23.2.5 Low visibility operations are not permitted on EFTA RWY 13/31.

2.23.2.6 Airborne EFTA aircraft will be required to divert to RWY 12/30 in the event conditions falls below VFR/SVFR minima.

2.23.3 Surface movement guidance and control system and markings

Note: Long range radar available (H24).

2.23.3.1 Arrival Procedures

2.23.3.1.1 Nose-wheel guidelines on taxiways and aprons.

2.23.3.1.2 Nose-in parking is mandatory, exemptions only given in special cases with specific authorisation from the airport authority.

2.23.3.1.3 Turn onto bay when the nose-wheel is approximately in line with the stand centre line marking. Operators are not permitted to self manoeuvre off stand centre line. In the event an operator enters the wrong stand, hold position and contact ATC.

2.23.3.1.4 Parking stands are equipped with A-VDGS except for G100 - G102 and G3 - G8 and EFTA stands located on APRON 1 to APRON 5, aircraft must be marshalled (excluding EFTA).

Note 1: Pilots should not enter an aircraft stand unless the A-VDGS is illuminated or a marshaller has signalled clearance to proceed. In the event of there being no activated A-VDGS displayed upon approach to the stand, flight crews should contact ATC to request marshalling assistance. Aircrew must not attempt to self park if the A-VDGS is not illuminated or calibrated for their aircraft type.

Note 2: A-VDGS units used at OMDW will not operate below CAT IIIA conditions (visibility down to 175 M), if A-VDGS unit is not illuminated or failing to capture aircraft, aircrew must stop and request marshalling assistance from ATC.

2.23.3.1.5 A-VDGS is not suitable for all aircraft types; a marshaller is provided in these cases.

2.23.3.1.6 Aircraft taxiing on Taxilane Z16 and Taxilane Z17 must use no more than idle power. If aircraft is stopped prior to docking on stands G1 - G9, G12, G13 and G16, docking must be completed under tow.

2.23.3.1.7 A-VDGS




- a. The A-VDGS system is installed for the CL of all stands except for L & R Multiple Aircraft Ramp System stands. It displays to pilots on large LED Board azimuth and distance - to - go information to position arriving aircraft accurately to the pre-set aircraft stop position in the parking stand.
- b. The Aircraft docking guidance system consists of an LED Board to display real time docking guidance information to pilots, a microprocessor Control Unit, a Laser Scanning Unit and an operator Control Panel with real time information display.
- c. Pilots should follow the taxilane lead-in ground marking to initiate the turn into the parking stand. The A-VDGS unit will be set to capture mode prior to the aircraft arrival. The capture mode will display on LED Board the aircraft type with floating areas (^) below (as shown in OMDW AD 2.23.3.1.9). The docking system will capture the aircraft about 20 degrees from the CL.
- d. Check aircraft type displayed is correct.
- e. Once the A-VDGS captures the aircraft, the display will change to tracking mode which displays the azimuth guidance on LED Board which shows the relative position of the aircraft (↑) from the CL (T). A flashing red arrow (>) on the LED Board indicates the direction of turn to align the aircraft nose-wheel with the CL of the parking stand (as shown in OMDW AD 2.23.3.1.9).
- f. The A-VDGS will display the final closing rate information in metres, which is displayed from 9 M from the STOP position. The closing rate is also shown graphically by gradual shortening of the (T) CL symbol. Slow down the aircraft speed to halt at the "STOP" position (as shown in OMDW AD 2.23.3.1.9).

Note: Aircrew must not proceed unless the floating arrows have been superseded by the closing rate bar.





- g. When the aircraft nose-wheel reaches the correct STOP position, distance - to - go reading reaches zero and the "STOP" signal and red lights are displayed on the LED board to halt the aircraft from any further movement.
- h. The "STOP" will change to an "OK" signal on the LED Board to indicate the aircraft is correctly parked. If the aircraft has overshoot the STOP position, "TOO FAR" signal will be displayed on the LED Board.
- i. Pilots are advised to maintain the aircraft taxiing speed at 3 M per second (6 KTS) throughout the entire aircraft docking.
- j. The A-VDGS units are controlled and monitored from a central workstation. No Marshaller will be present in bays equipped with fully automatic A-VDGS.
- k. In the event of malfunction of A-VDGS, pilots should hold position and inform ATC.

2.23.3.1.8 A follow me vehicle will be provided for all non - standard parking.

2.23.3.1.9 LED Board Display – When VDGS is functioning optimally

Mode	Display	Description
Capture		The floating arrows indicate that the system is activated and in Capture mode and searching for an approaching aircraft. Flight crew shall check that the correct aircraft type is displayed. Do not proceed any further if this mode is not replaced with the Tracking or Closing Rate mode when approaching the A-VDGS unit.
Tracking		When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow CL indicator. If a flashing red indicator is displayed then this is directing the direction of the turn required to re-establish onto the CL.
Closing Rate	 Metres (m)	This is the final count down from a specific distance to the stop position.

2.23.3.1.10 LED Board Display – Examples of VDGS Failures

Failure Type	Display	Description
OVERSHOOT		If the aircraft has overshoot the stop-position, 'TOO FAR' will be displayed.
STOP SHORT		If the aircraft is found standing still but has not reached the intended stop position, the message 'STOP, OK' will be shown after a pre- configured time.
AIRCRAFT VERIFICATION FAILURE		During entry into the Stand, the aircraft geometry is being checked. If, for any reason, aircraft verification is not made 12 M before the stop-position, the display will first show 'WAIT' and make a second verification check. If this fails, 'STOP' and 'ID FAIL' will be displayed.
GATE BLOCKED		If an object is found blocking the approach to gate/apron view from the safedock to the planned stop position for the aircraft, the docking procedure will be halted with a 'WAIT' and 'GATE BLOCK' message.

2.23.3.1.11 Helicopter Stands

- a. Stands S340 and S341 also designated as H1 and H2 respectively for itinerant helicopter operations.
- b. Helicopter parking bays near stand S324 are only for Aerogulf and Police Airwing and not available for fixed-wing operations.

2.23.3.2 Engine runs on stand are permitted for single engine at idle power, for a duration of 5 minutes. Requests shall be made via telephone to the Operations Duty Manager Airside (+971 56 788 2374) for OMDW operations and EFTA Officer Airside (+971 56 508 7924) for EFTA operations. Requests for any engine runs that will be required above idle, longer than 5 minutes or for multiple engines, are subject to assessment by the respective Airside in-charge. The airport operator reserves the right to refuse a request for operational or safety reasons. ATC are to be notified prior to the commencement of the run.

2.23.3.3 Aircraft operators that arrive at OMDW with an unknown departure time or a departure time greater than 12 hours are restricted from refueling their tanks above 85%. This is to prevent fuel expansion which results in fuel spillage. Aircraft operators can fill their remaining requirements within 3 hours of departure.

2.23.3.4 Start-up and Push-back approval procedures.

2.23.3.4.1 Aircraft are expected to start-up during push-back unless otherwise advised by ATC. Aircraft wishing to start engines either before or after push-back should notify ATC.

2.23.3.4.2 Engine starts on the stand using more than idle power are prohibited. Aircraft requiring cross bleed start are required to request via ATC and be pushed back prior to the commencement of cross bleed.

2.23.3.4.3 Push-backs are onto active taxiways and can only be obtained from AL MAKTOUM GROUND. Approval to start on stand does not imply an approval to push-back.

2.23.3.4.4 Aircraft pushing back from the following stands must pull forward to align the nose-wheel with the stand indicated below prior to engine start:

Aircraft pushed back from Stands	Nose-wheel to be aligned with the CL of Stand
S810 – S812	S810
S440L and S440R facing east	S440L

2.23.3.4.5 DNATA and certain operating companies with trained drivers, are the only approved agencies for executing push-backs. Their procedures are mandatory. However, it is the pilots responsibility to obtain push-back approval from ATC and relay the same to their ground engineers prior to commencing push-back.

2.23.3.4.6 Self-push-backs (reverse thrust) and self-maneuvring on stand is not permitted unless approval is given from the airport authority. It is the Ground Handlers responsibility to ensure that the correct facilities and equipment are available for the aircraft type prior to acceptance.

2.23.3.4.7 Pushbacks are only permitted to the taxiway closest to the stand. Pushbacks to outer taxiways are prohibited.

2.23.3.5 Start-up approval procedures(EFTA)

2.23.3.5.1 Aircraft operating at EFTA are to request start-up and initial taxi instructions from the EFTA Operations Centre. Start-up is expected on the stand and to taxi forward (pushback not required).

2.23.3.5.2 Aircraft operating at EFTA are to contact ACADEMY TOWER upon reaching L1, L2, L3, L4, L5 and L6 ITHP. Entry onto TWY A requires ATC approval.

2.23.4 Runway visual range

2.23.4.1 Transmissometers are available for reporting RVR. For locations see Charts OMDW AD 2-21A and OMDW AD 2-21C .

2.23.4.2 For radio transmission purposes the locations on RWY 12 / 30 will be designated as:

ALPHA: Touchdown

BRAVO: Mid-point

CHARLIE: Stop end

2.23.4.3 For radio transmission purposes the locations on RWY 13/31 will be designated as:

ALPHA : touchdown

BRAVO: STOP end

2.23.4.4 Visibility below 2000 M is reported in the following incremental steps:

a) RWY 12 / 30

50 M to 400 M: 25 M

400 M to 800M: 50 M

800 M to 2000 M: 100 M

b) RWY 13/31

800 M to 2000 M: 100 M

Note: See [GEN 3.5.3.5](#) for reporting procedures

2.23.4.5 For low visibility departures all IRVR for the departure RWY shall be serviceable except that the THR IRVR is not required when the reported meteorological visibility is more than 150 M.

2.23.5 Lighting

2.23.5.1 Stop bar lighting

Variable intensity red uni-directional inset with additional pair of elevated edge lights are located at all lead-in TWYs and linked to intrusion sensor for RWY.

2.23.5.2 Runway Guard lights

RWY holding positions are provided with a pair of yellow flashing lights on either side of the Stop bar.

2.23.5.3 Intermediate Holding Position Lights

A set of 3 variable intensity yellow inset lights are provided at all intermediate TWY holding positions.

2.23.6 Reduced Runway Separation Minima (RRSM)

2.23.6.1 When conditions permit, special landing and departing procedures may be used at DUBAI / AL MAKTOUM INTERNATIONAL for RWY 12/30, subject to the procedures and conditions shown hereunder:

2.23.6.2 Landing following landing

When the runway in use is temporarily occupied by the previous landing traffic, a landing clearance may be issued to the next landing aircraft provided that ATC has reasonable assurance that the following separation distance will be met when the landing aircraft crosses the runway threshold:

- a. RWY 12
The preceding landing aircraft has landed and has vacated the runway or has passed a point at least 2400 M from the threshold (abeam TWY W12); and is in motion and will vacate the runway without stopping and/or backtracking.
- b. RWY 30
The preceding landing aircraft has landed and has vacated the runway or has passed a point at least 2400 M from the threshold (abeam TWY W10); and is in motion and will vacate the runway without stopping and/or backtracking.

2.23.6.3 Landing following departure

When the runway in use is temporarily occupied by a previous departing aircraft, a landing clearance may be issued provided that ATC has reasonable assurance that the following separation distance will be met when the landing aircraft crosses the runway threshold:

- a. RWY 12
The preceding departing aircraft is, or will be, airborne and has passed a point at least 2400 M from the threshold (abeam TWY W12).
- b. RWY 30
The preceding departing aircraft is, or will be, airborne and has passed a point at least 2400 M from the threshold (abeam TWY W10).

2.23.6.4 Departure following a departure

Take-off clearance may be issued to a departing aircraft, commencing its take-off roll from the threshold (TWY V1 or TWY V21) before the preceding departing aircraft has passed the upwind end of the runway, provided that:

- a. RWY 12
The preceding aircraft is airborne and has passed a point at least 2450 M from the threshold (abeam TWY W12) and increasing separation continues to exist between the two aircraft immediately after take-off of the second.
- b. RWY 30
The preceding aircraft is airborne and has passed a point at least 2400 M from the threshold (abeam TWY W10) and increasing separation continues to exist between the two aircraft immediately after take-off of the second.

2.23.6.5 Conditions for the Application of RRSM

RRSM may be applied by day only between:

- a. A departing aircraft and a succeeding landing aircraft; or
- b. Two successive landing aircraft; or
- c. Two successive departing aircraft.

Provided that:

- i. Tail wind does not exceed 5 KTS, and there are no reports of wind shear;
- ii. MET visibility shall be equal to or greater than 5 KM and the cloud ceiling shall not be lower than 1000 FT and the Air Traffic Controller is satisfied that the pilot of the following aircraft will be able to observe the relevant traffic clearly and continuously;
- iii. The pilot of the following aircraft is provided with traffic information;
- iv. The runway is dry and there is no evidence that the braking action may be adversely affected;
- v. The controller is able to assess separation visually or by radar derived information;
- vi. Wake turbulence separation minima shall be applied;
- vii. Minimum separation continues to exist between two departing aircraft immediately after takeoff of the second aircraft.

2.23.6.6 Traffic Information Phraseology for pilot of following aircraft

When applying RRSM in a scenario where the runway is temporarily occupied by a previously landed or departing aircraft, ATC shall provide a warning (traffic information) to the following aircraft when issuing the landing clearance or departure clearance.

The following examples illustrate ICAO standard phraseology that will be used:

- a. Landing Clearance Phraseology
"(Call sign) (traffic information e.g. aircraft type & vacating point), wind (direction (.) / speed (knots)), Runway (number) cleared to land"

"(Call sign) (traffic information e.g. aircraft type departing ahead), wind (direction (.) / speed (knots)), Runway (number) cleared to land"
- b. Departing Clearance Phraseology
"(Call sign) (traffic information e.g. aircraft type departing ahead), wind (direction (.) / speed (knots)), Runway (number) cleared for take-off"

2.23.7 Wind Shear Warnings

2.23.7.1 General

Wind Shear reports added to a METAR shall be as per ICAO Annex 3, Appendix 3, Table A3-2.

2.23.7.2 Wind Shear reports passed by ATC

- i. On receipt of any report of wind shear, ATC will:
 - * Immediately relay the report to other aircraft potentially affected;
 - * Pass the full report to the MET Office; and
 - * Pass the information to other ATC units that may be affected;
- ii. Wind shear reports that are relayed by to other aircraft will contain as many of the following details as possible:
 - * Aircraft type that reported the wind shear;
 - * Description of event (e.g. light/moderate severe, or positive/negative);
 - * Height/altitude wind shear encountered;
 - * Phase of flight;
 - * Runway;
 - * Time of encounter;
 - * MET/operational information as received from the reporting pilot;
 - * Effect on aircraft and/or action taken by the pilot.
- iii. Examples of the phraseology used by ATC to pass on wind shear reports:
 - a. "CAUTION WIND SHEAR. AT (TIME) (AIRCRAFT TYPE) REPORTED STRONG WIND AT (HEIGHT/ALTITUDE) FEET ON APPROACH RWY (DESIGNATOR). MAX THRUST WAS REQUIRED".
 - b. "CAUTION WIND SHEAR. AT (TIME) (AIRCRAFT TYPE) REPORTED AFTER DEPARTING RUNWAY (DESIGNATOR) AT (HEIGHT/ALTITUDE) FEET AIRSPEED LOSS OF (NUMBER) KNOTS, STRONG (LEFT/RIGHT) DRIFT".

2.23.7.3 Wind Shear Warnings on ATIS

- i. Wind shear warning issued by NCM or received from an aircraft will be broadcast on the ATIS.
- ii. Regardless of any relevant information being broadcast on the ATIS, during final approach and prior to take-off, ATC will transmit to aircraft without delay:
 - * The latest information, on wind shear in the approach, final approach, take-off and climb-out area; and
 - * Any significant variations in the current surface wind, expressed in terms of minimum and maximum values.

2.23.7.4 Pilot Reports of Wind Shear

- i. For the benefit of subsequent aircraft and for validation and further enhancement of the low-level wind shear warning, pilots are requested to inform ATC if they experience any wind shear on arrival or departure, irrespective of whether a warning has been given. ATC will pass such reports to following aircraft and the MET Office. Pilot reports should conform to the requirements of ICAO Annex 3, Appendix 4, section 4.1.
- ii. Wind shear reports will continue to be passed by ATC to pilots likely to be affected until it is confirmed, either by subsequent aircraft reports or by advice from the MET Office that conditions are no longer a hazard to the operations.

2.23.7.5 1000 FT and Below Winds

If a Wind Shear Warning has been issued, aircraft may be requested by ATC to state the 1000 FT and below winds when able. ATC will then subsequently pass this information onto following aircraft whilst the Wind Shear Warning is in force.

OMDW AD 2.24 CHARTS RELATED TO AERODROME

AD CHART - ICAO (Chart OMDW-AD-2-21A)	Chart OMDW-AD-2-21A
HELIPORT CHART - ICAO (Chart OMDW-AD-2-21B)	Chart OMDW-AD-2-21B
EFTA Chart (Chart OMDW-AD-2-21C)	Chart OMDW-AD-2-21C
ACFT PARKING DOCKING CHART - ICAO APRONS S2, S3, S4, S8 (Chart OMDW-AD-2-22A) ..	Chart OMDW-AD-2-22A
ACFT PARKING DOCKING CHART - ICAO APRON G (Chart OMDW-AD-2-22B)	Chart OMDW-AD-2-22B
ACFT PARKING DOCKING CHART - ICAO EFTA APRONS 1, 2, 3, 4, 5 (Chart OMDW-AD-2-22C) .	Chart OMDW-AD-2-22C
RUNWAY INCURSION HOT SPOT AREAS (Chart OMDW-AD-2-25A)	Chart OMDW-AD-2-25A
TAXIWAY INCURSION HOT SPOT AREAS (Chart OMDW-AD-2-25B)	Chart OMDW-AD-2-25B
LOW VISIBILITY TAXI ROUTES - ARRIVALS RWY 12 (Chart OMDW-AD-2-26)	Chart OMDW-AD-2-26
LOW VISIBILITY TAXI ROUTES - ARRIVALS RWY 30 (Chart OMDW-AD-2-27)	Chart OMDW-AD-2-27
LOW VISIBILITY TAXI ROUTES - DEPARTURES RWY 12 (Chart OMDW-AD-2-28)	Chart OMDW-AD-2-28
LOW VISIBILITY TAXI ROUTES - DEPARTURES RWY 30 (Chart OMDW-AD-2-29)	Chart OMDW-AD-2-29
AD OBSTACLE CHART - ICAO TYPE A RWY 12/30 (Chart OMDW-AD-2-31)	Chart OMDW-AD-2-31
AD OBSTACLE CHART - ICAO TYPE A RWY 13/31 (Chart OMDW-AD-2-33)	Chart OMDW-AD-2-33
PRECISION APPROACH TERRAIN CHART - ICAO RWY 12 (Chart OMDW-AD-2-35)	Chart OMDW-AD-2-35
PRECISION APPROACH TERRAIN CHART - ICAO RWY 30 (Chart OMDW-AD-2-36)	Chart OMDW-AD-2-36
SID CHART - ICAO RWY 30 RNAV1 ANVIX 4L, DAVMO 4L, EMERU 1L, KUTLI 3L, MIROT 3L, NABIX 3L, NOLSU 3L, RIDAP 3L, SENPA 3L (Chart OMDW-AD-2-41)	Chart OMDW-AD-2-41
SID CHART - ICAO RWY 12 RNAV1 ANVIX 5J, DAVMO 4J, EMERU 2J, KUTLI 3J, MIROT 3J, NABIX 3J, NOLSU 3J, RIDAP 3J, SENPA 3J (Chart OMDW-AD-2-42)	Chart OMDW-AD-2-42
SID CHART - ICAO RWY 31 RNAV1 ANVIX 1P, MIROT 1P, NABIX 1P (Chart OMDW-AD-2-43)	Chart OMDW-AD-2-43
SID CHART - ICAO RWY 13 RNAV1 ANVIX 1N, MIROT 1N, NABIX 1N (Chart OMDW-AD-2-44) ...	Chart OMDW-AD-2-44
STAR CHART - ICAO RWY 30 / 31 RNAV1 DATOB 5Z, ELOVU 3Z, GERUL 3Z, GIDIS 5Z, GONVI 5Z, LORID 3Z, PUVAL 6Z, UMAMI 4Z (Chart OMDW-AD-2-45)	Chart OMDW-AD-2-45
STAR CHART - ICAO RWY 12 / 13 RNAV1 DATOB 5Y, ELOVU 3Y, GERUL 3Y, GIDIS 5Y, GONVI 5Y, LORID 3Y, PUVAL 6Y, UMAMI 4Y (Chart OMDW-AD-2-46)	Chart OMDW-AD-2-46
IAC - ICAO RWY 12 ILS CAT A-D _L (Chart OMDW-AD-2-61)	Chart OMDW-AD-2-61
IAC - ICAO RWY 12 RNAV _(GNSS) CAT A-D _L (Chart OMDW-AD-2-62)	Chart OMDW-AD-2-62
IAC - ICAO RWY 30 ILS CAT A-D _L (Chart OMDW-AD-2-63)	Chart OMDW-AD-2-63
IAC - ICAO RWY 30 RNAV _(GNSS) CAT A-D _L (Chart OMDW-AD-2-64)	Chart OMDW-AD-2-64
IAC - ICAO RWY 13 RNAV _(GNSS) CAT A-B (Chart OMDW-AD-2-65)	Chart OMDW-AD-2-65
IAC - ICAO RWY 31 ILS CAT A-B (Chart OMDW-AD-2-66)	Chart OMDW-AD-2-66
IAC - ICAO RWY 31 RNAV _(GNSS) CAT A-B (Chart OMDW-AD-2-67)	Chart OMDW-AD-2-67
BIRD CONCENTRATION CHART (Chart OMDW-AD-2-85)	Chart OMDW-AD-2-85

AERODROME CHART - ICAO

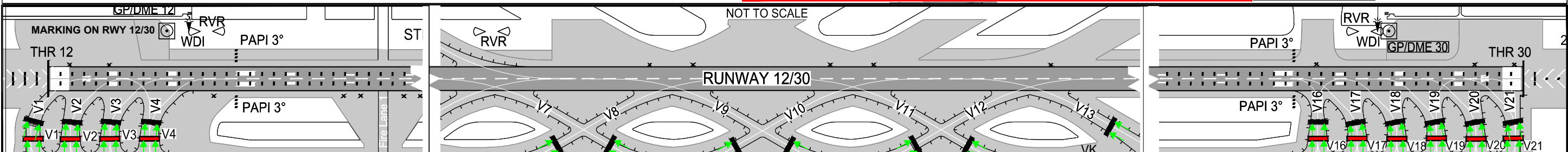
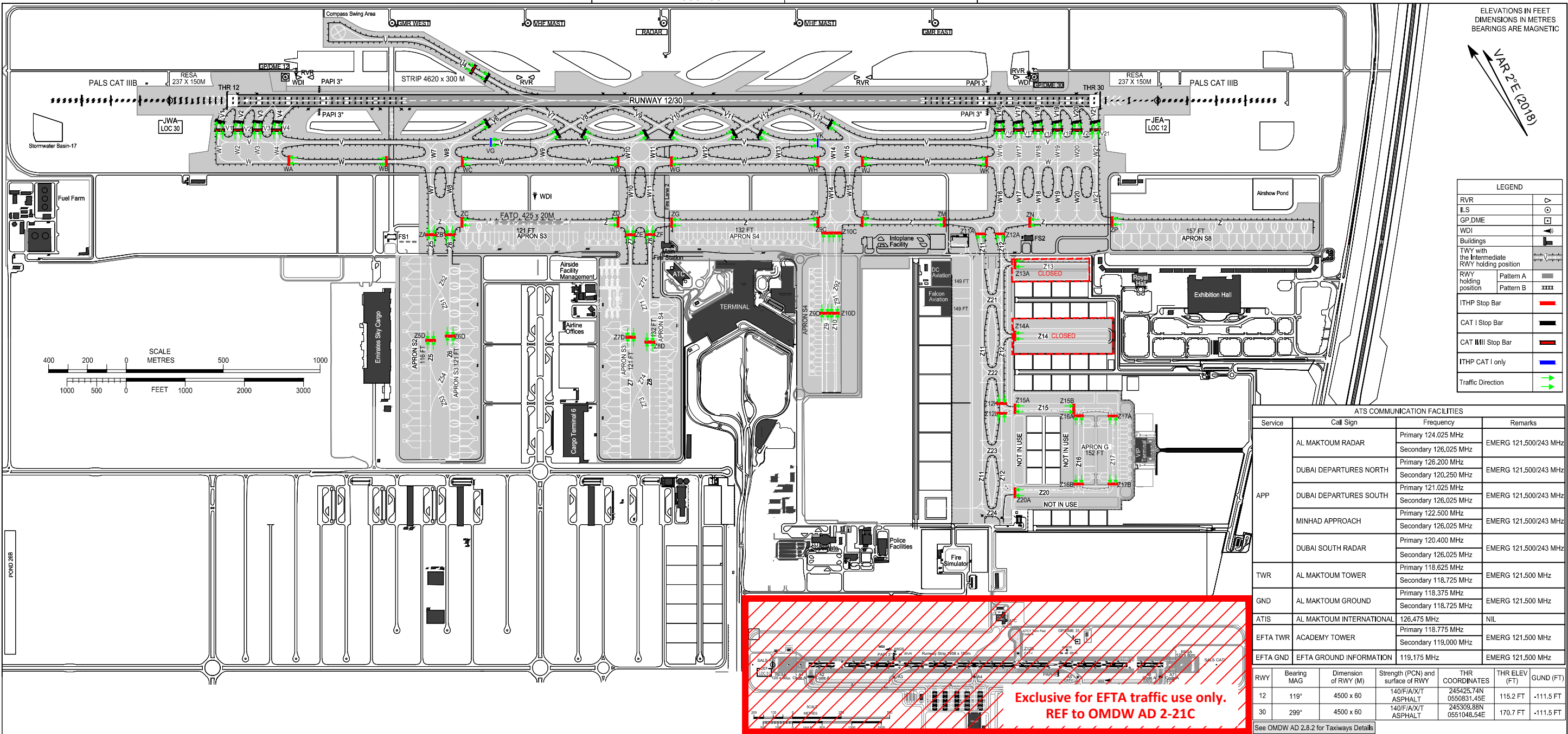
AIP UNITED ARAB EMIRATES

