MACAO SPECIAL ADMINISTRATIVE REGION
PEOPLE REPUBLIC OF CHINA
CIVIL AVIATION AUTHORITY

Postal Address:	Alameda Dr. Carlos D'Assumpção, 336-342 Centro Comercial Cheng Feng, 18 ºandar Macao, China
AFTN ADDRESS:	VMMCYAYX
TELEPHONE NUMBER:	(853) 2851 1213
FAX NUMBER:	(853) 2833 8089
E-MAIL:	aacm@aacm.gov.mo

AIP MACAO
AMDT 45
13 JUL 2023

1. Significant Information and Changes :

This regular amendment is to incorporate information contained in the AIP Supplement and update the gerneral information.

2. Destroy the following pages and/or charts on implementation date		3. Insert the following new pages and/or charts on implementation date	
GEN		GEN	
0.4-1/2	23 FEB 23/23 FEB 23	0.4-1/2	13 JUL 23/13 JUL 23
1.6-1/2	19 NOV 20/24 FEB 22	1.6-1/2	13 JUL 23/13 JUL 23
1.6-3/4	23 MAY 19/16 JUN 22	1.6-3/4	23 MAY 19/13 JUL 23
1.6-5/6	01 DEC 22/01 DEC 22	1.