OMDW AD 2 - 21A
DUBAI / Al Maktoum Intl.
United Arab Emirates

AERODROME CHART - ICAO

ARP 245506N
0551032E

AD ELEV 171 FT



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HELIPORT CHART - ICAO

AIP UNITED ARAB EMIRATES

OMDW AD 2 - 21B

HELIPORT CHART - ICAO

ARP 24 55 06 N
055 10 32 E

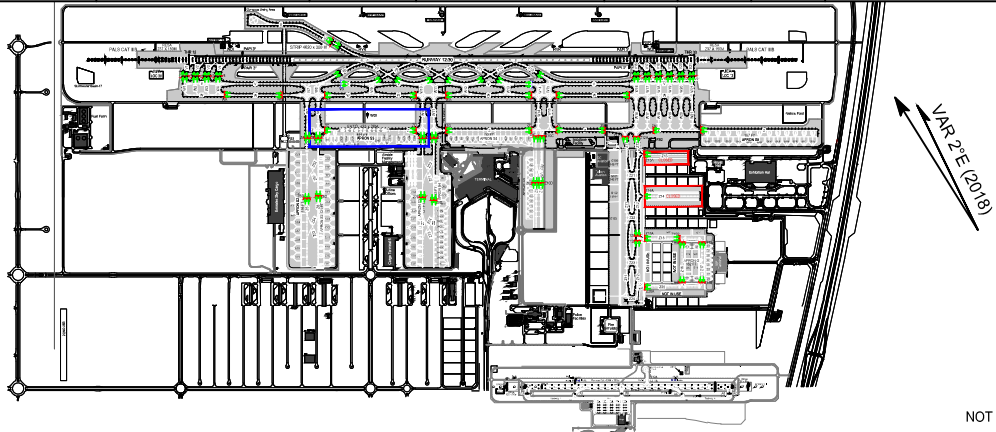
AD ELEV 171 FT

DUBAI/ Al Maktoum Intl.
United Arab Emirates

DISTANCES AND ELEVATIONS IN METRES
ELEVATIONS ARE AMSL

FATO	BRG (TRUE)	VAR	ELEV	THR COORD	TLOF COORD	SURFACE, STRENGTH	DECLARED DISTANCES (M)			TWY AND APRON
							TODAH	RTODAH	LDAH	
12	121°	2° E	35.8 M / 117 FT	245345.7N 0550900.7E	NIL	CONCRETE	425	425	425	TWY ZULU WIDTH = 25M
30	301°	(2018)	37.1 M / 122 FT	245338.5N 0550913.7E		PCN 90 R / A / W / T	425	425	425	CONC, PCN 90 R / A / W / T

LEGEND	
RVR	▽
ILS, GP	○
DME	□
Wind Sensor	⬅
Buildings	■
TWY with the Intermediate RWY holding position	—V—
RWY holding position	Pattern A
	Pattern B
ITHP Stop Bar	—
CAT I Stop Bar	—
CAT II/III Stop Bar	—
ITHP CAT I only	—
Traffic Direction	→



NOT SCALED



MARKING AIDS FATO H12/H30



NO FATO LIGHTING - use green centerline lights of taxiway Zulu for orientation

NOTES-REMARKS

- FATO 425M x 20M
- SURFACE: CONC, PCN 90 R / A / W / T
- SAFETY AREA 435M x 40M
- SLOPE 0%

as directed by ATC,
for use by Dubai Police Airwing and Aerogulf Services helicopters only

ATS COMMUNICATION FACILITIES

Service	Call Sign	Frequency	Remarks
APP	AL MAKTOUM RADAR	Primary 124.025 MHz Secondary 126.025 MHz	EMERG 121.500/243 MHz
	DUBAI DEPARTURES NORTH	Primary 126.200 MHz Secondary 120.250 MHz	EMERG 121.500/243 MHz
	DUBAI DEPARTURES SOUTH	Primary 121.025 MHz Secondary 126.025 MHz	EMERG 121.500/243 MHz
	MINHAD APPROACH	Primary 122.500 MHz Secondary 126.025 MHz	EMERG 121.500/243 MHz
	DUBAI SOUTH RADAR	Primary 120.400 MHz Secondary 126.025 MHz	EMERG 121.500/243 MHz
TWR	AL MAKTOUM TOWER	Primary 118.625 MHz Secondary 118.725 MHz	EMERG 121.500 MHz
GND	AL MAKTOUM GROUND	Primary 118.375 MHz Secondary 118.725 MHz	EMERG 121.500 MHz
ATIS	AL MAKTOUM INTERNATIONAL	126.475 MHz	NIL
EFTA TWR	ACADEMY TOWER	Primary 118.775 MHz Secondary 119.000 MHz	EMERG 121.500 MHz
EFTA GND	EFTA GROUND INFORMATION	119.175 MHz	EMERG 121.500 MHz

CHANGES: Updated Box stand G101 markings. Editorial.

GENERAL CIVIL AVIATION AUTHORITY

AIRAC 10/2019 effective 12 SEP 19

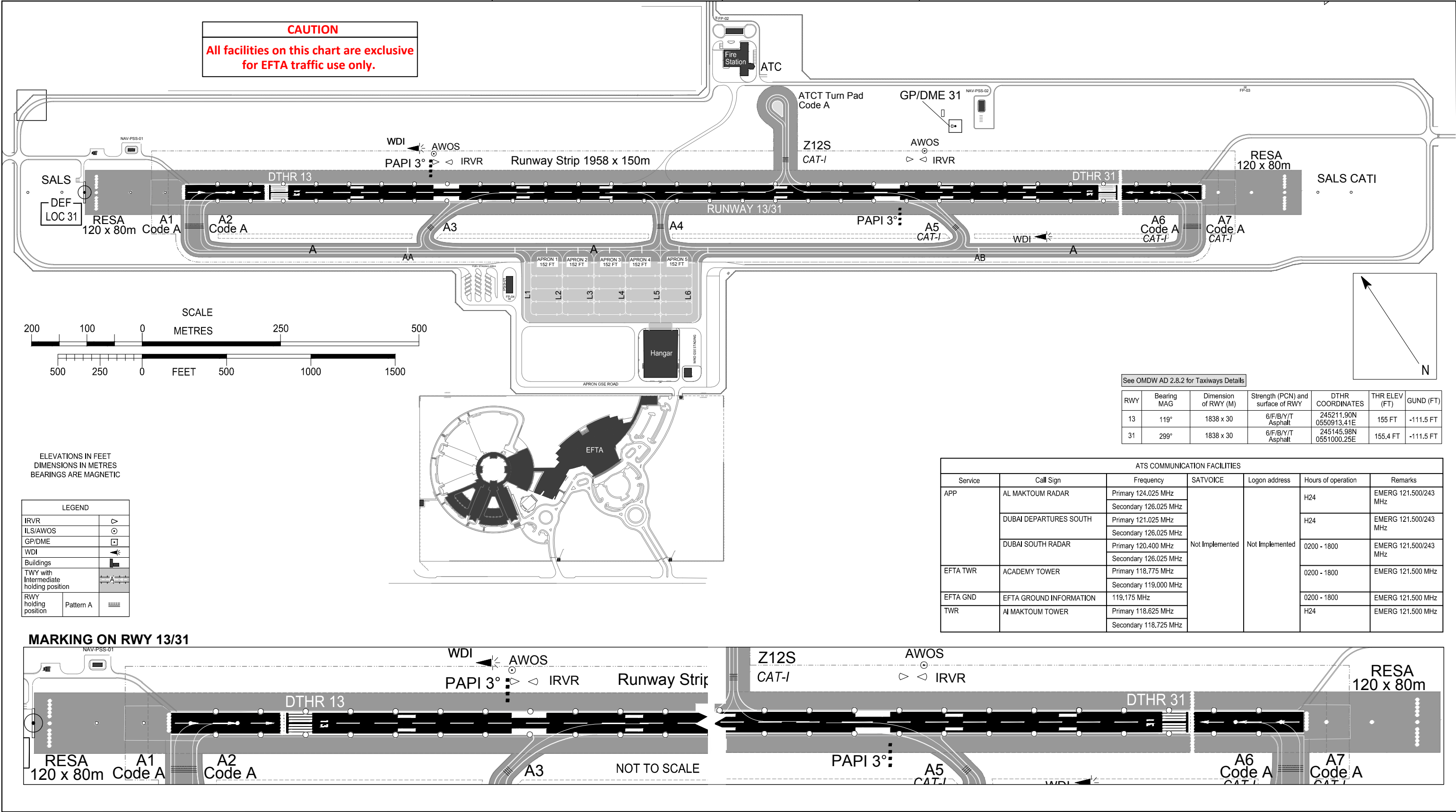
EFTA CHART

AIP UNITED ARAB EMIRATES
EFTA CHART

ARP 245506N
0551032E

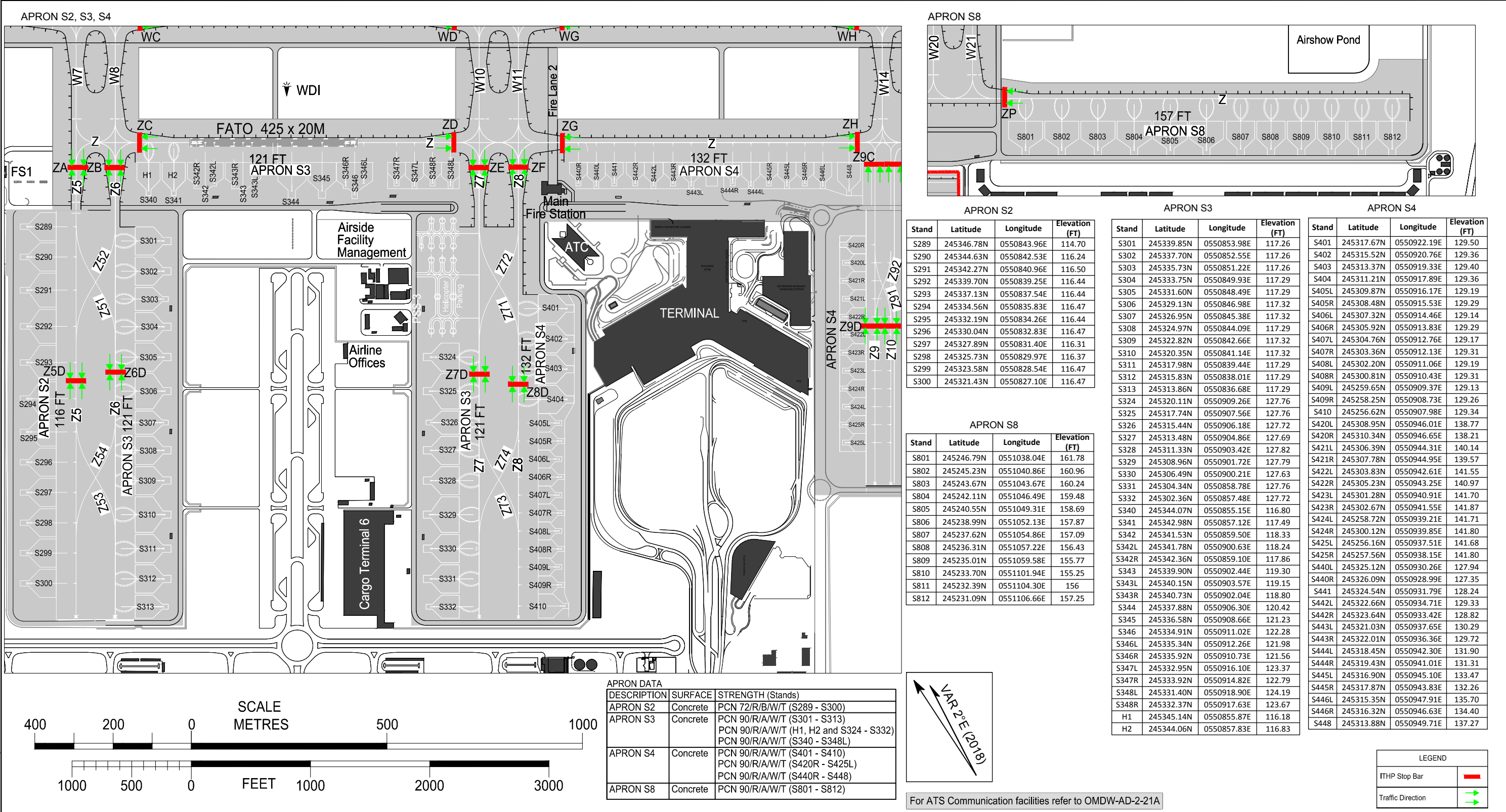
AD ELEV 171 FT

OMDW AD 2 - 21C
DUBAI / Al Maktoum Intl.
United Arab Emirates



AIRCRAFT PARKING & DOCKING CHART - ICAO
APRONS - S2, S3, S4, S8

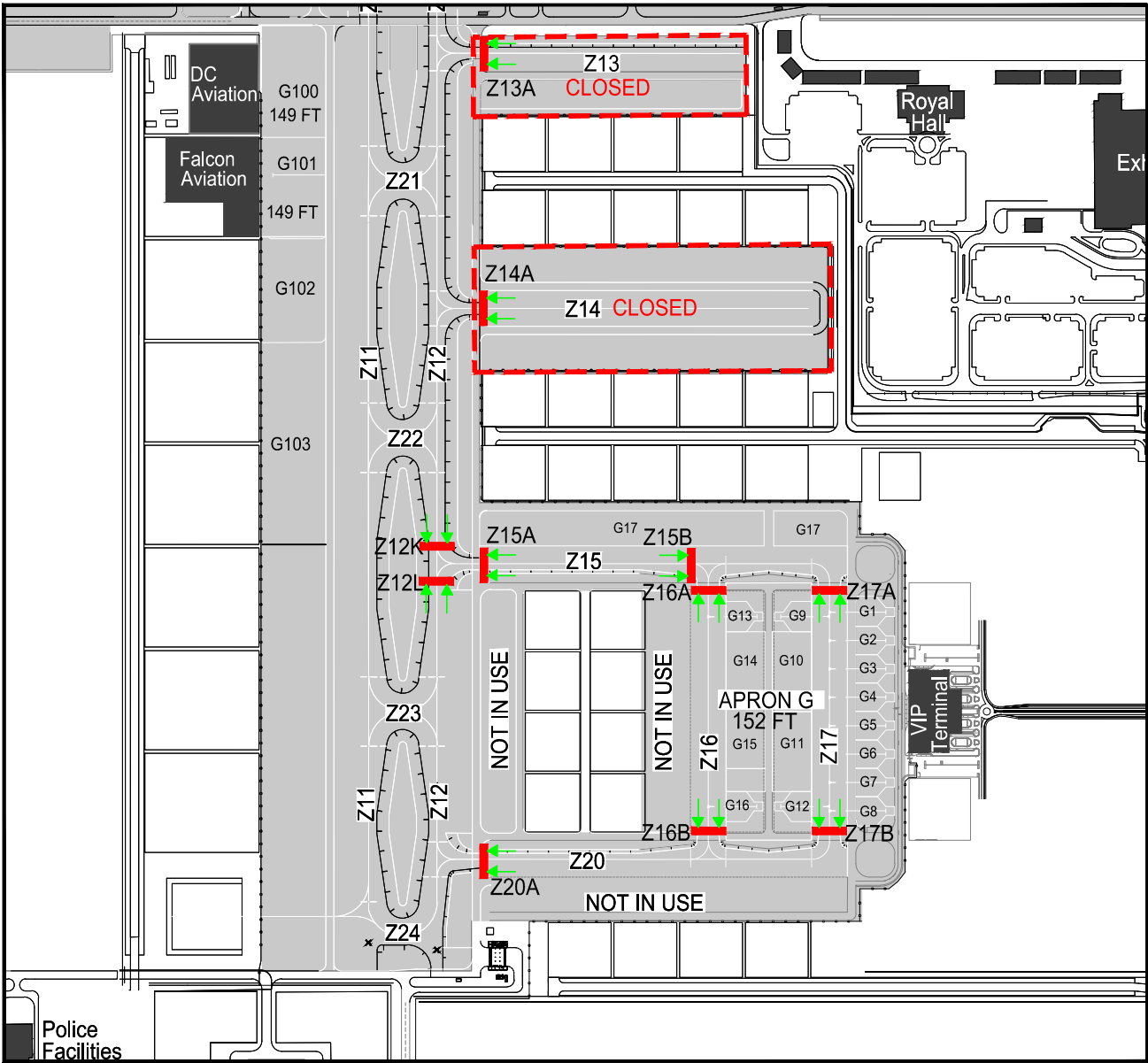
AIP UNITED ARAB EMIRATES
AIRCRAFT PARKING & DOCKING CHART - ICAO
Aprons - S2, S3, S4, S8
ARP 245506 N 0551032 E
AD ELEV 171 FT
OMDW AD 2 - 22A
DUBAI / Al Maktoum Intl.
United Arab Emirates



AIRCRAFT PARKING & DOCKING CHART - ICAO

APRON - G

AIP UNITED ARAB EMIRATES			OMDW AD 2 - 22B
AIRCRAFT PARKING & DOCKING CHART - ICAO			DUBAI / Al Maktoum Intl.
Apron - G	ARP 245506 N 0551032 E	AD ELEV 171 FT	United Arab Emirates



APRON G

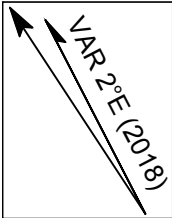
Stand	Latitude	Longitude	Elevation (FT)
G1	245221.30N	0551022.44E	152.31
G2	245220.14N	0551021.67E	152.43
G3	245218.99N	0551020.91E	152.41
G4	245217.84N	0551020.14E	152.44
G5	245216.69N	0551019.37E	152.44
G6	245215.53N	0551018.60E	152.41
G7	245214.38N	0551017.84E	152.41
G8	245213.23N	0551017.07E	152.36
G9	245223.70N	0551017.65E	151.78
G12	245215.99N	0551012.52E	151.81
G13	245224.29N	0551016.58E	151.81
G16	245216.58N	0551011.45E	151.80
Box Stands	Latitude	Longitude	Elevation (FT)
G10	Box Stand Parking		
G11	Box Stand Parking		
G14	Box Stand Parking		
G15	Box Stand Parking		
G17	Box Stand Parking		
G100	245258.29N	0551009.02E	149.18
G101	245254.14N	0551006.96E	148.33
G102	Box Stand Parking		
G103	Box Stand Parking		

APRON DATA

DESCRIPTION	SURFACE	STRENGTH (Stands)
APRON G	Concrete	PCN 62/R/B/W/T (G1 - G8) PCN 62/R/B/W/T (G9 - G16) PCN 62/R/B/W/T (G17) PCN 86/R/B/W/T (G100 - G103)

For ATS Communication facilities refer to OMDW-AD-2-21A

LEGEND	
ITHP Stop Bar	
Traffic Direction	



CHANGES: Updated Box stand G101 markings, Coordinates and elevation. Editorial.

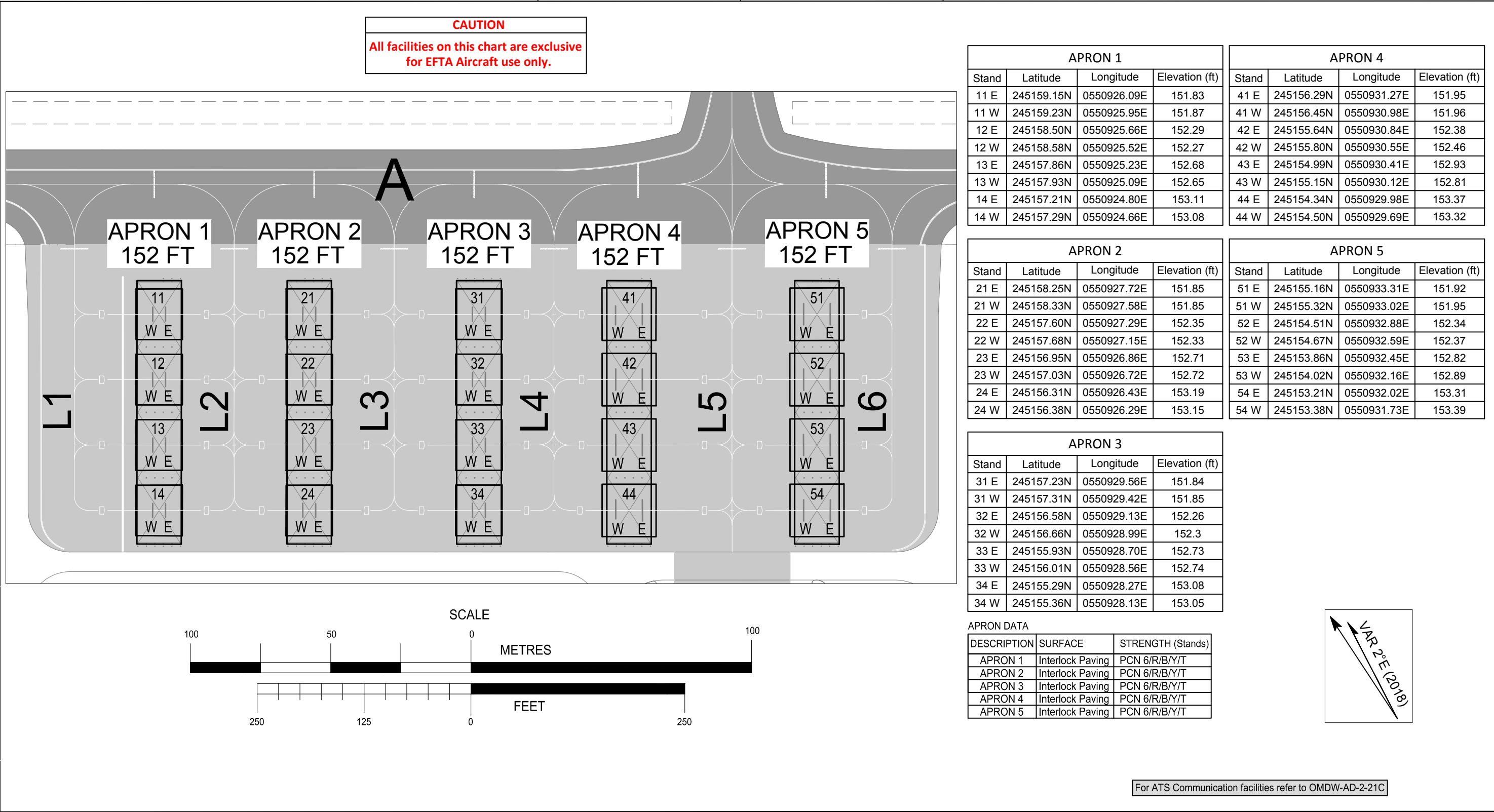
AIRCRAFT PARKING & DOCKING CHART - ICAO
EFTA APRONS - 1, 2, 3, 4, 5

AIP UNITED ARAB EMIRATES
AIRCRAFT PARKING & DOCKING CHART - ICAO
EFTA Aprons 1, 2, 3, 4, 5

ARP 245506 N
0551032 E

AD ELEV 171 FT

OMDW AD 2 - 22C
DUBAI / Al Maktoum Intl.
United Arab Emirates



RUNWAY INCURSION HOT SPOT AREAS

AIP UNITED ARAB EMIRATES

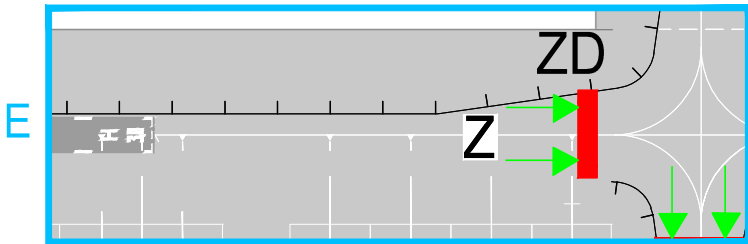
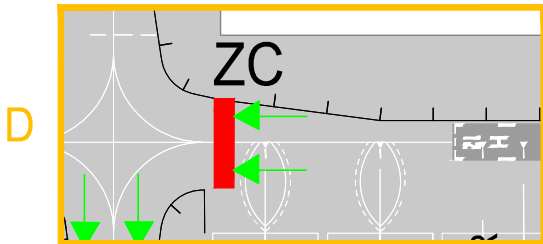
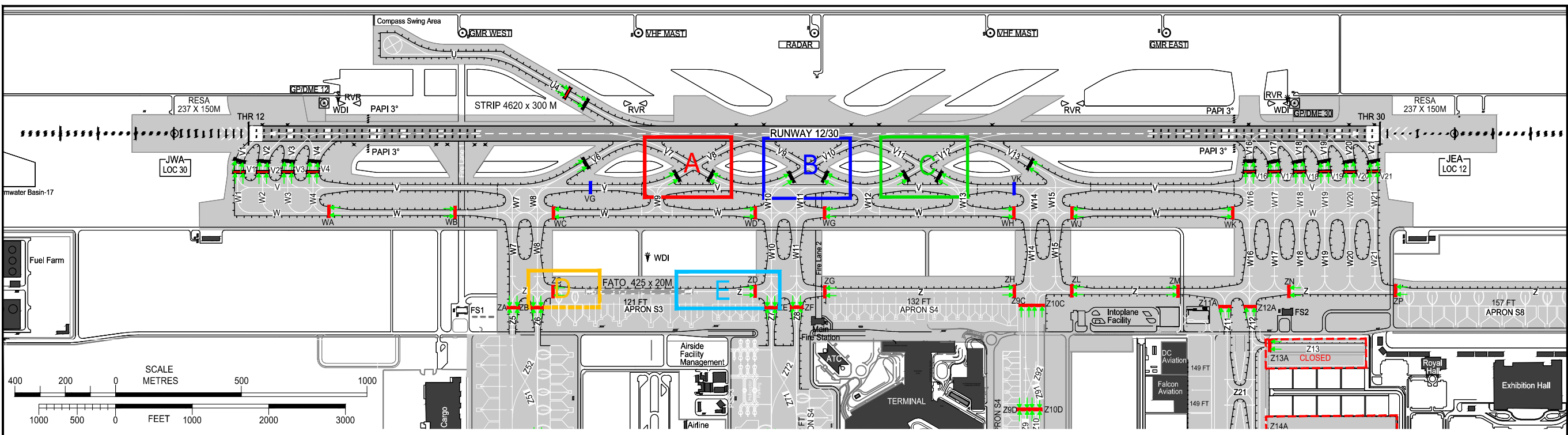
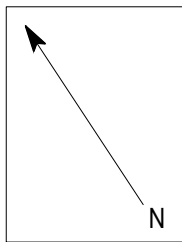
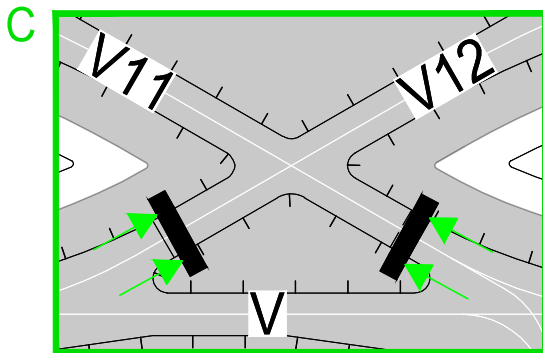
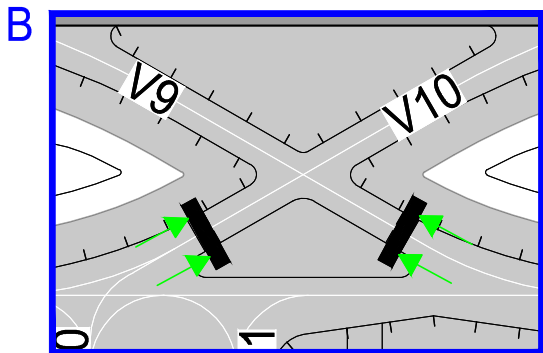
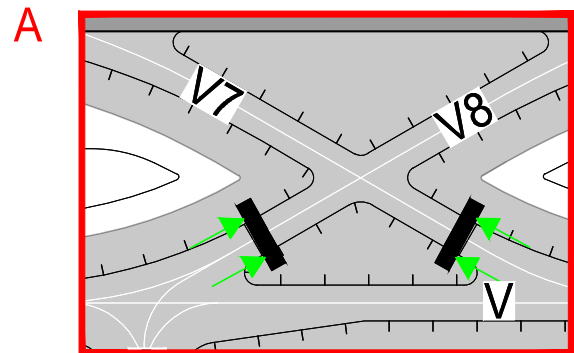
OMDW AD 2 - 25A
DUBAI / Al Maktoum Intl.
United Arab Emirates

RUNWAY INCURSION HOT SPOT AREAS

ARP 245506N
0551032E

AD ELEV 171 FT

ELEVATIONS IN FEET
DIMENSIONS IN METRES



LEGEND	
ITHP Stop Bar	
CAT I Stop Bar	
CAT II/III Stop Bar	
ITHP CAT I only	
Traffic Direction	

NOTE 1	
HOT SPOT LOCATIONS	ADDITIONAL INFORMATION ON HOT SPOT AREA
A, B, C	Operators are to ensure that when vacating the RWY 12/30 on a Rapid Exit Taxiway that they do not inadvertently turn back on to the RWY 12/30 using the adjacent Rapid Exit Taxiway.
D, E	Operators are to be aware of FATO 12/30.

NOTE 2	
Operators are to be vigilant when complying with ATC instructions and to be observant of Holding points markings, Stop Bar lights and Signs. All runways require an ATC Clearance to enter or cross irrespective of whether active or not.	

TAXIWAY INCURSION HOT SPOT AREAS

AIP UNITED ARAB EMIRATES

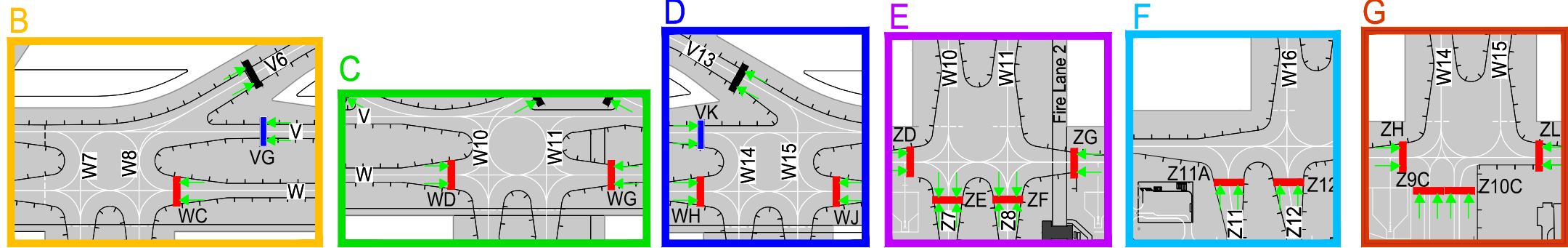
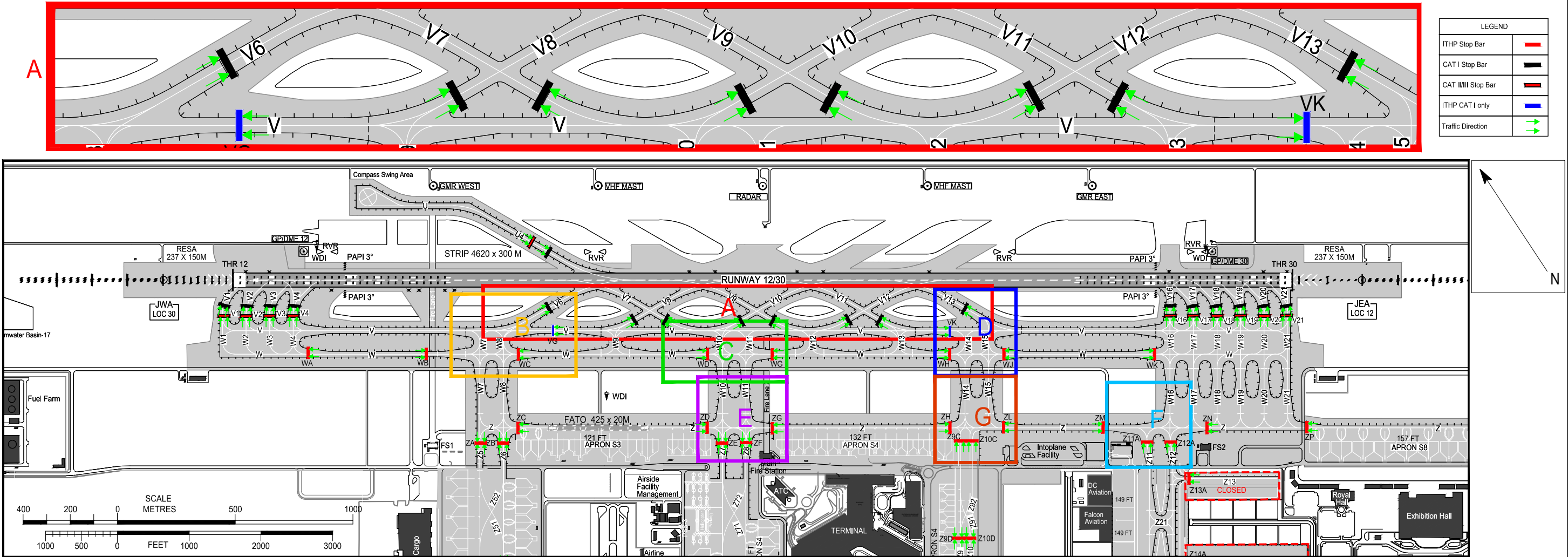
OMDW AD 2 - 25B
DUBAI / Al Maktoum Intl.
United Arab Emirates

TAXIWAY INCURSION HOT SPOT AREAS

ARP 245506N
0551032E

AD ELEV 171 FT

ELEVATIONS IN FEET
DIMENSIONS IN METRES



NOTE 1	
HOT SPOT LOCATIONS	ADDITIONAL INFORMATION ON HOT SPOT AREA
A	Operators vacating the Runway at any Rapid Exit Taxiway are not to conduct 90 degree turns onto Taxiway Victor as there is no marking or lighting to allow this turn. Operators often confuse ATC instructions on to Taxiway Whiskey 8-15 with turning 90 degrees on to Taxiway Victor.
B	Operators vacating at Rapid Exit Taxiway Victor 6 are to be vigilant when approaching adjoining Taxiways Whiskey 7 and Whiskey 8. Rapid Exit Taxiway Victor 6 connects with Taxiway Whiskey 8, access onto Taxiway Whiskey 7 requires a right turn on to Taxiway Victor first.
C	Operators are to be vigilant at the junction of Taxiway Whiskey, Whiskey 10 and Whiskey 11. This area is high risk for arriving and departing aircraft.
D	Operators are to be vigilant when vacating at Rapid Exit Taxiway Victor 12 or using Taxiway V eastbound at the intersection of Taxiway Whiskey 14 and Whiskey 15.
E	Operators taxiing for departure from Taxiway Zulu 7 and Zulu 8 are to be vigilant at the intersection of Taxiway Zulu. Operators routinely miss the turn onto Taxiway Zulu.
F	GA operators are to be vigilant when arriving or departing from Taxiway Zulu 11 or Zulu 12. The alignment with Taxiway Whiskey 16 is via Taxiway Zulu 12, not Zulu 11.
G	Operators arriving or departing to/from stands on Taxiway Z9 and Z10 are to be aware that Taxiway Whiskey 14 is Code F and divides into two Code C Taxiways (Z9 and Z10) to the south of Taxiway Z.

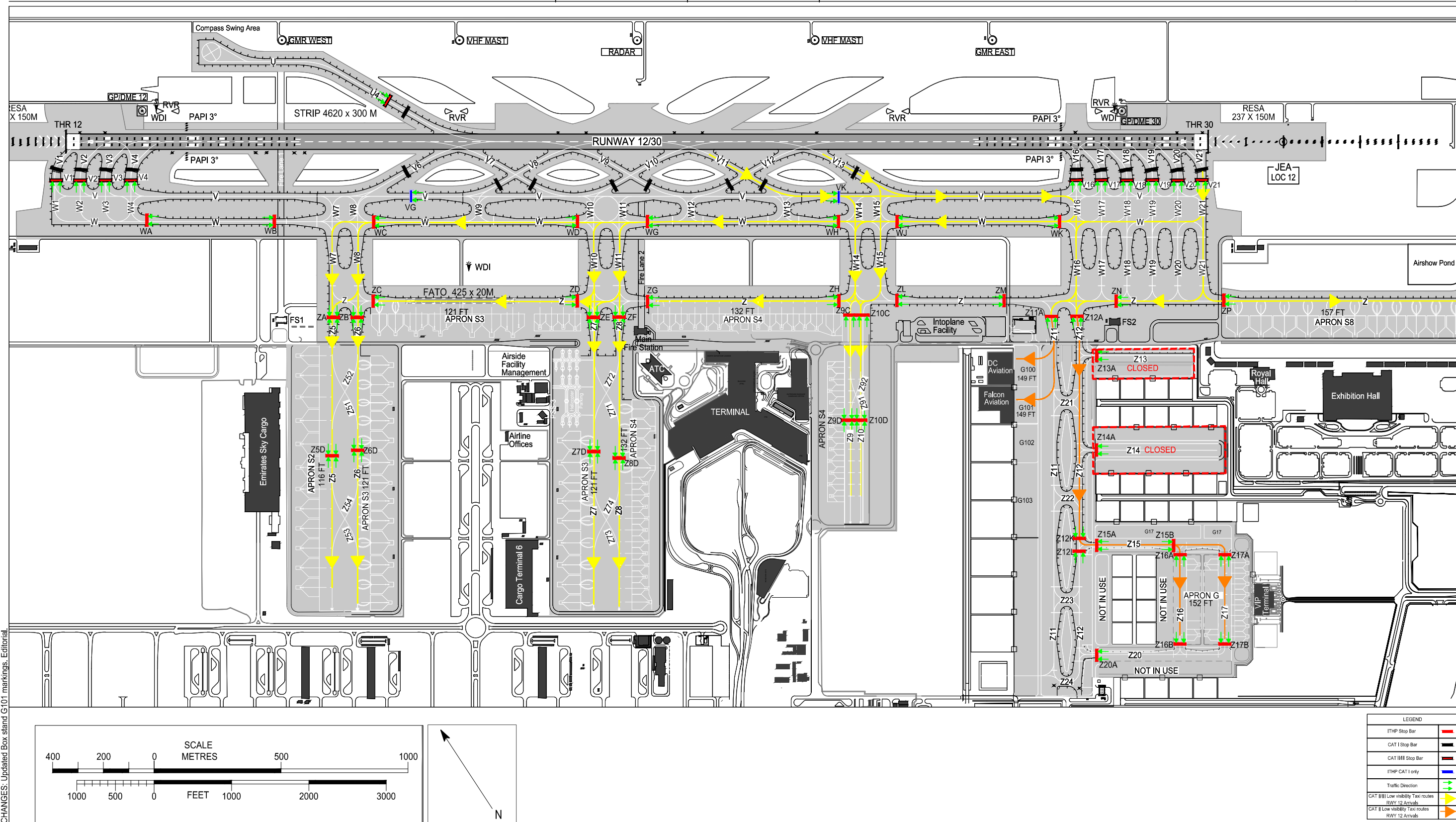
LOW VISIBILITY TAXI ROUTES - ARRIVALS RWY 12

AIP UNITED ARAB EMIRATES

ARP	245506 N 0551032 E	AD ELEV 171 FT
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AD ELEV 171 FT

OMDW AD 2 - 26
DUBAI / Al Maktoum Intl.
UNITED ARAB EMIRATES



CHANGES: Updated Box stand G101 markings. Editorial.

GENERAL CIVIL AVIATION AUTHORITY

AIRAC 10/2019 effective 12 SEP 19

LOW VISIBILITY TAXI ROUTES - ARRIVALS RWY 30

AIP UNITED ARAB EMIRATES

Low Visibility Taxi Routes - Arrivals RWY 30

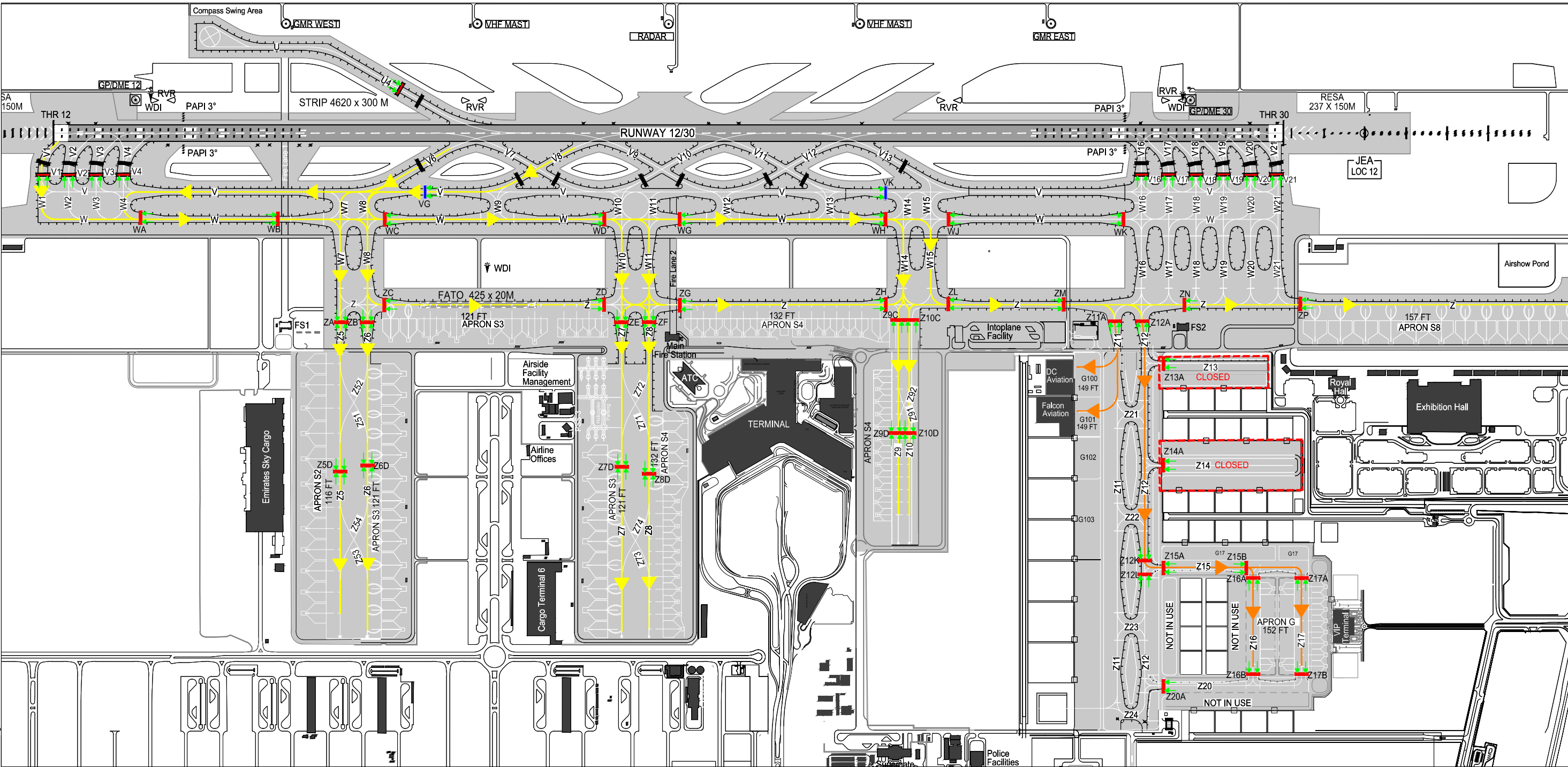
ARP

245506 N
0551032 E

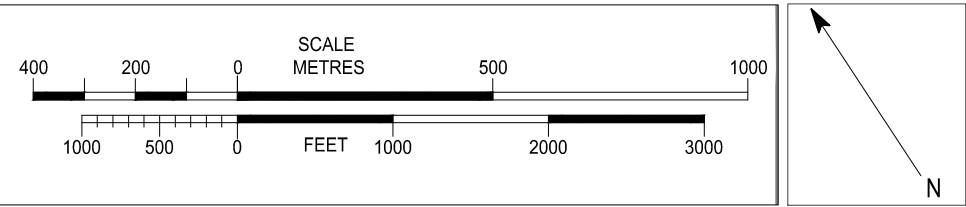
AD ELEV 171 FT

OMDW AD 2 - 27

DUBAI / Al Maktoum Intl.
UNITED ARAB EMIRATES



CHANGES: Updated Box stand G101 markings. Editorial.



LEGEND	
ITHP Stop Bar	Red line
CAT I Stop Bar	Black line
CAT II/III Stop Bar	Blue line
ITHP CAT I only	Blue line
Traffic Direction	Green arrow
CAT II/III Low visibility Taxi routes	Yellow arrow
RWY 30 Arrivals	Yellow arrow
CAT II Low visibility Taxi routes	Orange arrow
RWY 30 Arrivals	Orange arrow

GENERAL CIVIL AVIATION AUTHORITY

AIRAC 10/2019 effective 12 SEP 19

LOW VISIBILITY TAXI ROUTES - DEPARTURES RWY 12

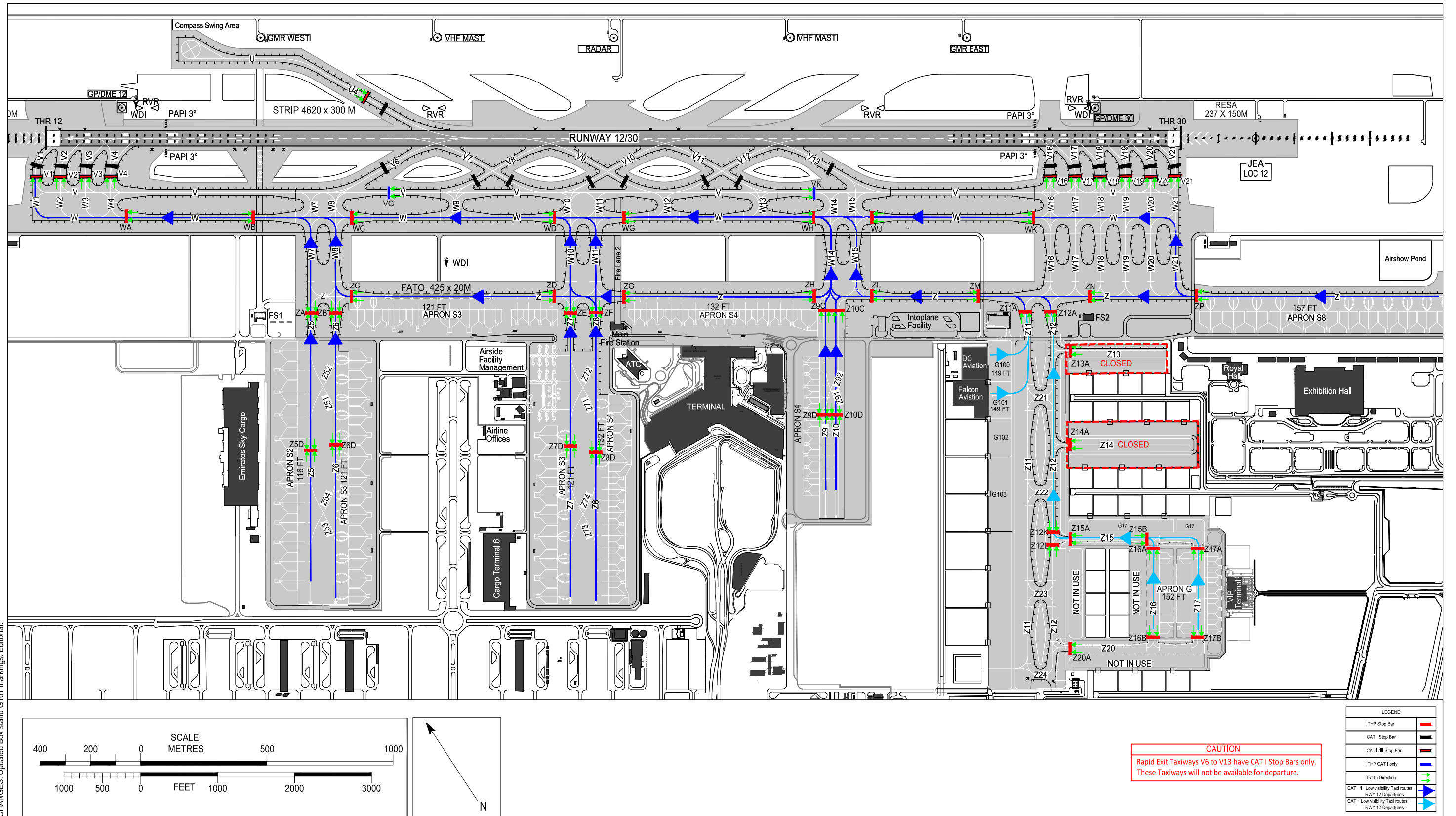
AIP UNITED ARAB EMIRATES

Low Visibility Taxi Routes - Departures RWY 12

ARP 245506 N
0551032 E

AD ELEV 171 FT

OMDW AD 2 - 28

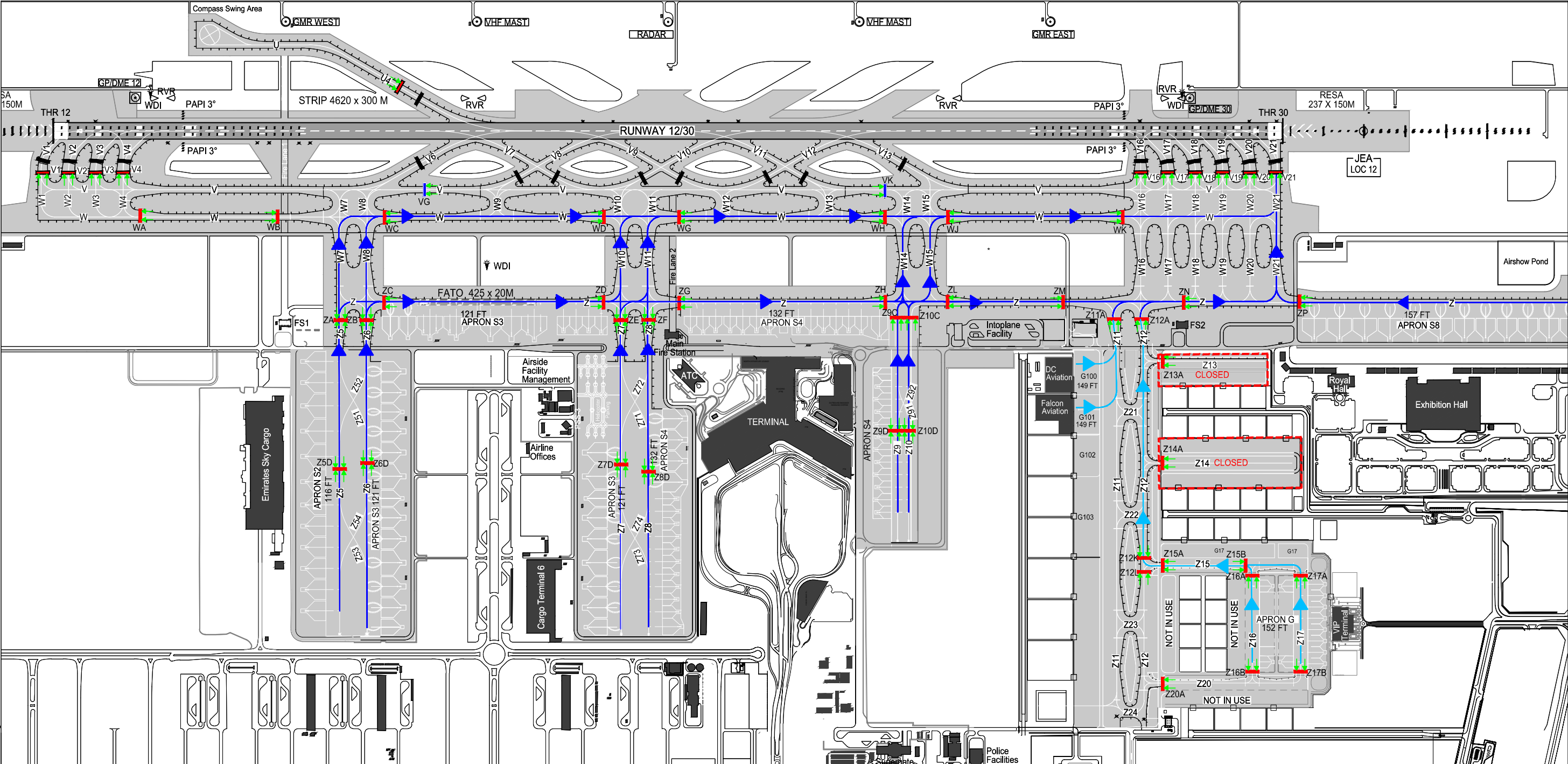
DUBAI / Al Maktoum Intl.
UNITED ARAB EMIRATES

CHANGES: Updated Box stand G101 markings. Editorial.

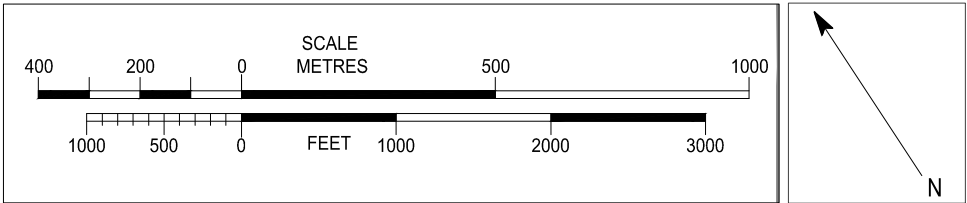
GENERAL CIVIL AVIATION AUTHORITY

AIRAC 10/2019 effective 12 SEP 19

LOW VISIBILITY TAXI ROUTES - DEPARTURES RWY 30



CHANGES: Updated Box stand G101 markings. Editorial.



CAUTION
Rapid Exit Taxiways V6 to V13 have CAT I Stop Bars only.
These Taxiways will not be available for departure.

LEGEND	
ITHP Stop Bar	
CAT I Stop Bar	
CAT III/II Stop Bar	
ITHP CAT I only	
Traffic Direction	
CAT I/II Low visibility Taxi routes RWY 30 Departures	
CAT II Low visibility Taxi routes RWY 30 Departures	

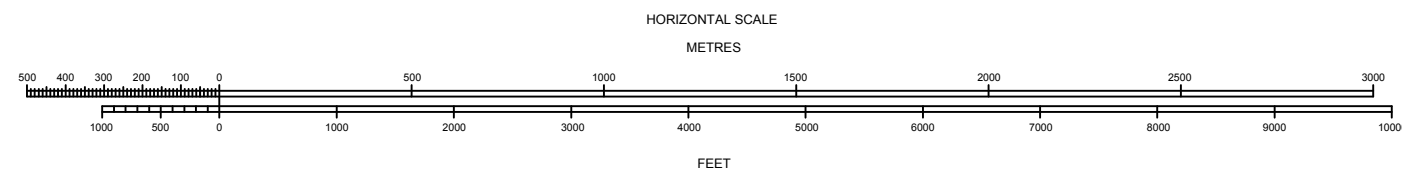
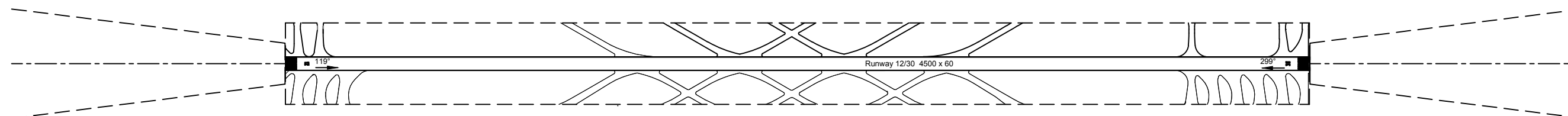
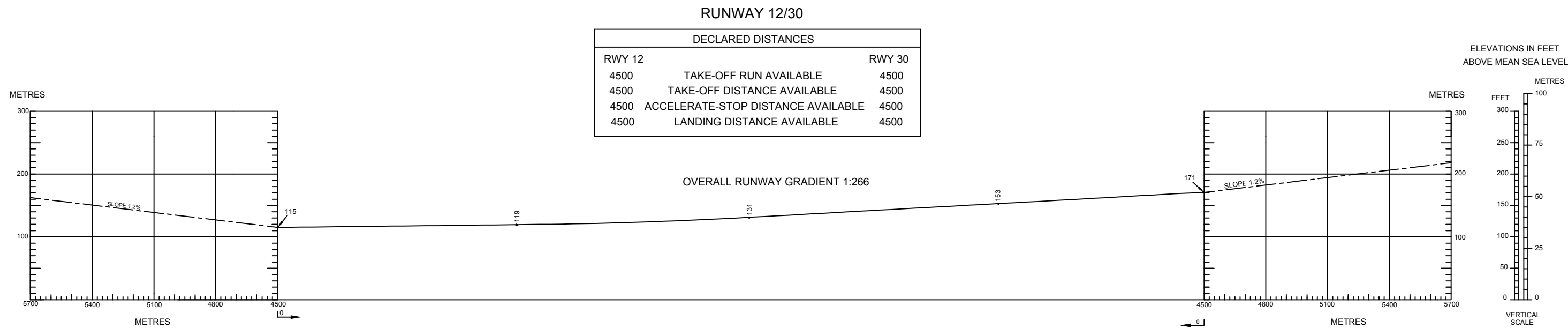
UNITED ARAB EMIRATES







RWY 12/30

ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES
BEARINGS ARE MAGNETIC

TYPE A - OPERATING LIMITATIONS

MAGNETIC VARIATION 2° E (2018)



LEGEND		
		PROFILE
IDENTIFICATION NUMBER		
HEIGHT AMSL	25	
BUILDING		
TREE / BUSH		
POLE, AERIAL, TOWER, ETC		
MOBILE OBSTACLE		

ORDER OF ACCURACY: Horizontal 3 M; Vertical 1 FT

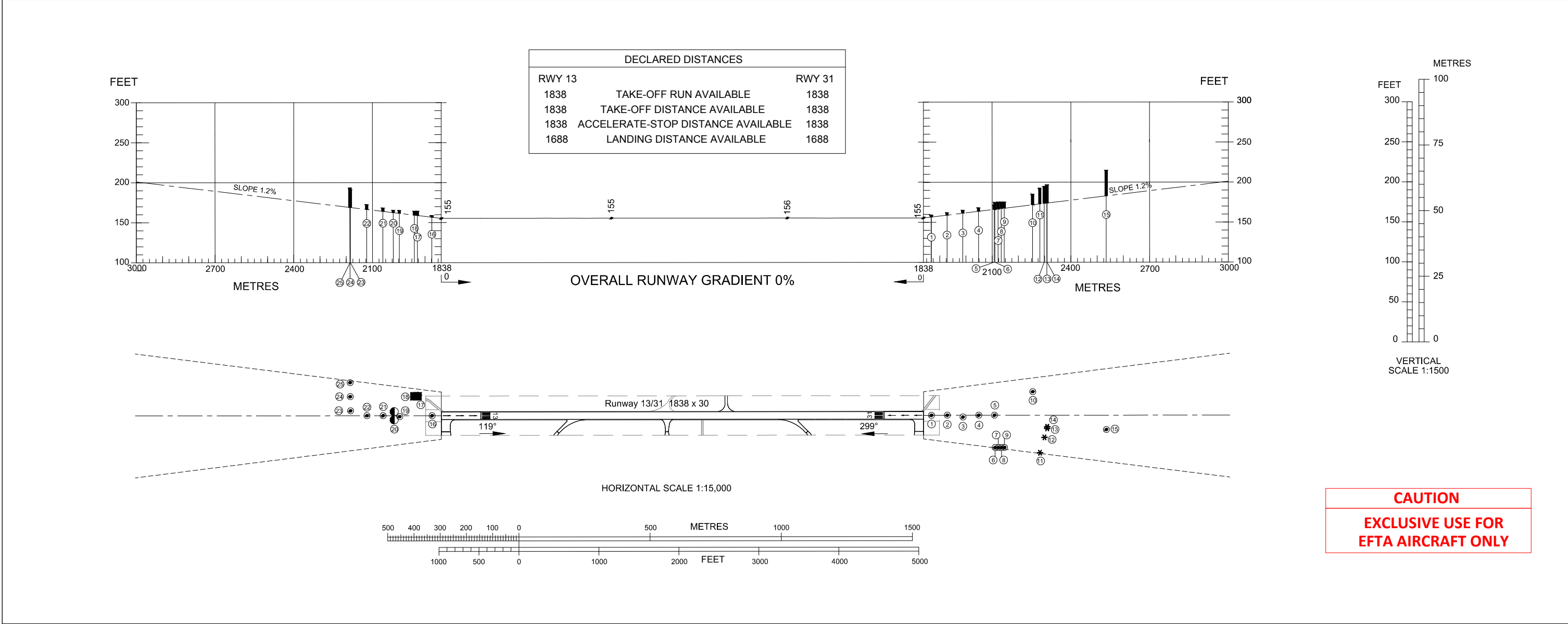
CHANGES: Amended MAG VAR Year.

ELEVATIONS IN FEET AMSL
ALL OTHER DIMENSIONS IN METRES
BEARINGS ARE MAGNETIC

AERODROME OBSTACLE CHART - ICAO
TYPE A - OPERATING LIMITATIONS

DUBAI / Al Maktoum Intl.
UNITED ARAB EMIRATES
RWY 13/31

MAGNETIC VARIATION 2° E (2018)
ORDER OF ACCURACY: Horizontal 3M; Vertical 1FT



LEGEND		
		PROFILE
IDENTIFICATION NUMBER	⑩	
HEIGHT AMSL	25	
BUILDING	■	⑬
TREE / BUSH	*	
POLE, AERIAL, TOWER, ETC	●	
LOCALISER	⦿	

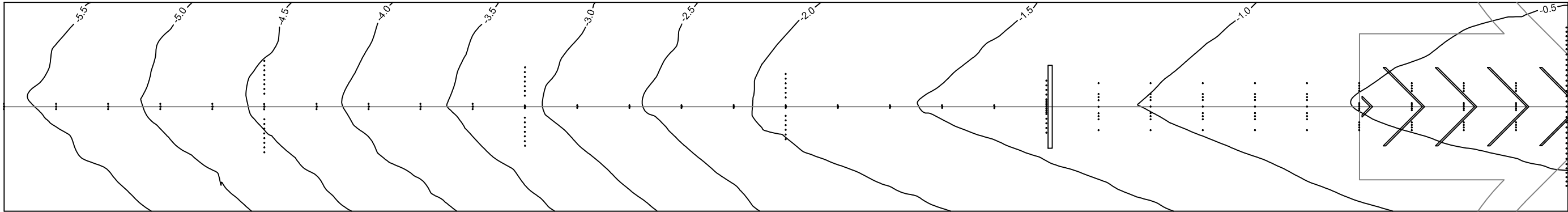
OBST ID	Description	Coordinates		Elevation	Survey Ref ID
		Latitude	Longitude	FT	
1	APPROACH_LIGHT	245142.9458N	0551005.7285E	158.86	8935
2	APPROACH_LIGHT	245141.9335N	0551007.5575E	161.91	8741
3	APPROACH_LIGHT	245140.7302N	0551009.2561E	165.06	8749
4	APPROACH_LIGHT	245139.9114N	0551011.2111E	168.01	8753
5	APPROACH_LIGHT	245138.9001N	0551013.0394E	171.06	8754
6	STREETLIGHT	245135.4456N	0551010.8304E	174.84	8772
7	STREETLIGHT	245135.2351N	0551011.2030E	175.10	8773
8	STREETLIGHT	245135.0275N	0551011.5776E	175.23	8774
9	STREETLIGHT	245134.8423N	0551011.9248E	175.33	8775
10	STREETLIGHT	245138.9331N	0551019.1381E	185.01	8788
11	TREE	245132.0045N	0551015.6919E	192.44	16219
12	TREE	245133.3400N	0551017.2814E	194.75	16216
13	TREE	245134.1277N	0551018.2278E	196.53	16213
14	TREE	245134.2823N	0551018.3543E	196.68	16212
15	ROAD_GANTRY	245130.1915N	0551025.0254E	214.99	8200

OBST ID	Description	Coordinates		Elevation	Survey Ref ID
		Latitude	Longitude	FT	
16	APPROACH_LIGHT	245215.0330N	0550907.7496E	158.83	8936
17	BUILDING_LC	245218.0398N	0550907.4578E	164.37	8480
18	BUILDING_LC	245218.2389N	0550907.1037E	164.37	8479
19	APPROACH_LIGHT	245217.0033N	0550903.8954E	165.22	8470
20	LLZ_OBS_LIGHT	245218.0439N	0550903.6296E	165.39	8873
	LLZ_OBS_LIGHT	245216.9755N	0550902.9169E	165.39	8870
21	APPROACH_LIGHT	245218.1766N	0550902.0715E	168.27	8477
22	APPROACH_LIGHT	245219.2100N	0550900.1937E	172.51	8478
23	STREETLIGHT	245220.7753N	0550858.6403E	191.17	8074
24	STREETLIGHT	245222.3006N	0550859.5874E	192.29	8075
25	STREETLIGHT	245223.7955N	0550900.5777E	193.64	8076

DUBAI / AI Maktoum International
UNITED ARAB EMIRATES
RWY 12

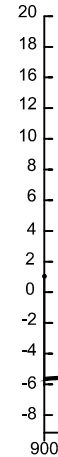
PRECISION APPROACH TERRAIN CHART - ICAO

ELEVATIONS IN METERS
ALL OTHER DIMENSIONS IN METRES

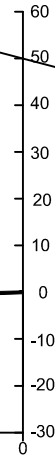


Elevation of runway threshold 35.1 M/ 115.2 FT AMSL
Maximum elevation within first 900 M of runway 36.1 M/ 118.4 FT AMSL

VERTICAL SCALE
METRES



VERTICAL SCALE
FEET



NOMINAL GLIDE PATH 3°

ILS RDH 15.24M (50FT)

DISTANCE FROM THRESHOLD

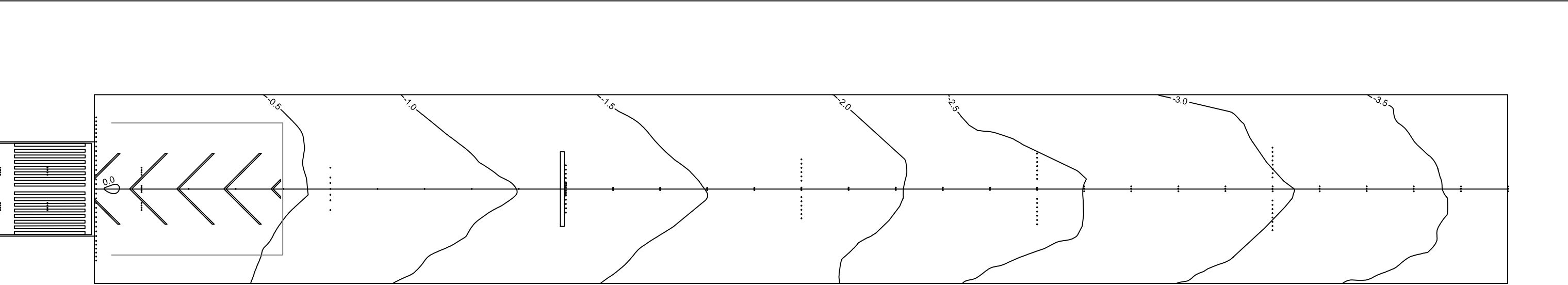
LEGEND	
MOBILE OBSTACLE	
CENTRELINE PROFILE	
APPROACH LIGHT	

HORIZONTAL SCALE 1:2500
VERTICAL SCALE 1:500

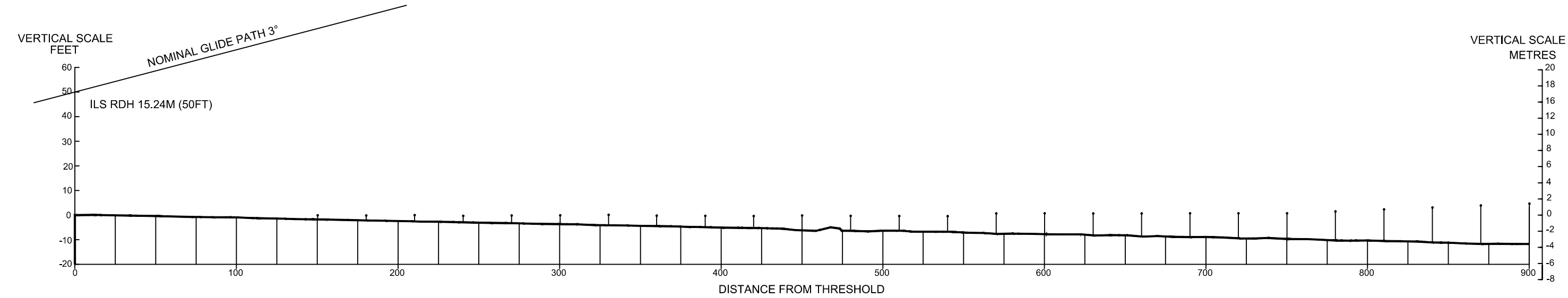
CONTOURS AND HEIGHTS ARE RELATED TO ELEVATION OF RUNWAY THRESHOLD

ELEVATIONS IN METERS
ALL OTHER DIMENSIONS IN METRES

PRECISION APPROACH TERRAIN CHART - ICAO



Elevation of runway threshold 52.0 M/ 170.7 FT AMSL
Maximum elevation within first 900 M of runway 52.0 M/ 170.7 FT AMSL



CHANGES: Revised Chart.

LEGEND	
MOBILE OBSTACLE	— —
CENTRELINE PROFILE	—
APPROACH LIGHT	↑

HORIZONTAL SCALE 1:2500
VERTICAL SCALE 1:500
CONTOURS AND HEIGHTS ARE RELATED TO ELEVATION OF RUNWAY THRESHOLD

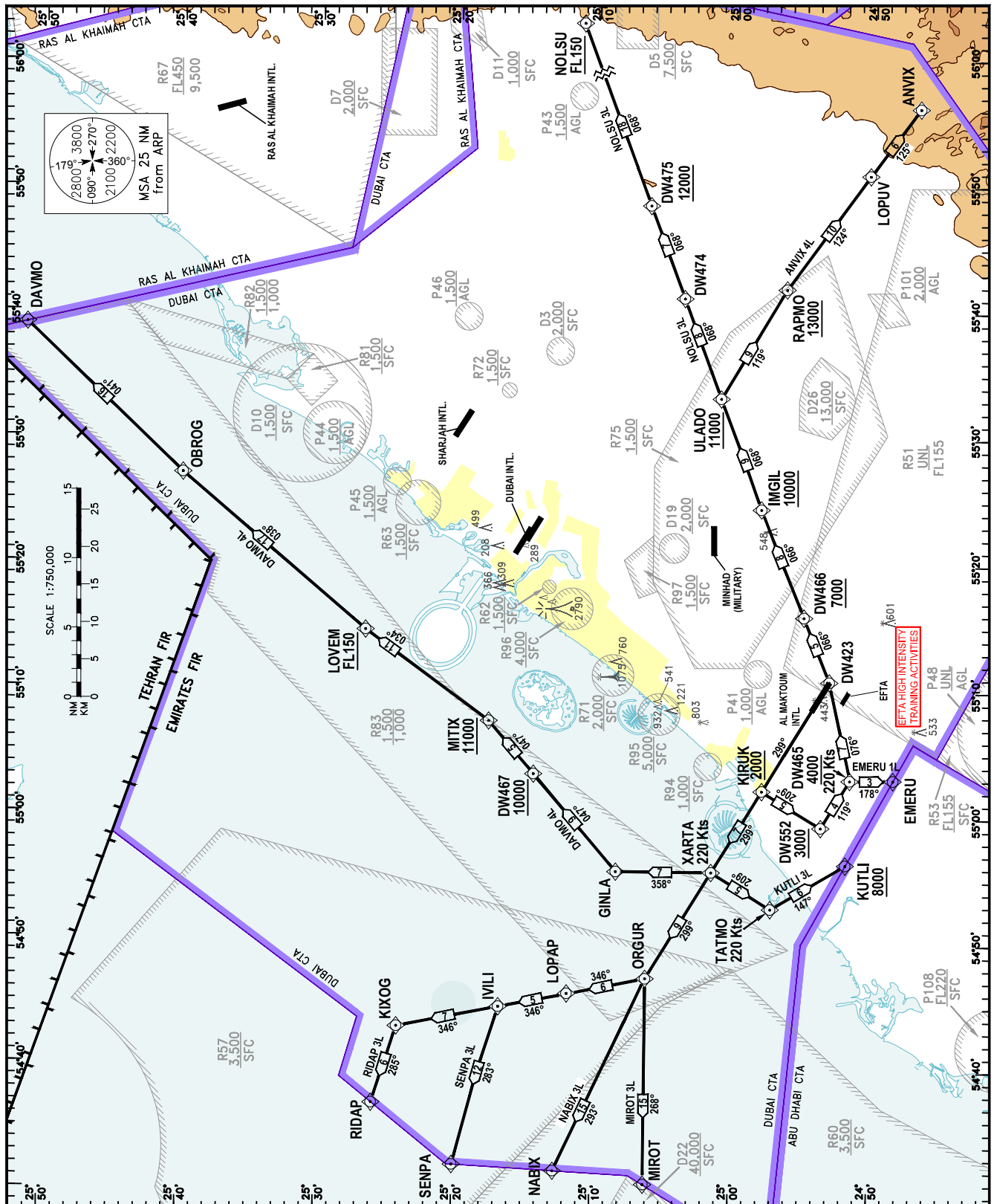
STANDARD INSTRUMENT AD ELEV 171 FT

DUBAI/Al Maktoum Intl.

DEPARTURE (SID)

RNAV 1 SID RWY 30

CHART-ICAO ANVIX 4L, DAVMO 4L, EMERU 1L, KUTLI 3L, MIROT 3L, NABIX 3L, NOLSU 3L, RIDAP 3L, SENPA 3L



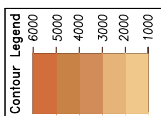
ATIS	126.475
RDR	124.025
DEP (N)	126.200
DEP (S)	121.025
TWR	118.625
GND	118.375

FOR ROUTE DESCRIPTION
SEE OMDW AD 2.22

TRANSITION ALTITUDE
13,000 FT

VAR 2° E (2017)

BEARINGS ARE MAGNETIC
ALTITUDES IN FEET
SPEEDS ARE MAXIMUM



NOTES

Do not climb above ATC
cleared level.

RESTRICTIONS

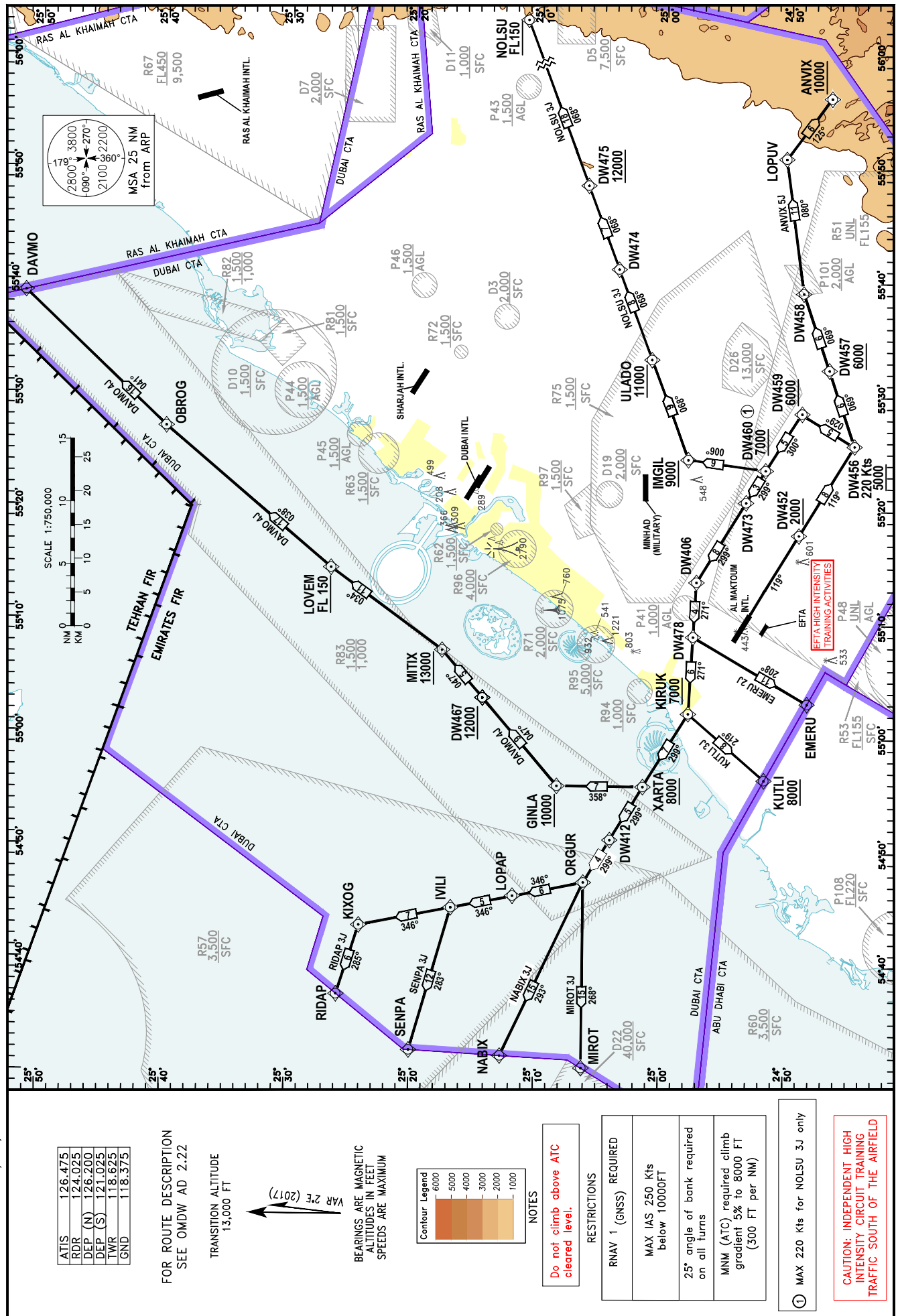
RNAV 1 (GNSS) REQUIRED
MAX IAS 250 Kts below 10000FT
25° angle of bank required on all turns
MNM (ATC) required climb gradient 5% to 8000 FT (300 FT per NM)
MNM (ATC) required climb gradient 6.4% to 8000 FT (390 FT/NM) for DAYMO 4L.

CAUTION: INDEPENDENT HIGH
INTENSITY CIRCUIT TRAINING
TRAFFIC SOUTH OF THE AIRFIELD

STANDARD INSTRUMENT AD ELEV 171 FT
DEPARTURE (SID)
CHART-ICAO ANVIX 5J, DAVMO 4J, EMERU 2J, KU

DUBAI/AI Maktoum Intl.
RNAV 1 SID RWY 12

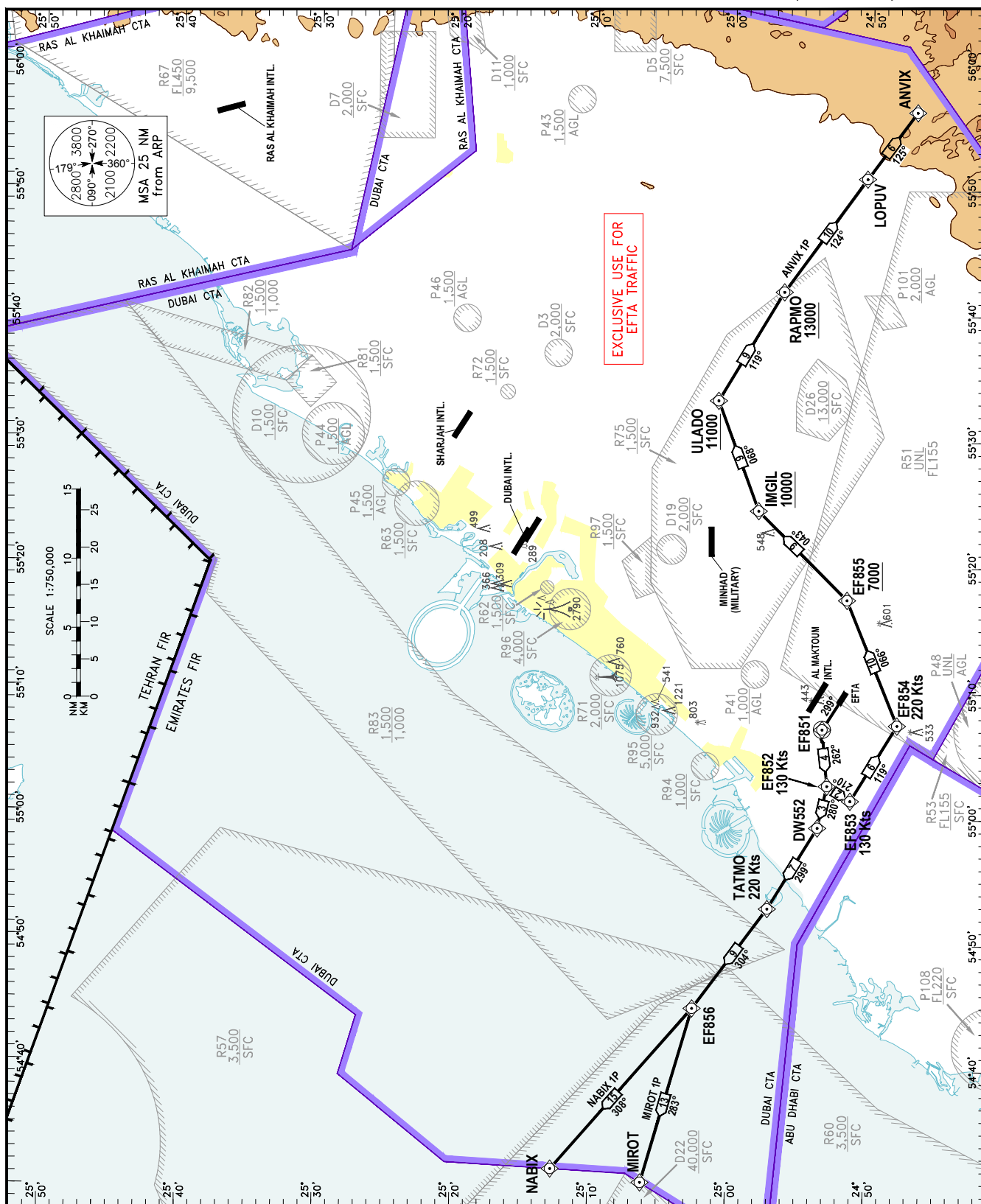
ANVIX 5J, DAVMO 4J, EMERU 2J, KUTLI 3J, MIROT 3J, NABIX 3J, NOLSU 3J, RIDAP 3J, SENPA 3J



STANDARD INSTRUMENT AD ELEV 171 FT
DEPARTURE (SID)
CHART-ICAO

DUBAI/Al Maktoum Intl.
RNAV 1 SID RWY 31 (CAT A-B)

ANVIX 1P, MIROT 1P, NABIX 1P



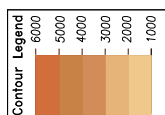
ATIS	126.475
RDR	124.025
DEP (N)	126.200
DEP (S)	121.025
EFTA TWR	118.775

FOR ROUTE DESCRIPTION
SEE OMDW AD 2.22

TRANSITION ALTITUDE
13,000 FT

VAR 2°E (2018)

BEARINGS ARE MAGNETIC
ALTITUDES IN FEET
SPEEDS ARE MAXIMUM



NOTES

Do not climb above ATC
cleared level.

RESTRICTIONS

RNAV 1 (GNSS) REQUIRED
MAX IAS 250 Kts below 10000FT
25° angle of bank required on all turns
MNM (ATC) required climb gradient 5% to 8000 FT (300 FT per NM)
Initial climb limited to 2000 FT. Further climb when instructed by ATC.

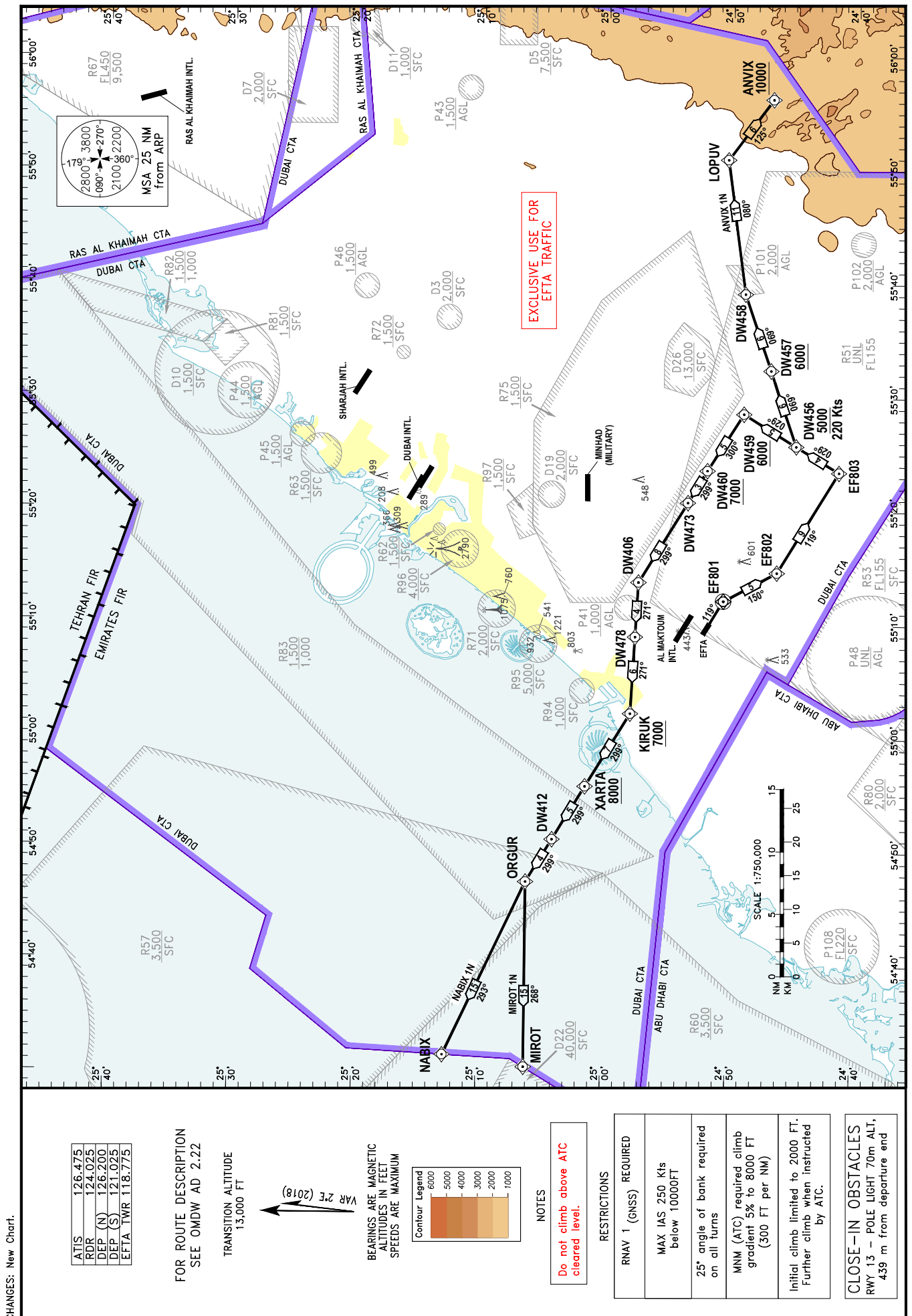
CHANGES: New Chart.

STANDARD INSTRUMENT DEPARTURE (SID)
CHART-ICAO

AD ELEV 171 FT

DUBAI/Al Maktoum Intl.
RNAV 1 SID RWY 13 (CAT A-B)

ANVIX 1N, MIROT 1N, NABIX 1N



STANDARD INSTRUMENT AD ELEV 171 FT

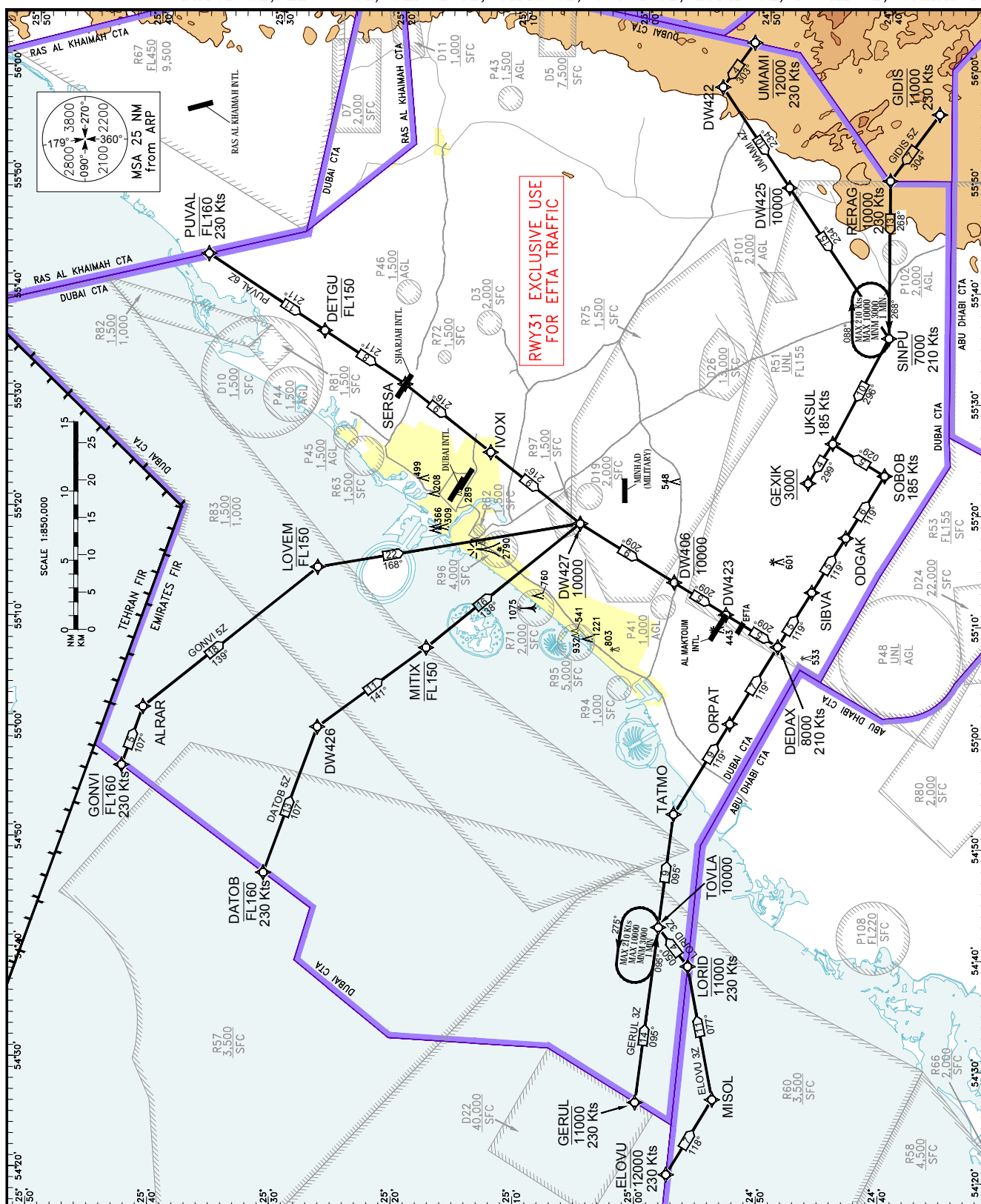
DUBAI/Al Maktoum Intl.

ARRIVAL (STAR)

RNAV 1 STAR RWY 30 / 31

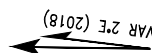
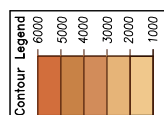
CHART-ICAO

DATOB 5Z, ELOVU 3Z, GERUL 3Z, GIDIS 5Z, GONVI 5Z, LORID 3Z, PUVAL 6Z, UMAMI 4Z



CHANGES: Added RWY 31. Revised Chart.

ATIS	126.475
RDR	124.025
DEP (N)	126.200
DEP (S)	121.025
TWR	118.625
GND	118.375
EFTA TWR	118.775

FOR ROUTE DESCRIPTION
SEE OMDW AD 2.22TRANSITION ALTITUDE
13,000 FTBEARINGS ARE MAGNETIC
ALTITUDES IN FEET "A"

NOTES

Do not descend below ATC
cleared level.CAUTION: INDEPENDENT HIGH
INTENSITY CIRCUIT TRAINING
TRAFFIC SOUTH OF THE AIRFIELD

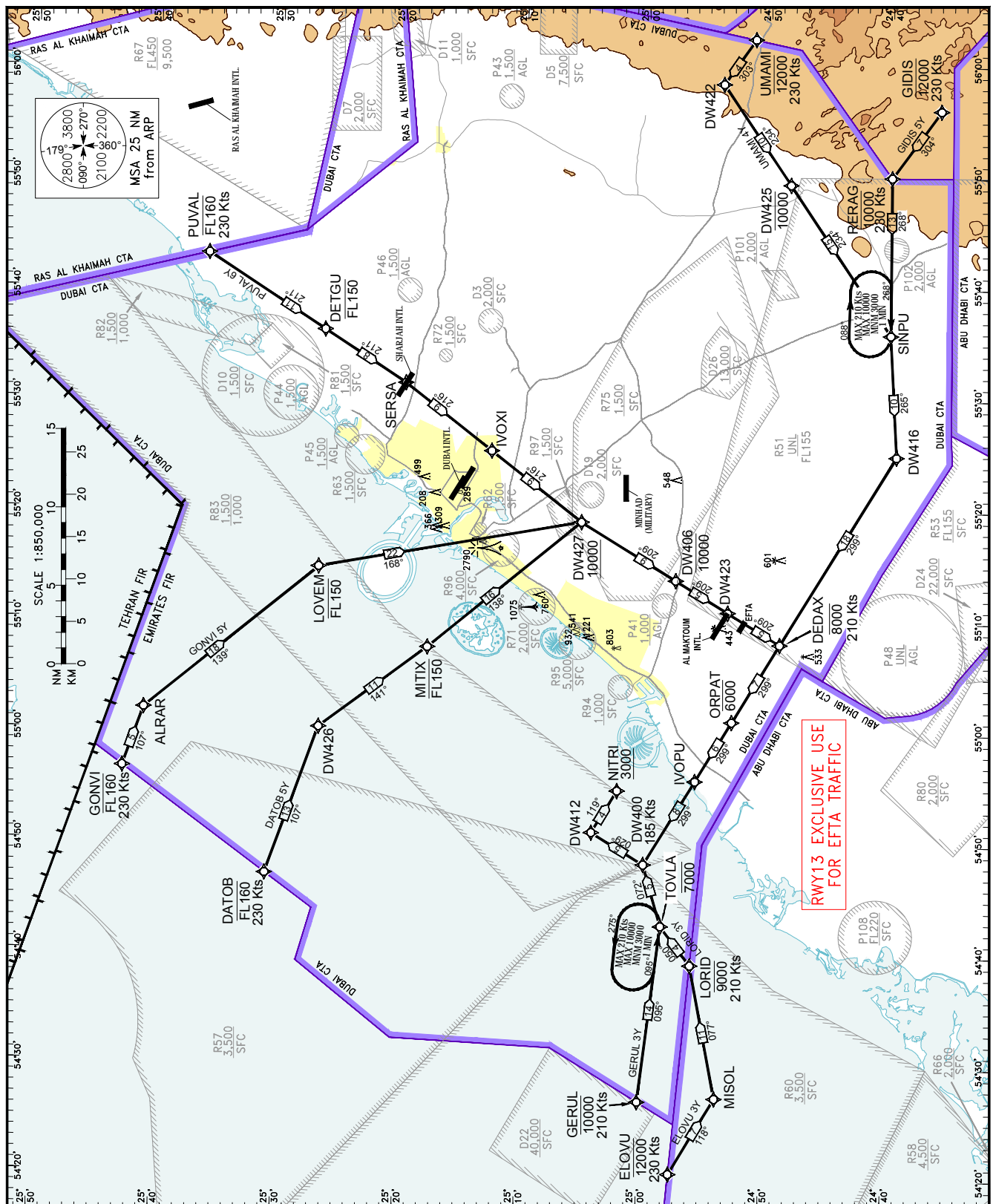
STANDARD INSTRUMENT AD ELEV 171 FT

DUBAI/Al Maktoum Intl.

ARRIVAL (STAR)

RNAV 1 STAR RWY 12 / 13

CHART-ICAO DATOB 5Y, ELOVU 3Y, GERUL 3Y, GIDIS 5Y, GONVI 5Y, LORID 3Y, PUVAL 6Y, UMAMI 4Y



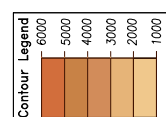
ATIS	126.475
RDR	124.025
DEP (N)	126.200
DEP (S)	121.025
TWR	118.625
GND	118.375
EFDA TWR	118.775

FOR ROUTE DESCRIPTION
SEE OMDW AD 2.22

TRANSITION ALTITUDE
13,000 FT

VAR 2°E (2018)

BEARINGS ARE MAGNETIC
ALTITUDES IN FEET "AT"



NOTES

Do not descend below ATC
cleared level.

CAUTION: INDEPENDENT HIGH
INTENSITY CIRCUIT TRAINING
TRAFFIC SOUTH OF THE AIRFIELD

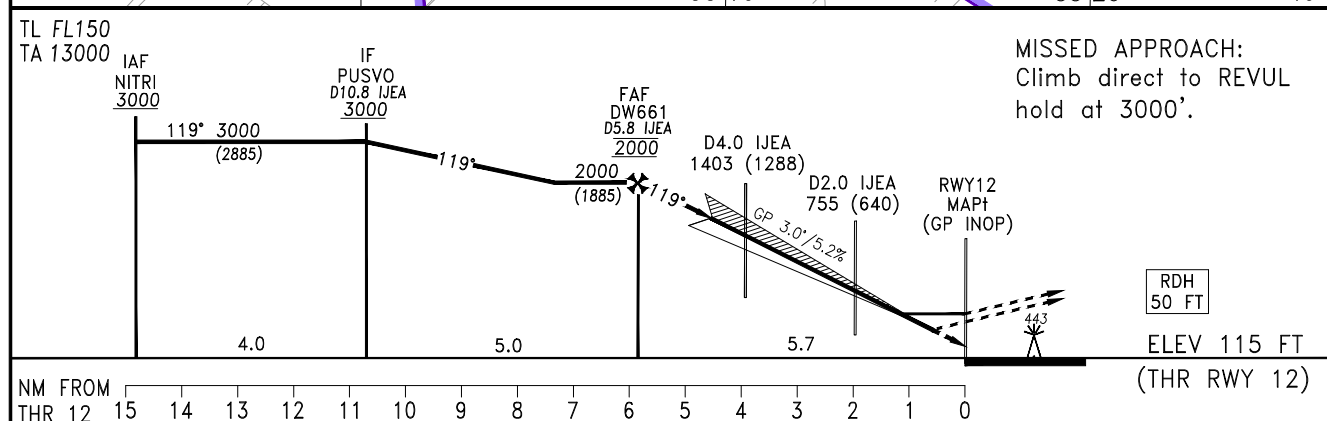
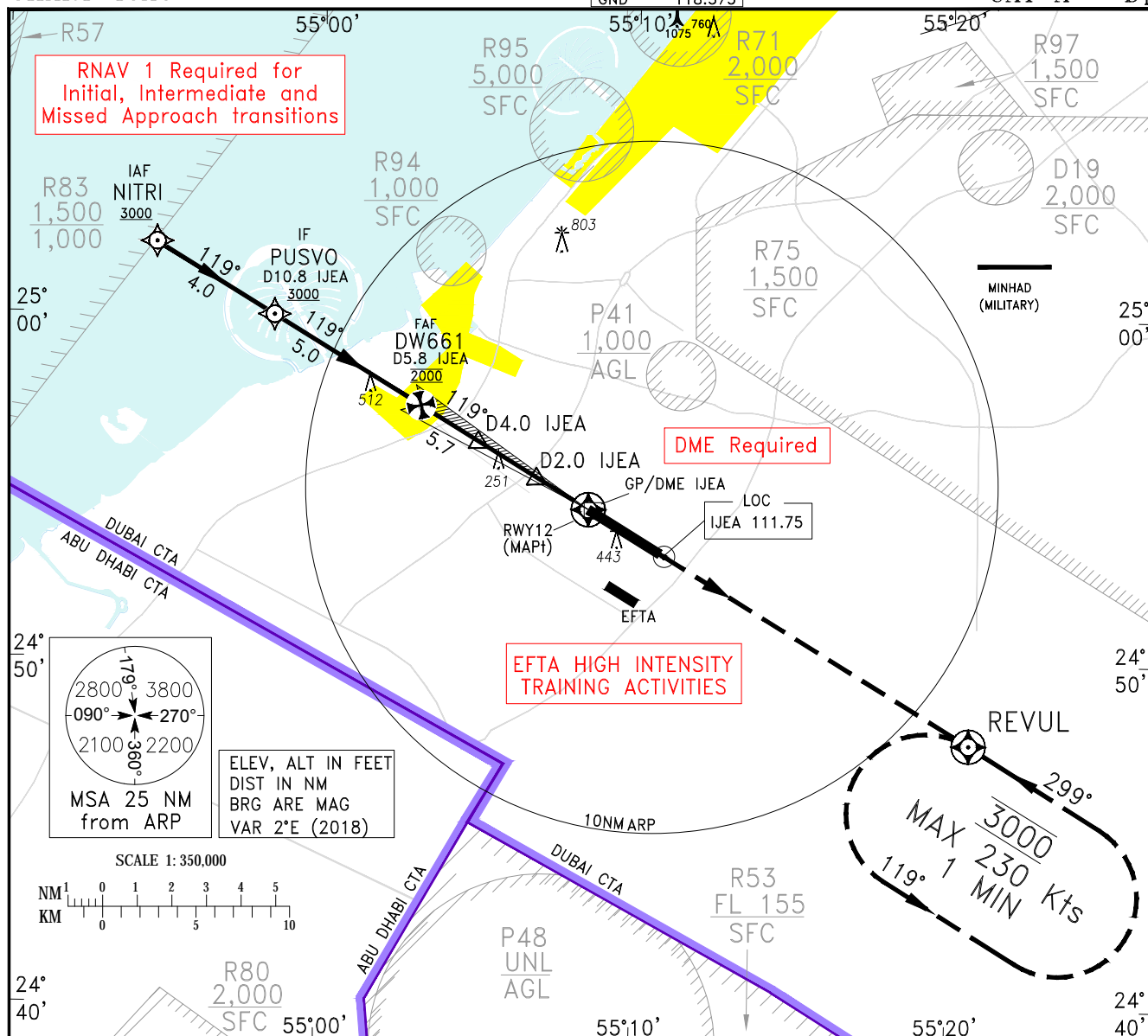
CHANGES: Added RWY 13. Revised Chart.

INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 171FT
HEIGHTS RELATED TO
THR RWY 12 ELEV 115FT

ATIS	126.475
RDR	124.025
DEP (N)	126.200
DEP (S)	121.025
TWR	118.625
GND	118.375

DUBAI/Al Maktoum Intl.
ILS RWY 12
CAT A - D_L



OCA/H		A	B	C	D	D _L					
Straight-in Approach	ILS CAT I ^① MACG 3.0%	302 (187)	315 (200)	323 (208)	333 (218)	333 (218)					
	ILS CAT II ^② MACG 3.0%	176 (61)	193 (78)	205 (90)	220 (105)	220 (105)					
	GP INOP MACG 3.0%	520 (405)									
Circling		N/A									
ILS CAT IIIB available MNM RVR 50M ①MNM DH CAT I A - 200FT ②MNM DH CAT II A, B, C - 100FT			Distance from IJEA		NM	5.8	4.8	3.8	2.8	1.8	0.8
			Altitude		FT	1940	1630	1310	1000	680	370
			Ground Speed		KTS	80	100	120	140	160	180
			Rate of Descent		FT/MIN	430	540	650	760	870	980

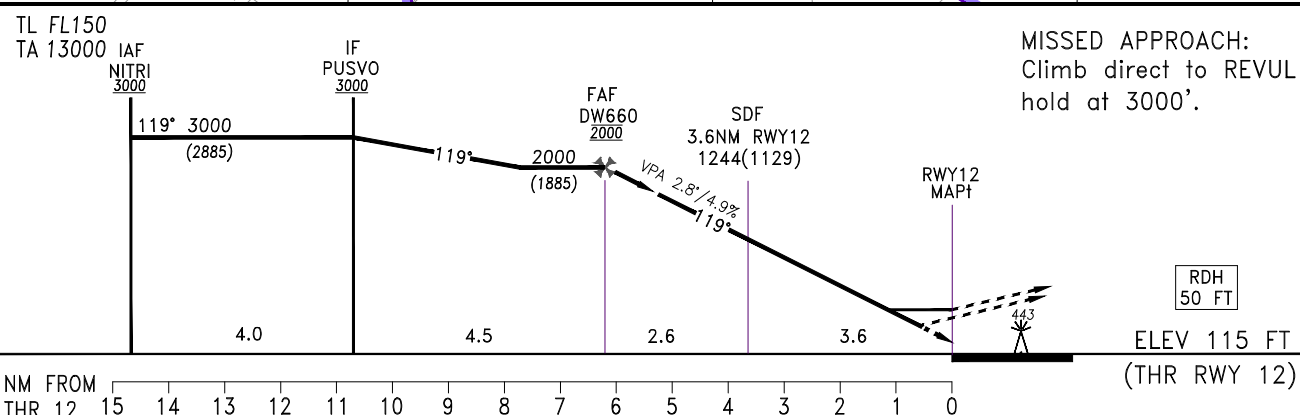
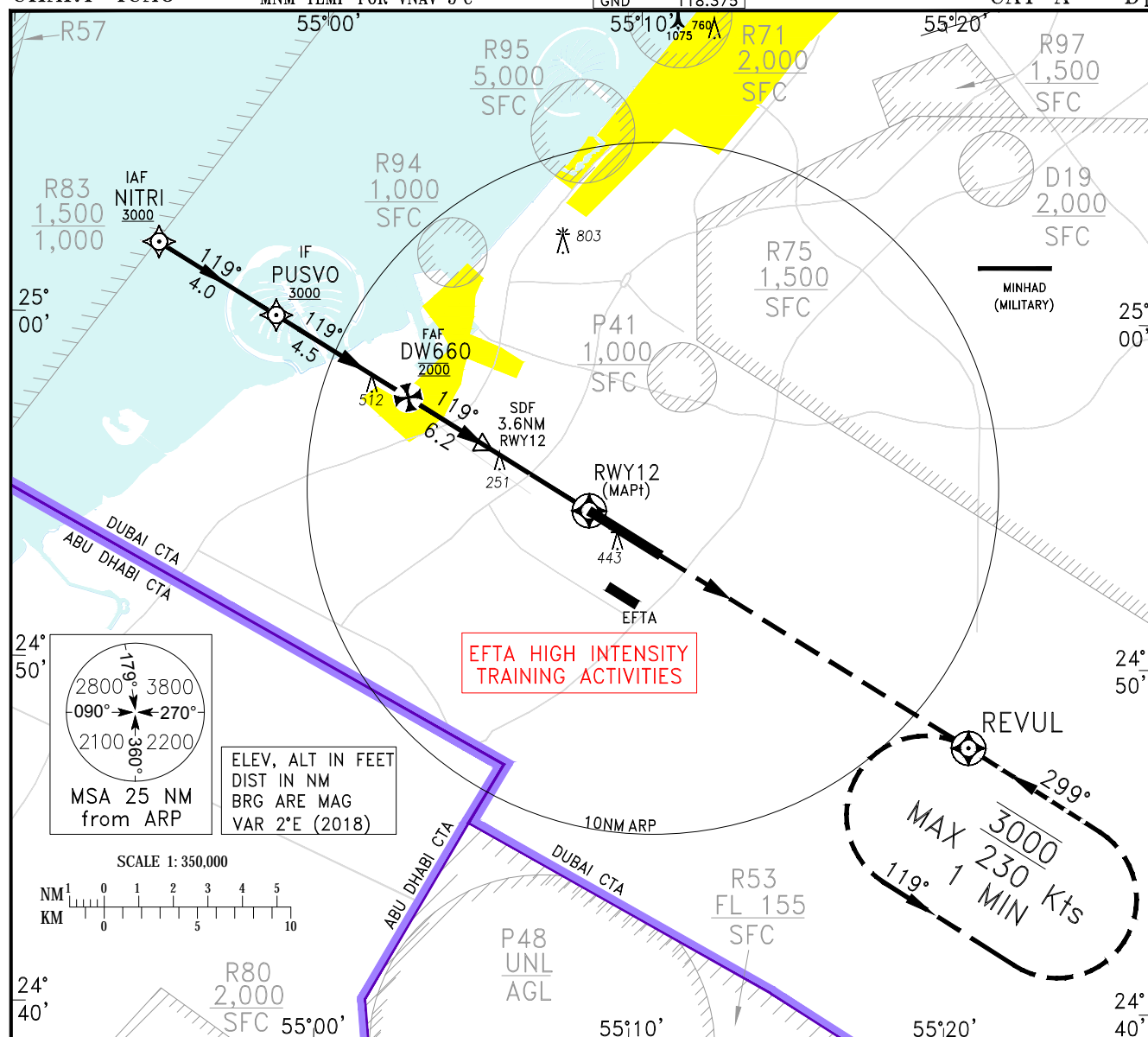
CHANGES: Revised Chart.

INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 171 FT
HEIGHTS RELATED TO
THR RWY 12 ELEV 115FT
MNM TEMP FOR VNAV 5°C

ATIS 126.475
RDR 124.025
DEP (N) 126.200
DEP (S) 121.025
TWR 118.625
GND 118.375

DUBAI/Al Maktoum Intl.
RNAV (GNSS) RWY 12
CAT A - D_L



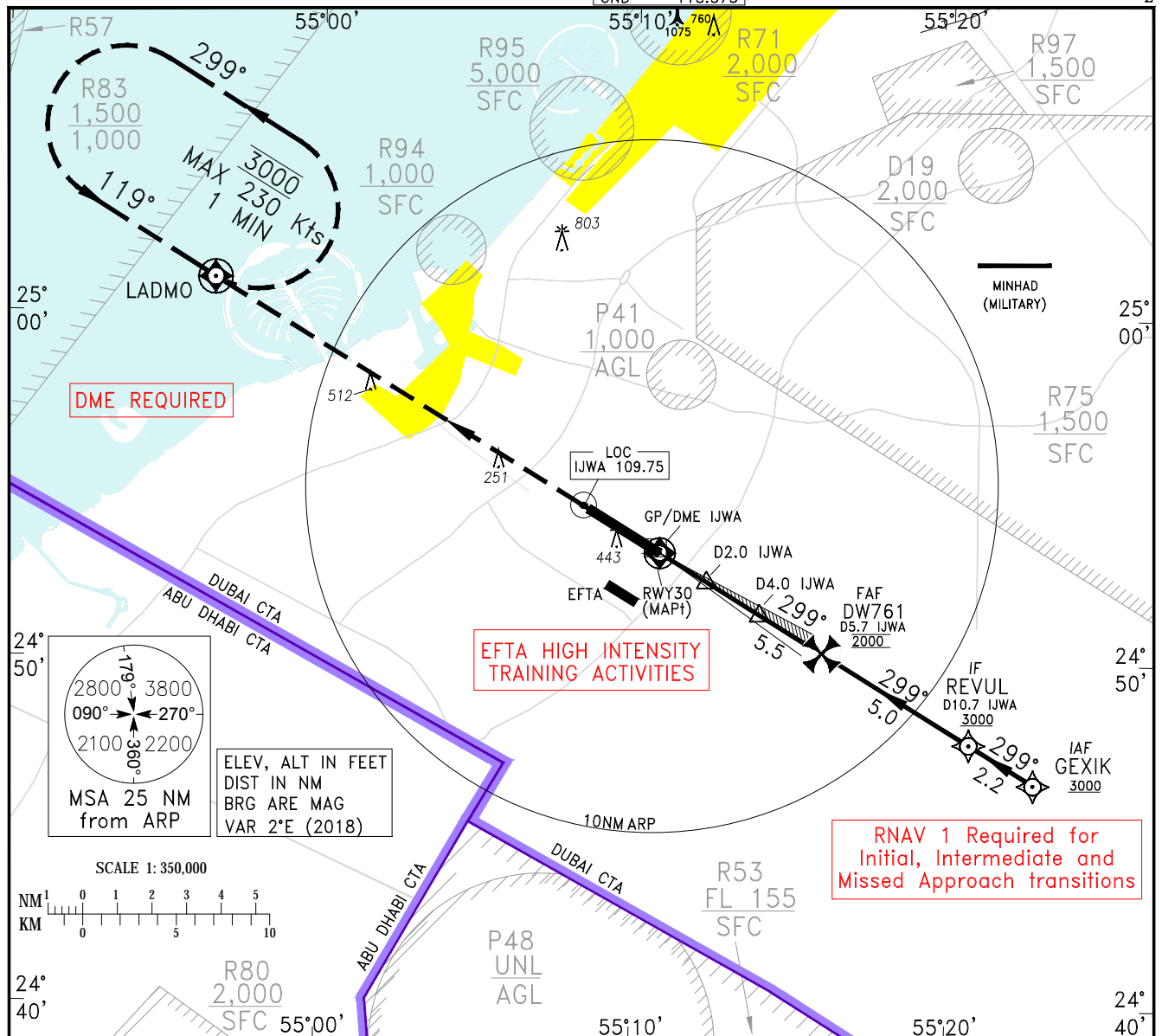
OCA/H		A	B	C	D	D _L						
Straight-in Approach	LNAV/VNAV MACG 3.00%	466 (351)	475 (360)	480 (365)	487 (372)	487 (372)						
	LNAV MACG 3.00%	550 (435)										
Circling		N/A										
		Distance from RWY12	NM	6.1	5.1	4.1	3.1	2.1	1.1			
		Altitude	FT	1970	1680	1380	1080	780	490			
		Ground Speed	KTS	80	100	120	140	160	180			
		Rate of Descent	FT/MIN	400	500	610	710	810	910			

CHANGES: Revised Chart.

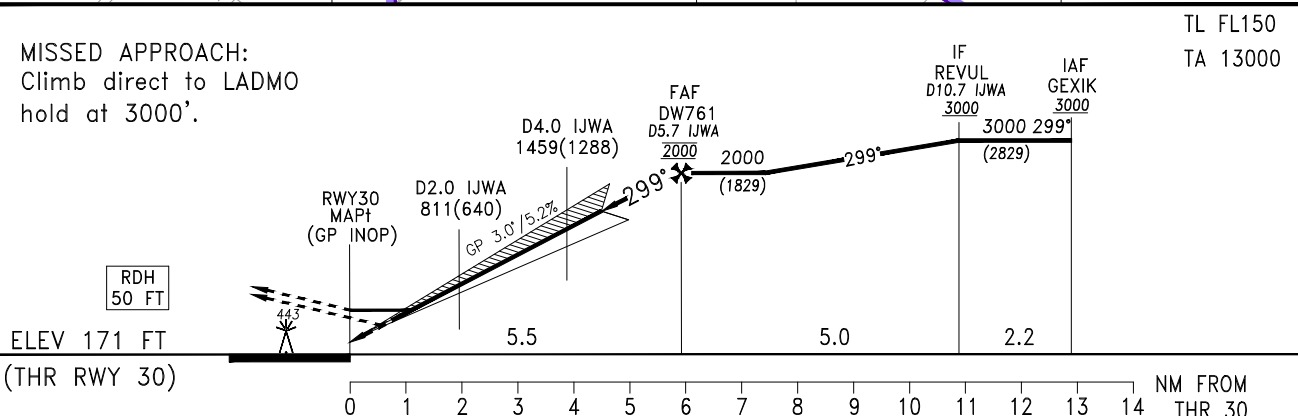
INSTRUMENT AD ELEV 171 FT
 APPROACH HEIGHTS RELATED TO
 CHART-ICAO THR RWY 30 ELEV 171 FT

ATIS 126.475
 RDR 124.025
 DEP (N) 126.200
 DEP (S) 121.025
 TWR 118.625
 GND 118.375

DUBAI/Al Maktoum Intl.
 ILS RWY 30
 CAT A - D_L



MISSSED APPROACH:
 Climb direct to LADMO
 hold at 3000'.



OCA/H		A	B	C	D	D _L				
Straight-in Approach	ILS CAT I ^① MACG 3.0%	326 (155)	339 (168)	347 (176)	357 (186)	357 (186)				
	ILS CAT II ^② MACG 3.0%	238 (67)	256 (85)	267 (96)	282 (111)	282 (111)				
	GP INOP MACG 3.0%	480 (309)								
Circling		N/A								
ILS CAT IIIB available MNM RVR 50M		Distance from IJWA	NM	5.7	4.7	3.7	2.7	1.7	0.7	
① MNM DH CAT I A,B,C,D,D _L - 200FT		Altitude	FT	1990	1670	1350	1030	710	400	
② MNM DH CAT II A,B,C - 100FT		Ground Speed	KTS	80	100	120	140	160	180	
		Rate of Descent	FT/MIN	440	550	660	770	880	990	

CHANGES: Revised Chart.

INSTRUMENT

AD ELEV 171 FT

APPROACH

HEIGHTS RELATED TO

CHART-ICAO

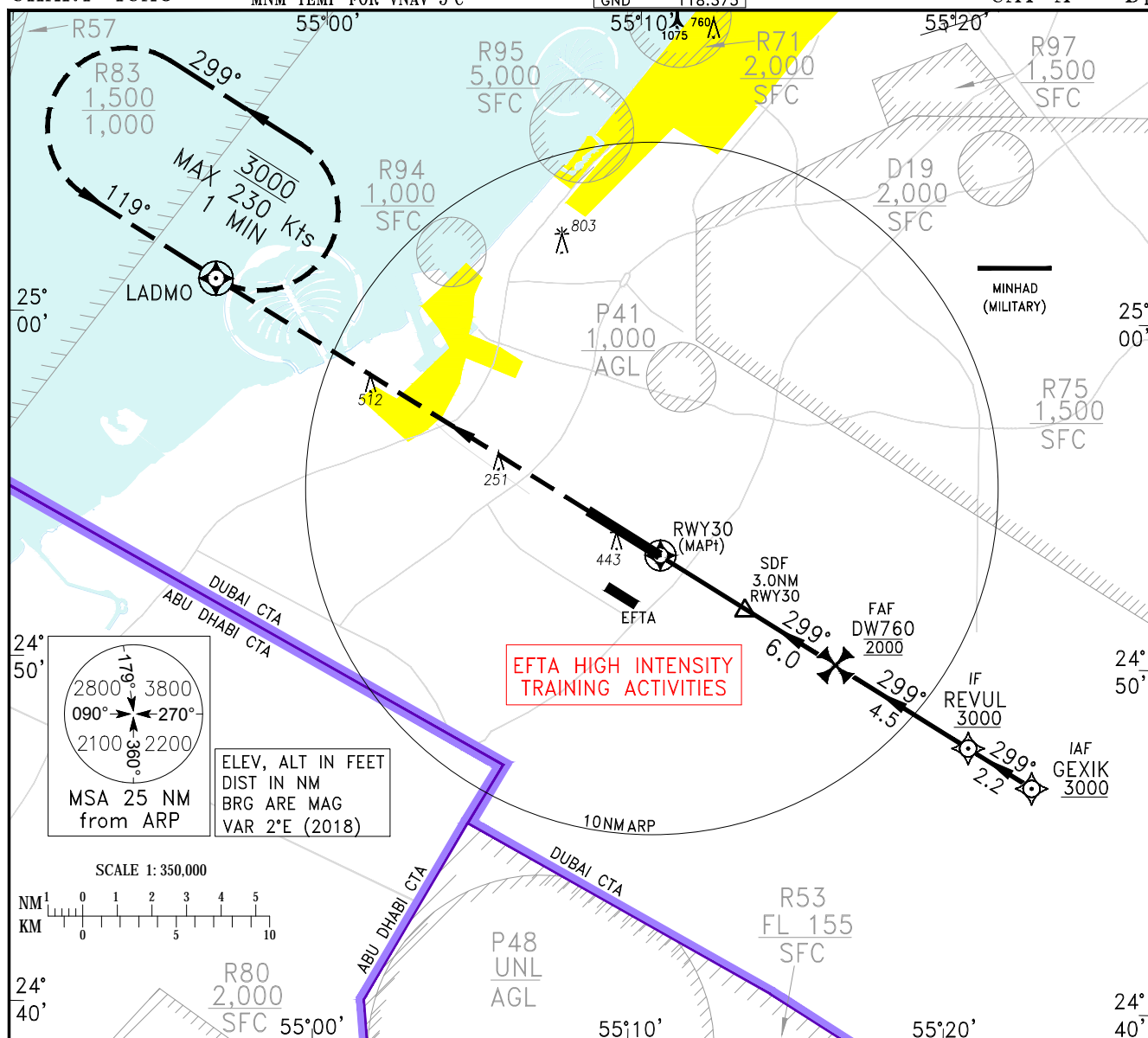
THR RWY 30 ELEV 171FT

MNM TEMP FOR VNAV 5°C

ATIS	126.475
RDR	124.025
DEP (N)	126.200
DEP (S)	121.025
TWR	118.625
GND	118.375

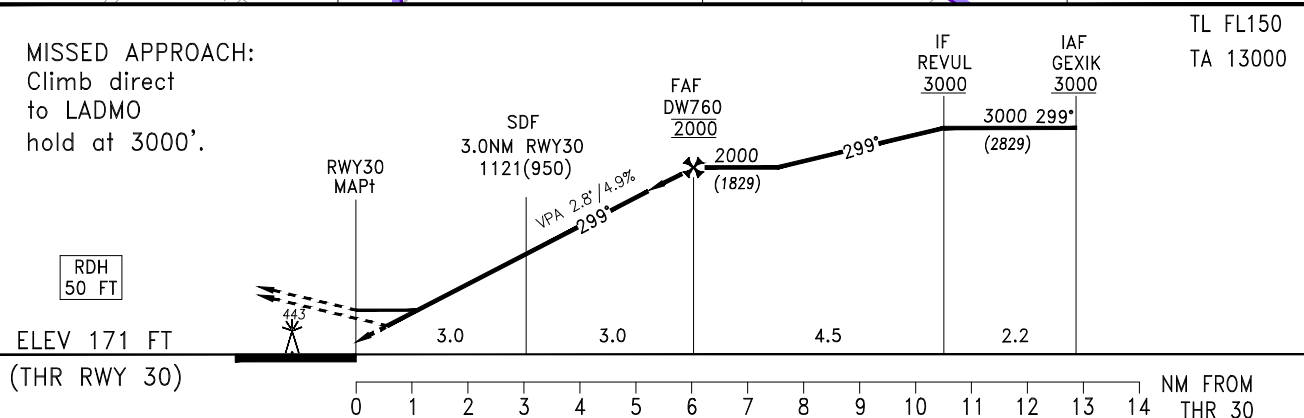
DUBAI/Al Maktoum Intl.

RNAV(GNSS) RWY 30

CAT A - D_L

MISSED APPROACH:

Climb direct
to LADMO
hold at 3000'.



OCA/H		A	B	C	D	D _L				
Straight-in Approach	RNAV/VNAV ^① MACG 3.00%	404 (233)	416 (245)	428 (257)	457 (286)	457 (286)				
	RNAV MACG 3.00%	570 (399)								
Circling		N/A								
① RNAV/VNAV DH 250 FT ACFT CAT A,B.		Distance from RWY30	NM	5.9	4.9	3.9	2.9	1.9	0.9	
		Altitude	FT	1970	1670	1370	1080	780	480	
		Ground Speed	KTS	80	100	120	140	160	180	
		Rate of Descent	FT/MIN	400	500	610	710	810	910	

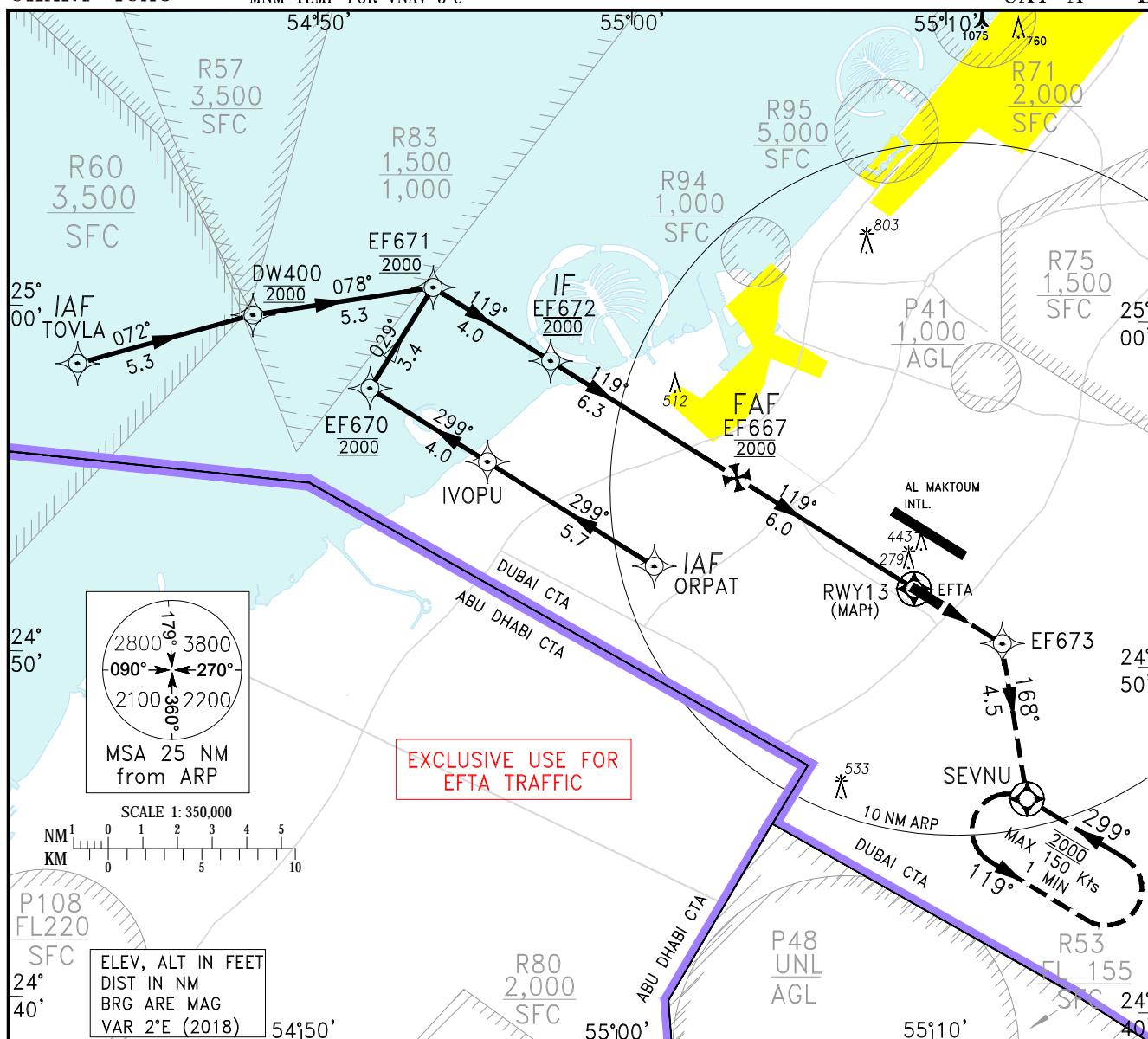
CHANGES: Revised Chart.

INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 171 FT
HEIGHTS RELATED TO
THR RWY 13 ELEV 155FT
MNM TEMP FOR VNAV 5°C

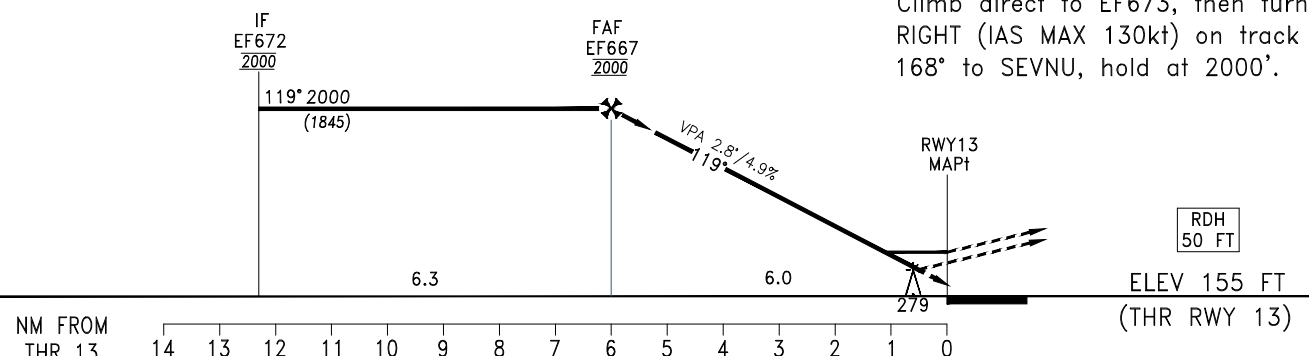
RDR 124.025
EFTA TWR 118.775


DUBAI/Al Maktoum Intl.
RNAV (GNSS) RWY 13
CAT A - B



TL FL150
TA 13000

MISSED APPROACH:
Climb direct to EF673, then turn
RIGHT (IAS MAX 130kt) on track
168° to SEVNU, hold at 2000'.



OCA/H		A	B										
Straight-in Approach	LNAV/VNAV MACG 3.50%	409(254)	421 (266)										
	LNAV MACG 3.50%	530 (375)											
Circling(1)		740 (569)											
(1) Circling not authorised N of the runway centreline					Distance from RWY13	NM	6.0	5.0	4.0	3.0	2.0	1.0	
					Altitude	FT	1990	1690	1390	1090	800	500	
					Ground Speed	KTS	80	100	120	140			
					Rate of Descent	FT/MIN	400	500	610	710			

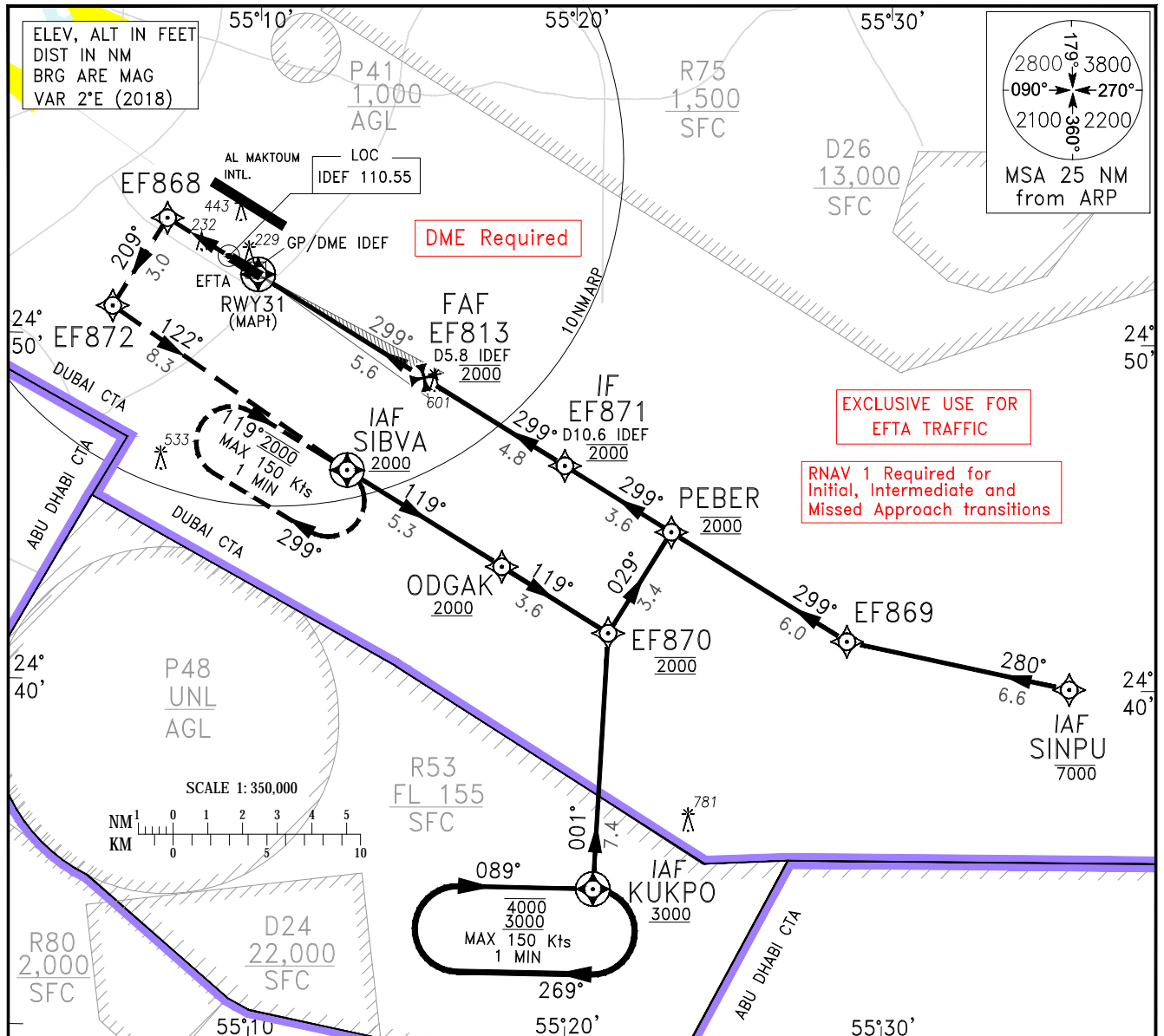
CHANGES: Revised Chart.

INSTRUMENT APPROACH CHART-ICAO

AD ELEV 171 FT
HEIGHTS RELATED TO
THR RWY 31 ELEV 155FT

RDR	124.025
EFTA TWR	118.775

DUBAI/AI Maktoum Intl.
ILS RWY 31
CAT A - B

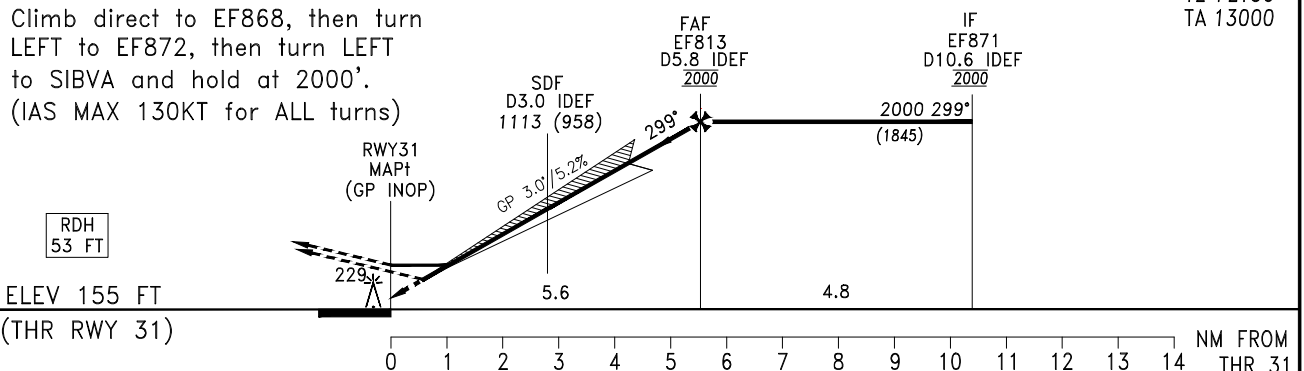



MISSED APPROACH:

Climb direct to EF868, then turn LEFT to EF872, then turn LEFT to SIBVA and hold at 2000'.
(IAS MAX 130KT for ALL turns)

(IAS MAX 130KT for ALL turns)

TL FL150
TA 13000



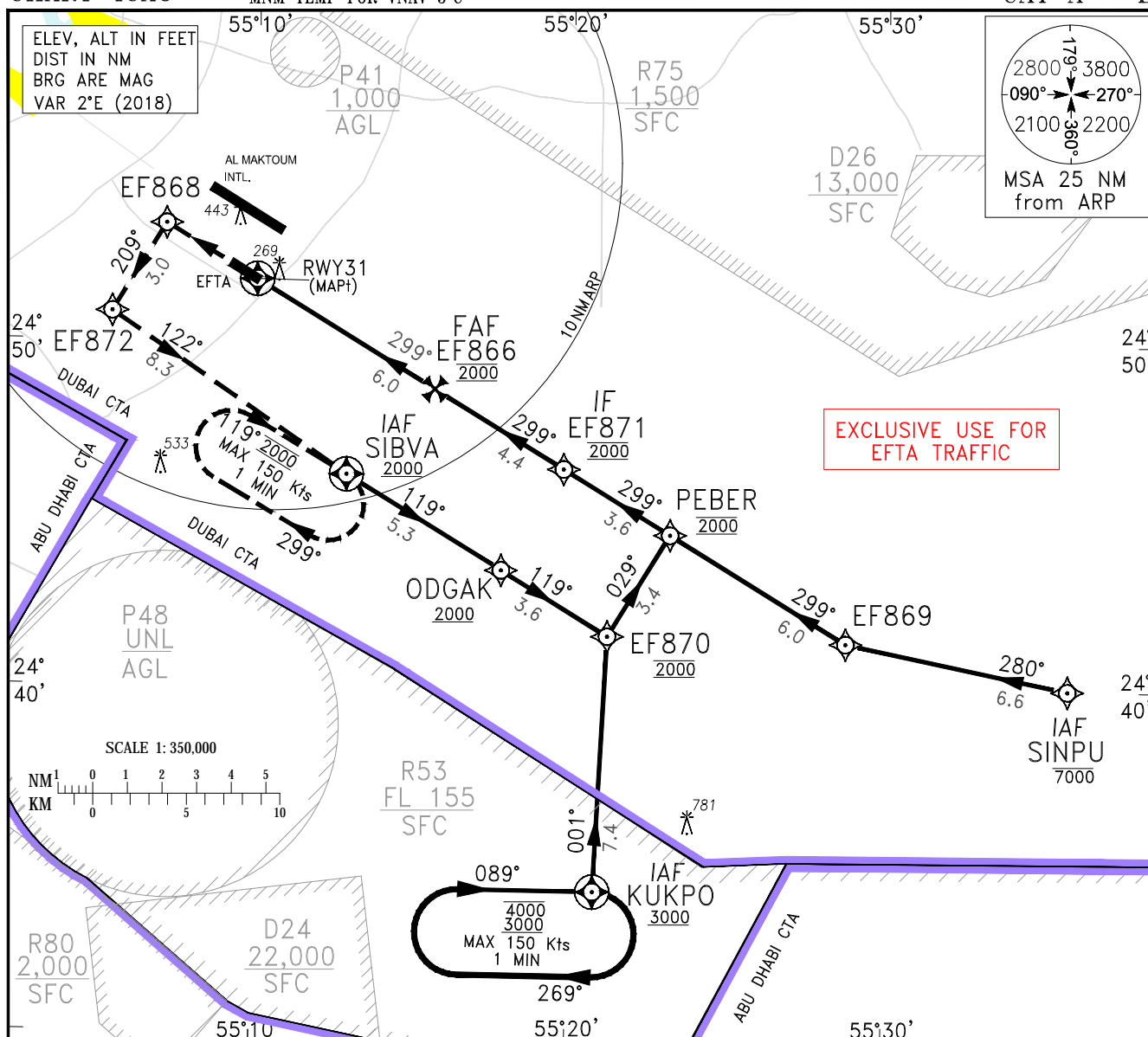
OCA/H		A		B							
Straight-in Approach	ILS CAT I	360 (205)	372 (217)								
	GP INOP	480 (325)									
Circling		740 (569)									
(1) Circling not authorised N of the runway centreline			Distance from IDEF		NM	5.8	4.8	3.8	2.8	1.8	0.8
			Altitude		FT	1990	1670	1350	1040	720	400
			Ground Speed		KTS	80	100	120	140		
			Rate of Descent		FT/MIN	420	530	630	740		

INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 171 FT
HEIGHTS RELATED TO
THR RWY 31 ELEV 155FT
MNM TEMP FOR VNAV 5°C

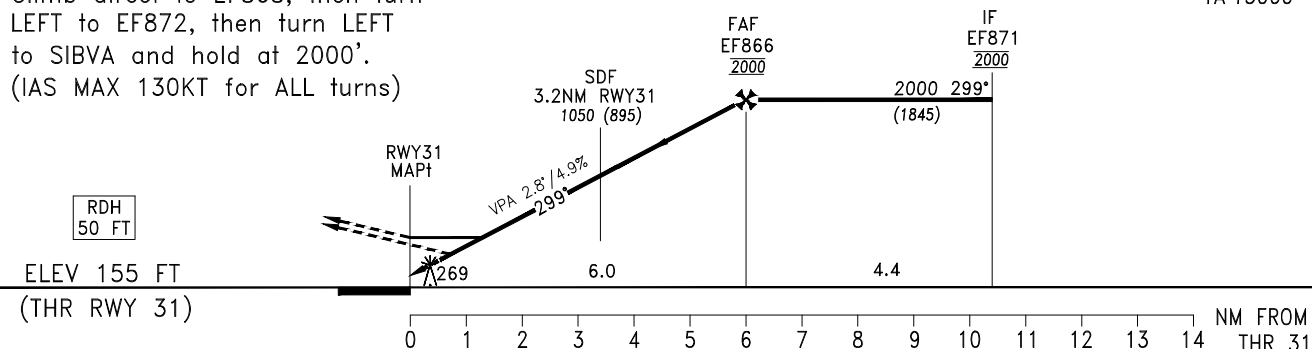
RDR	124.025
EFTA TWR	118.775


DUBAI/Al Maktoum Intl.
RNAV (GNSS) RWY 31
CAT A - B



MISSED APPROACH:
Climb direct to EF868, then turn
LEFT to EF872, then turn LEFT
to SIBVA and hold at 2000'.
(IAS MAX 130KT for ALL turns)

TL FL150
TA 13000



OCA/H		A		B									
Straight-in Approach	LNAV/VNAV MACG 4.00%	405 (250)	411 (256)										
	LNAV MACG 4.00%	520 (365)											
Circling		740 (569)											
(1) Circling not authorised N of the runway centreline				<div>No Circling</div> 		Distance from RWY31	NM	6.0	5.0	4.0	3.0	2.0	1.0
						Altitude	FT	1990	1690	1390	1090	800	500
						Ground Speed	KTS	80	100	120	140		
						Rate of Descent	FT/MIN	400	500	610	710		

CHANGES: Revised Chart.

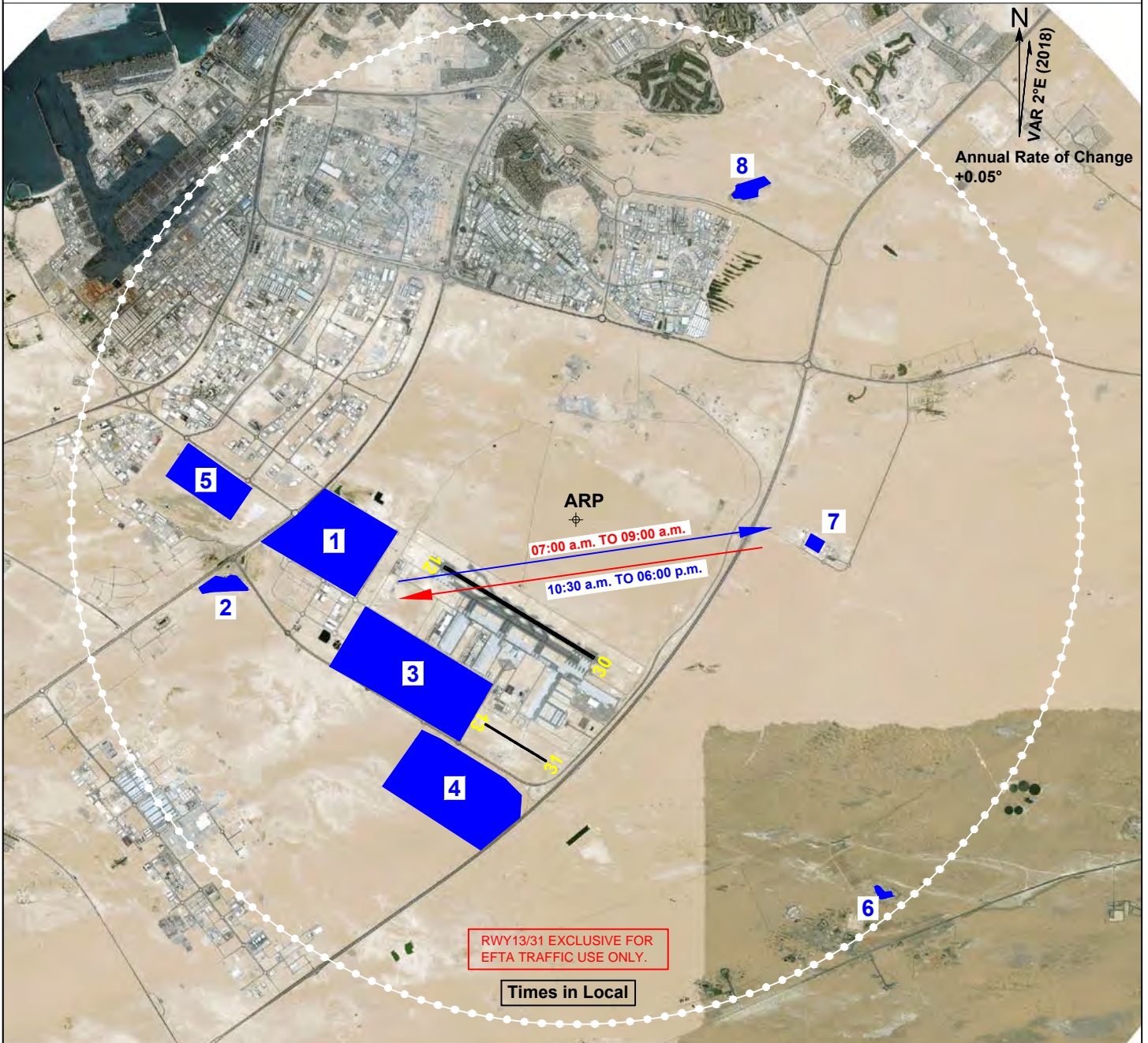
BIRD CONCENTRATION CHART

AIP UNITED ARAB EMIRATES

OMDW AD 2 - 85

BIRD CONCENTRATION CHART

DUBAI / Al Maktoum Intl.



LEGEND

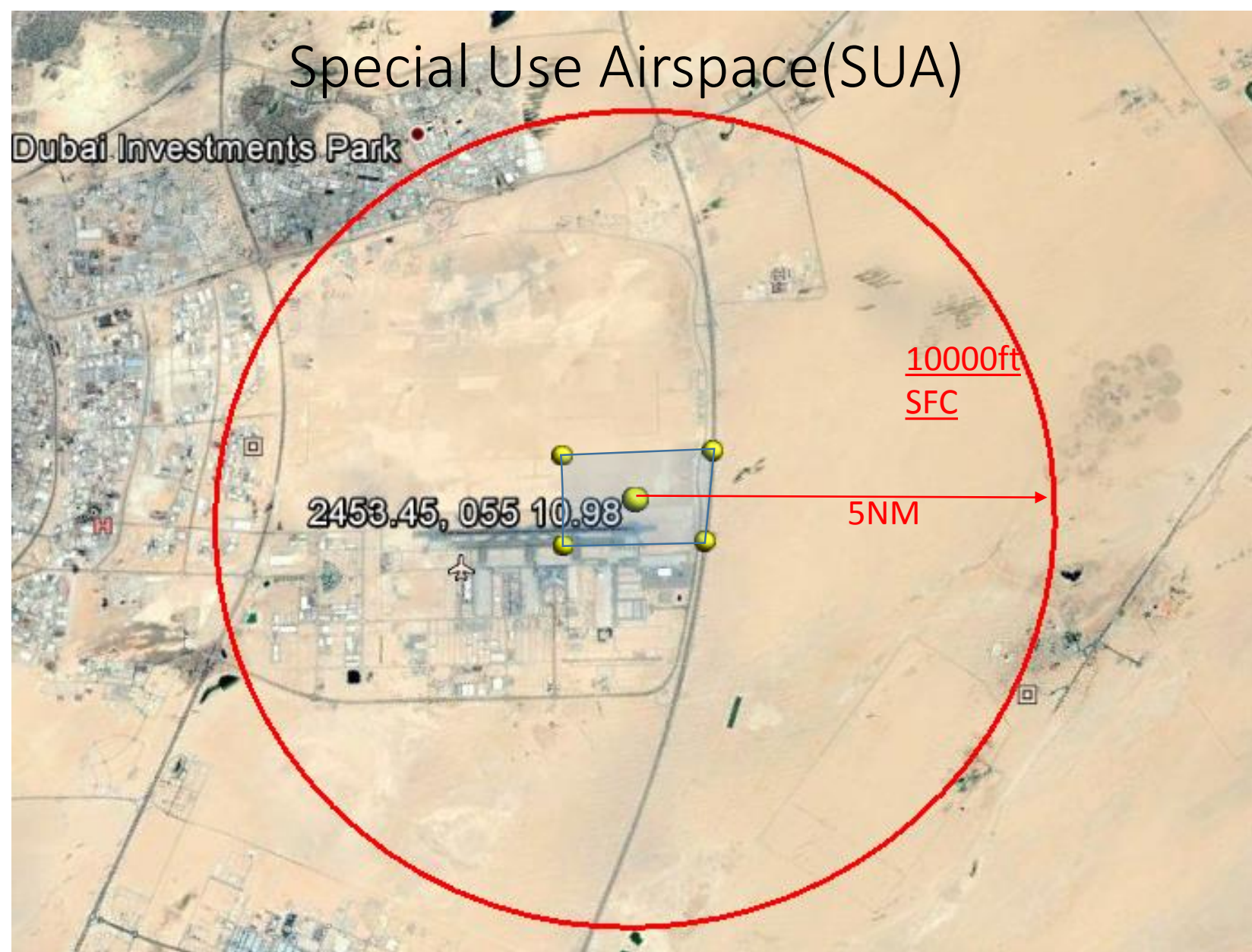
- 13 KM RADIUS FROM ARP
- SPECIAL BIRD HAZARD ZONE
- 1 DUBAI SOUTH HQ
- 2 DUBAI SOUTH WATER STORAGE PONDS
- 3 LOGISTICS CITY
- 4 EMAAR SOUTH
- 5 DUBAI MUNICIPALITY WASTE PLANT (DMWP)
- 6 SAIH AL SALAM LAKE
- 7 DEWA WASTE PLANT
- 8 DIP LAKE
- BIRD MOVEMENT

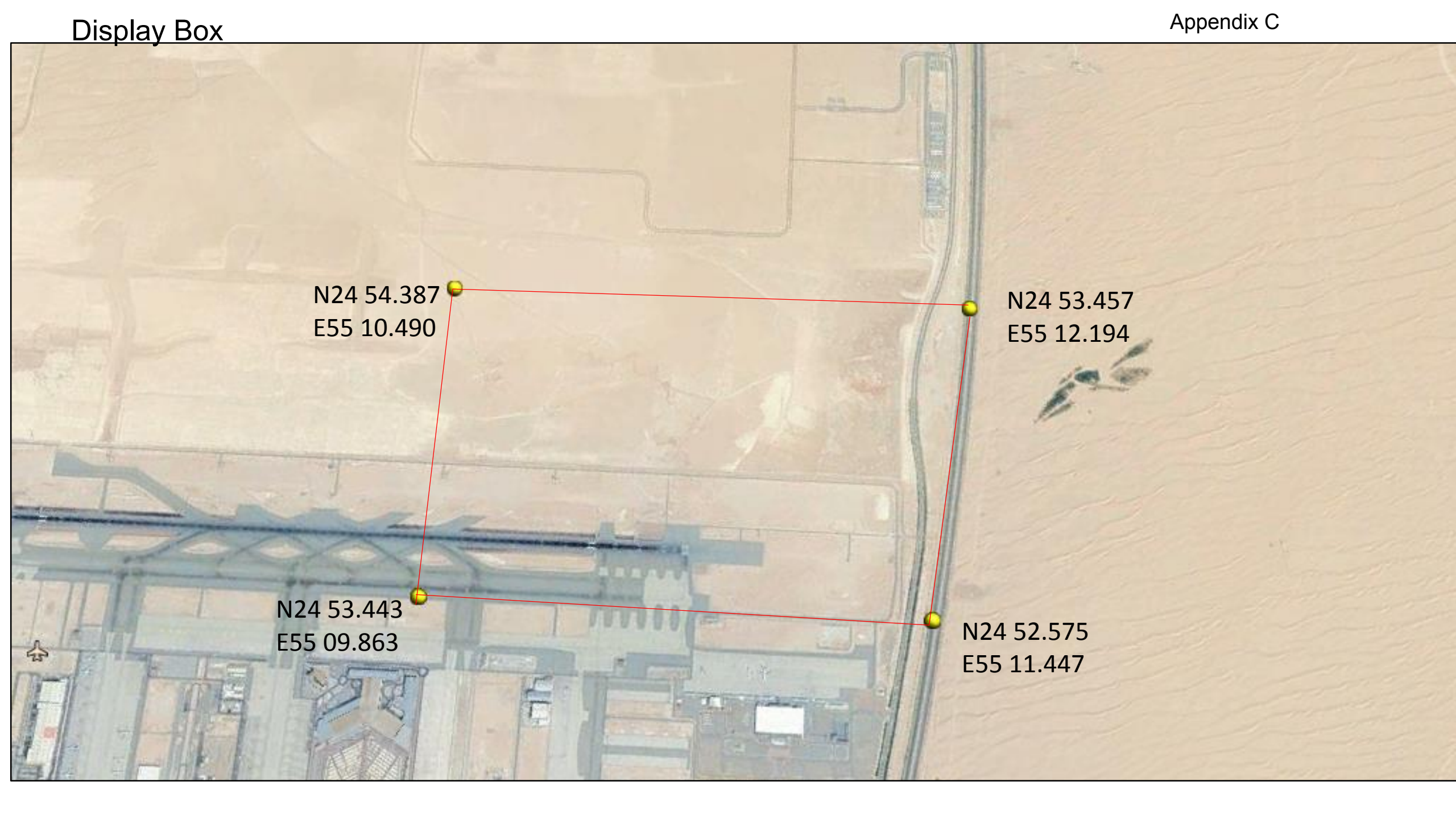
CHANGES: New Chart.

NOT TO SCALE

GENERAL CIVIL AVIATION AUTHORITY

AIRAC 06/2019 effective 23 MAY 19





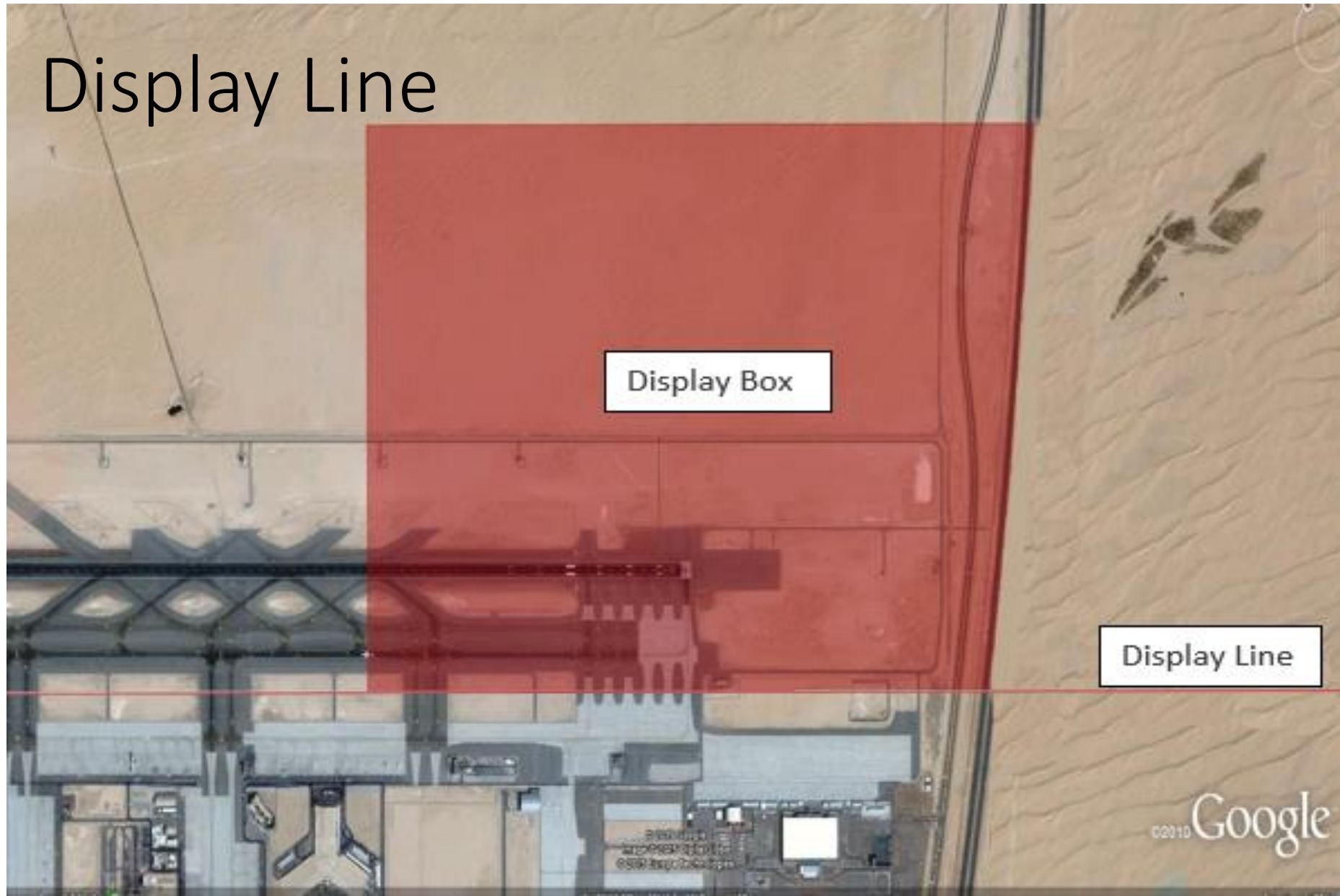
An aerial photograph of a desert landscape with a river and some buildings. A red quadrilateral is overlaid on the map, with its vertices marked by yellow dots. Each vertex is accompanied by a set of coordinates. The map also features a small airplane icon in the bottom left corner.

N24 54.387
E55 10.490

N24 53.457
E55 12.194

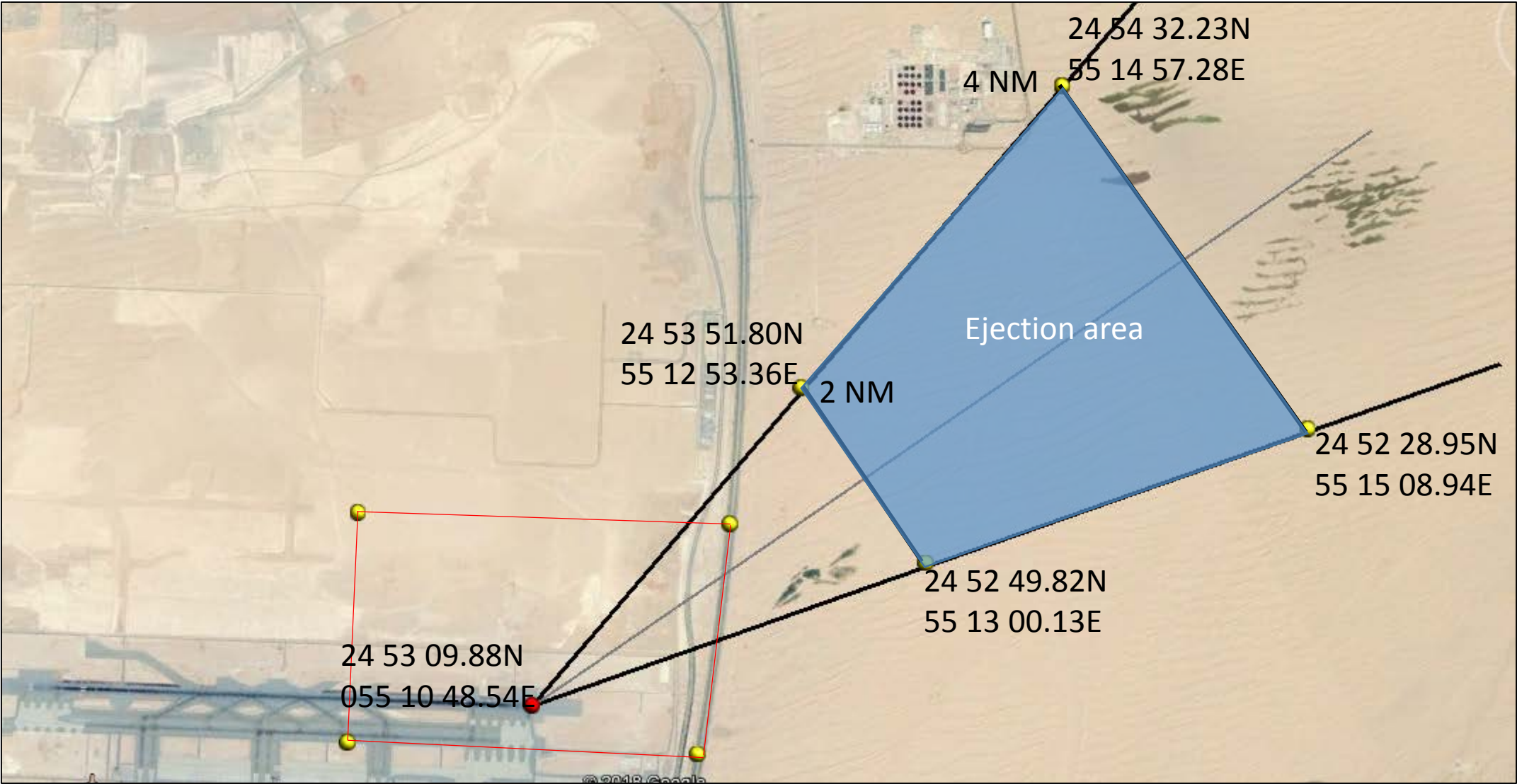
N24 53.443
E55 09.863

N24 52.575
E55 11.447



The reference point starts from OMDW 30 threshold between 070 and 100 bearing

Appendix D



Note: Ejection area is subject to change

Return by 10th September 2019

AIRCRAFT INFORMATION

A separate form must be completed in respect of each aircraft

A. EXHIBITOR

Exhibiting company or Unit _____ Tel _____

Address _____ Fax _____

24 hr Contact Person _____ Mobile _____

E-mail _____ Fax _____

B. APPLICATION

We apply to present the following aircraft at DUBAI AIRSHOW 2019 (tick as appropriate)

(a) In the Aircraft Static Display Park only ☐

(b) In the Aircraft Static Display Park and Flying Display ☐

(c) For customer demonstration flights in addition to (a) or (b) ☐

Aircraft Type _____ Weight Empty _____ (lb./kg)

Operating _____ (lb./kg)

Design Role _____ Registration No _____

Constructor's No _____

Engines Type and Number _____

Wing Span _____ (ft./metres) Tail Span _____ (ft./metres)

Overall Length _____ (ft./metres) Main Wheel Track _____ (ft./metres)

Arrival Date _____ Arrival Time _____

PLEASE NOTE outdoor space rates will apply to all equipment displays on the static park e.g. missiles/weapon systems etc, displayed with the aircraft. Please contact the sales team to book.

- Aircraft are required to be ready for positioning on the static park no later than 15th November 2019 at 9:00am. Aircraft arriving after this time cannot be guaranteed a position.**
- Aircraft are required to remain on the static park for the duration of the exhibition.**
- Aircraft will be positioned according to the Organisers decision.**

C. DECLARATION

We declare that:

- The aircraft will be maintained and serviced in accordance with its current schedules.
- Flying limitations for the aircraft have been defined and are known by the nominated pilots.
- Operation of the aircraft into and out of DUBAI will be controlled in a manner consistent with the airfield's operational facilities, characteristics and limitations.
- The nominated pilots will be appropriately qualified and proficient on the aircraft type, and will be capable of complying with the briefing and control instructions given in the English language.
- We have read the Organisers' Regulations governing the exhibition, presentation and flying of the aircraft and we hereby agree to be bound by the provisions thereof. We note and agree that, if exhibited, the aircraft will be exhibited for the whole period of Dubai Airshow: 17th November to 21st November 2019 (Please see Flying Regulations Manual for participation in the Flying Display).

Signed _____ Date _____

Name (in BLOCK CAPITALS) _____

Appointment: Company Chief Test Pilot/Director of Flight Operations _____

Continued Overleaf.....

D. ACCESS BY SAFETY SERVICES

Please attach a diagram showing the access and break-in points which rescue/safety services need to use in the event of an emergency.

Are ejector seats fitted? Please state type_____

E. TOWING (including positioning in the Aircraft Static Park)

Exhibitors must PROVIDE THEIR OWN TOW BAR or cables, steering arms, any special connections or adaptors and aircraft wheel chocks.

Please state any special ground handling instructions_____

F. RADIO EQUIPMENT

VHF ☐ UHF ☐ (tick as appropriate)

G. REFUELLING

Any special adaptors must be provided by the exhibitor

Please specify any special refueling instructions_____

Please note: For the supply of fuel, please see the Flying Regulations Manual.

H. ENGINE STARTING

Type of starting (State capacity of system in volts/amps/gallons/liters etc. as applicable)

Please state any special instructions required by Dubai World Central (DWC) Airport ground personnel:

I. OXYGEN

Please state quantity of oxygen required per day_____

Please note: For the supply of oxygen, please see the Flying Regulations Manual.

J. GALLEY AND TOILET SERVICES

Please state quantity of water required each day_____(gallons)

Please send a copy to the following address no later than Tuesday 10th September 2019 to:

**The Aircraft Manager
Dubai Airshow 2019
Tel: + 971 4 6033300
Fax: + 971 4 7017226
Email: aircraft@dubai.aero**



AIR 2

Return by: 10th September 2019

AIRCRAFT CLEARANCE AND FLIGHT DISPLAY

To be completed for ALL aircraft accepted for the Flying Display AND/OR Customer Demonstration Flights

PART ONE – AIRCRAFT CLEARANCE

A. EXHIBITOR

Exhibiting Company or Unit _____

Address _____

Person to Contact _____ Tel _____

Address (if different from above) _____ Fax _____

_____ Email _____

B. CIVIL AIRCRAFT

AIRCRAFT TYPE/NAME _____

Design Role _____ Registration No. _____

The above aircraft is registered as a CIVIL aircraft with:-

A NORMAL Certificate of Airworthiness issued pursuant to the Chicago Convention of 1944

OR Document Identification No. _____

A RESTRICTED Certificate of Airworthiness Document Identification No. _____

OR

A Flight Authorisation Document Document Identification No. _____

Issued by _____

Valid until _____

C. MILITARY AIRCRAFT

AIRCRAFT TYPE/NAME _____

Design Role _____ Registration No. _____

Constructors No. _____

The above aircraft is a MILITARY aircraft with:

Full Military Clearance ☐ Tick

OR as

Partial Military Clearance ☐ appropriate

Issued by _____

Valid until _____

D. ESTIMATED SAFE ENDURANCE AND RANGE OF AIRCRAFT

Capability in event of emergency diversion _____ minutes

_____ km

Continued overleaf

PART TWO – DISPLAY AND CUSTOMER DEMONSTRATION FLYING

E. DESCRIPTION OF PROPOSED MANOEUVRES – Take off to landing (Flying display AND Customer Demonstration Aircraft)

To include all linking manoeuvres maximum and minimum speeds, configurations and accelerometer (g meter) readings involved, and altitude envelope required for display (normal maximum 9000' AGL)

1. Fine Weather

Minimum required Cloud Base _____ feet

Minimum required Visibility _____ km

2. Bad Weather (Cloud Base 3,000 feet or below)

Minimum required Cloud Base _____ feet

Minimum required Visibility _____ km

NOTE: Add sketch of manoeuvres on separate page if necessary

Continued overleaf

F. AIR DISPLAY AIRCRAFT ONLY

1. The Airworthiness Certificate (Military or Civil) permits the following manoeuvres – (delete those not permitted).
 - Gentle manoeuvres, steep turns and wing-overs.
 - Barrel/Aileron/Slow Roll(s)
 - Flick rolls
 - Loops
 - Sustained inverted flight
 - Stalls
 - Spins
2. Are consecutive rolls allowed? Yes/No. If “Yes”, which type
 - Barrel
 - Aileron
 - Slow
 - Flick

G. QUALIFICATIONS OF NOMINATED PILOTS

NAME	Company Unit	Appointment Rank	Type of Licence/ Authority to fly	Total hours in Command	Total hours on Type
1.					
2.					
3.					

NOTE: Evidence of previous 90 days flying must be produced to the FCC on arrival

H. DECLARATION

We declare that:

1. The aircraft will be presented for the total period of DUBAI Airshow November 17th to 21st November 2019 inclusive.
2. The manoeuvres described in Sections E and F are within the normal and proved operating limits of this aircraft and within its design role.

Their sequence and that of the associated linking manoeuvres may be changed at the discretion of the authorised pilot (shown with a star at Section G) and with the approval of the Flying Control Committee but no others will be substituted or added.
3. The nominated pilots are currently proficient on the aircraft and are competent to perform the display manoeuvres described.
4. The pilots have been briefed on the Organisers’ Regulations governing the exhibition, presentation and flying of aircraft at DUBAI Airshow and have been instructed to abide by them and to accept the rulings of the Flying Control Committee

Signed _____

Name (in BLOCK CAPITALS) _____ Chief Test Pilot OR
Director of Flight

Operations
Position held _____

Company _____

Date _____

Continued overleaf

PART THREE – ENDORSEMENT AND APPROVAL

I. ENDORSEMENT

Endorsement by the appropriate Authority of the State of Registry that the particulars in Section B/C are correct and that the manoeuvres described in Section E and F are within the normal and proved operating limits of this aircraft and within its design role.

Signed _____

Name (in BLOCK CAPITALS) _____

Position held _____

National Authority _____

National
Authority
Official Stamp

J. APPROVAL – FOR OFFICIAL USE ONLY

1. On the basis of the foregoing certification and endorsement, approval is given for the above designated aircraft to participate in the DUBAI Airshow Flying Display and/or to give Customer Demonstration Flights.

Endorsement for Military Aircraft _____ Endorsement for Civil aircraft _____

Chairman FCC _____ DCA Dubai _____

Date _____ Date _____

2. Flying display aircraft only

Preliminary demonstrations witnessed and approved.

Signed _____
Chairman, Flying Control Committee

Date _____

Please send a copy to the following address no later than Tuesday 10th September 2019 to:

The Aircraft Manager
Dubai Airshow 2019
Tel: + 971 4 6033300
Fax: + 971 4 7017226
E-mail: aircraft@dubai.aero



AIR 3

Return by: 10th September 2019

AIRCRAFT MAINTENANCE PARK STORAGE CABINS

Exhibiting Company Name _____

Address _____

Name of Director of Flying Operations _____

Telephone _____ Fax _____ Email _____

ORDER FORM FOR STORAGE CABINS

- A limited number of storage cabins are available only to companies displaying aircraft in the flying demonstration.
- The cabins are 40' air-conditioned lockable units positioned in the Aircraft Maintenance Park and are available for hire from 6th November – 21st November 2019.
- Furniture and telecommunication lines are not included and may be ordered through the on-site services office (details in the Exhibitors Information Manual)

- **Cost of Hire US\$4,410 per cabin (inclusive of 5% VAT) required**
(6th November – 21st November 2019)

Please indicate the number of containers

Payment Details:

- ☐ **PAYMENT IN FULL MUST ACCOMPANY THIS ORDER**
- ☐ **PAYMENT MAY BE MADE TO F&E LLC FZE BY CREDIT CARD, CHEQUE OR INTERNATIONAL DRAFT**

By Draft: All charges must be paid by remitter direct to:

HSBC Bank Middle East
Building No. 5, Emaar Square,
P.O. Box 502601
Dubai
United Arab Emirates

Account Name: F&E LLC FZE
Account No : 026-333765-100
Int'l Swift Code: BBMEAEAD
IBAN: AE780200000026333765100

Email address for remittance advice: Ms. Anne Riedell - ariedell@tarsus.co.uk

By Credit Card: Please fax a clear copy of the Credit Card (front & back) to be debited to the address below:

Credit Card Details	
Please Debit my (name of card) _____	
(Diners Card and AMEX not accepted)	
Card No. _____	Expiry Date _____
Issue No _____	Amount US\$ _____
Name of Card Holder (as shown on card) _____	
I, the card holder will honour this transaction and not hold F&E LLC FZE responsible if the Credit Card account number has been compromised.	
Card Holders Signature _____	Date: _____

Please send a copy to the following address no later than Tuesday 10th September 2019 to:

Operations Team

Dubai Airshow **Tel: + 971 4 6033300**
P O Box 371391 **Fax: + 971 4 7017226**
Dubai, UAE **e-mail: operations@dubai.aero**

See overleaf to order Aircraft Maintenance Park Passes

ORDER FORM FOR AIRCRAFT MAINTENANCE PARK PASSES

Exhibitors who have ordered storage cabins will require Aircraft Maintenance passes for their air and maintenance crew. **These passes must be worn with the Exhibitor badge** which can be ordered online (see Online Exhibitor System).

Exhibitors should be aware that the Aircraft Maintenance Park is within Dubai World Central (DWC) and that, in order to maintain a high level of security, the number of passes should be limited to essential personnel only. Loss of a pass should be reported immediately to the Organisers Office.

The maximum number of maintenance passes is 20 per aircraft

Please complete and return to the address below:

Name	Position/Appointment

Please send a copy to the following address no later than Thursday 10th September 2019 to:

Operations Team

Dubai Airshow

P O Box 371391

Dubai, UAE

Tel: + 971 4 6033300

Fax: + 971 4 7017226

e-mail: operations@dubai.aero



AIR 4

Return by 10th September 2019

CONFIRMATION OF AIRCRAFT INSURANCE

TO BE RETURNED BY ALL EXHIBITORS PRESENTING AIRCRAFT

****Exhibitors should request their insurance companies to complete this form & return it stamped & signed, to the organisers before the date stated above.***

Name of Exhibitor _____

Name of Insurer/Authorised Broker _____

Address of Insurer/Authorised Broker _____

We, being Insurers/Authorised Brokers, confirm that insurance has been effected by the above-named Exhibitor as detailed below:

- a) Third Party Risks (including passengers) Insurance has been effected by the Exhibitor in accordance with Regulations as detailed overleaf.
- b) Each of F&E LLC FZE and Tarsus Group plc, (as Organisers), and Dubai Airports Corporation, its servants and or agents, have been added as an additional insured or for the purpose of compliance with the IMPORTANT NOTICE overleaf, such addition being limited to the period of the Exhibitor's participation in the Exhibition.
- c) The wording of the Appendix to the Exhibition Regulations overleaf is incorporated in the policy as required under Regulation X.1 of the General Conditions and Regulations.
- d) The total limit of the above Exhibitor's existing Third Party Risks Insurance is: US\$ _____
- e) The limit of the above Exhibitor's Third Party Risks (including passengers) Insurance in respect of their participation in DUBAI 2019 is: US\$ _____
(Minimum US\$50,000,000 Fifty Million US Dollars).
- f) The insurance above referred to has been effected in respect of the entirety of the period of the Exhibitor's attendance and presence at the site of the Exhibition and participation or involvement in the DUBAI Airshow Exhibition to take place between 17th – 21st November 2019 inclusive together with all and any period prior to or after those dates during which The Exhibitor shall be flying to, at, or from the Exhibition.
- g) We acknowledge that provision of the insurance above referred to is a condition of the Organisers, breach of which will prevent participation by the Exhibitor at the Exhibition and further that the Organisers shall and do rely upon the accuracy in all material respects of this Certificate.

Company Stamp of Insurer/Broker:

Signed _____ Date _____

Please send a copy to the following address no later than Tuesday 10th September 2019 to:

The Aircraft Manager

Dubai Airshow

P O Box 371391

Dubai, UAE

Tel: + 971 4 6033300

Fax: + 971 4 7017226

e-mail: aircraft@dubai.aero

Continued overleaf

GENERAL CONDITIONS AND REGULATIONS
Insurance in connection with the presentation of aircraft

X.1. Requirements

Exhibitors are required to effect their own Third Party (including passengers) Insurance, to which each of FZE LLC FZE and Tarsus Group plc, as Organisers, Dubai Airports Corporation, its servants and or agents must be added as an additional insured. No claim by way of subrogation shall be made under any such policy in any circumstances against the Organisers or against Dubai Airports Corporation, its servants and or agents. The policy must incorporate the wording shown in the Appendix of these Regulations. The limit of the Insurance must be whichever is the higher of:-

- a) The total limit of the Exhibitors existing Third Party (including passengers) Insurance. OR
- b) Not less than **US\$50,000,000** for any one accident.

X.2. Confirmation

Exhibitors are required to submit to the organisers on FORM AIR 4 by not later than **10th September 2019** confirmation from their insurers or authorised insurance Brokers that the Exhibitor's liability has been insured in accordance with Regulation X.1. specifying the limit, and that the policy includes the wording of the APPENDIX to this section.

Note: Where an exhibitor has a stand or chalet, his Third Party risks in respect thereof must be insured in accordance with the requirement of General Condition 13 and 14 as shown on the Exhibition and Chalet Space Application Forms. See also Exhibitors Information Manual.

- X.3.** Attention is drawn to the fact that Exhibitors who borrow aircraft, engines, instruments, accessories, or parts from a Government Department may additionally be required under the terms of any Loan Agreement to effect specific insurances with which all Exhibitors concerned must comply.

APPENDIX
IMPORTANT NOTICE
Wording to be incorporated in the Insurance Policy:

IT IS HEREBY UNDERSTOOD AND AGREED THAT in connection with the Exhibition and Flying Display organised by F&E LLC FZE to be held in November 2019.

- 1) Subject to the policy coverage and the policy limits the Insurers shall indemnify the Insured and each of FZE LLC FZE, Tarsus Group plc and Dubai Airports Corporation, its servants and or agents, against public liability as well as against liability arising under any regulations incorporated in any agreement between the Insured and FZE LLC FZE, Tarsus Group plc and Dubai Airports Corporation, its servants and or agents and also under any Loan Agreement with any Government Department, but excluding:
 - a) Loss or damage to the aircraft loaned
 - b) Any charge for the loan of the aircraft
- 2) No tickets of admission shall be required to contain any disclaimer of liability.
- 3) In respect of accidents arising whilst the insured aircraft are operating from Dubai International Airport during the period of the Exhibition or whilst the aircraft are flying between their home base and Dubai 'en route' to participate in the Exhibition or returning to base from the Exhibition if any Third Party suffers death, bodily injury anywhere and caused by an aircraft insured by this policy THE INSURERS WITHOUT RAISING AS A DEFENCE:
 - c) That the Insured were not legally the owners of any aircraft loaned to the Insured, **OR**
 - d) That spectators voluntarily accept the risk of injury or damage or are in any worse legal position than ordinary wayfarers, **OR**
 - e) Any other purely technical defence

WILL PAY:

Compensation in respect of any one person up to an amount not exceeding **US\$200,000** which in the opinion of Leading Counsel mutually agreed between the Insurers and the Insured is adequate taking into consideration any contributory negligence.

PROVIDED THAT:

If any Third Party refuses to accept the amount of compensation offered then the Insurers shall be free to raise any defence to such claim and thereafter if such defence succeeds Insurers shall not be liable under the Policy to make any payment in respect of that Claimant.

- 4) Notwithstanding the limit of **US\$200,000** applicable to automatic compensation payments under the provision of clause 3 above, the amount of indemnity payable under this memorandum for sums which the Insured may become legally liable to pay in respect of any one person will be unlimited but always subject to the maximum limit of indemnity stated in the Policy as payable in respect of any one accident or occurrence.
- 5) Except as expressly stated this endorsement is subject to the terms and conditions of the Policy.

Note: Regulations X.1. and X.3. require the inclusion of this endorsement in the Exhibitor's Insurance Policy and written confirmation from the Insurers or authorised brokers that the Organisers' requirements have been met



AIR 5

Return by: 10th September 2019

AIRCRAFT SECURITY FENCING

Exhibiting Company Name _____

Address _____

Name of Director of Flying Operations _____

Telephone _____ Fax _____ Email _____

ORDER FORM FOR AIRCRAFT SECURITY FENCING

The aircraft park will not be fenced off to visitors. Exhibitors wishing to fence off their aircraft may order fence below:

- Cost of fencing per linear metre per week US\$47.25 (inclusive of 5% VAT)

Please indicate the length of fencing required for ____ week(s)

metres

Payment Details:

- ☐ PAYMENT IN FULL MUST ACCOMPANY THIS ORDER
- ☐ PAYMENT MAY BE MADE TO F&E LLC FZE BY CREDIT CARD, CHEQUE OR INTERNATIONAL DRAFT

By Draft: All charges must be paid by remitter direct to:

HSBC Bank Middle East
Building No. 5, Emaar Square,
P.O. Box 502601
Dubai
United Arab Emirates

Account Name: F&E LLC FZE
Account No : 026-333765-100
Int'l Swift Code: BBMEAAD
IBAN: AE780200000026333765100

Email address for remittance advice: Ms. Anne Riedell - ariedell@tarsus.co.uk

By Credit Card: Please fax a clear copy of your Credit Card (front & back) to be debited to the address below:

Credit Card Details

Please Debit my (name of card) _____
(Diners Card and AMEX not accepted)

Card No. _____ Expiry Date _____

Issue No _____ Amount US\$ _____

Name of Card Holder (as shown on card) _____

I, the card holder will honour this transaction and not hold F&E LLC FZE responsible if the Credit Card account number has been compromised.

Card Holders Signature _____ Date: _____

Operations Team
Dubai Airshow
P O Box 371391
Dubai, UAE

Tel: + 971 4 6033300
Fax: + 971 4 7017226
e-mail: operations@dubai.aero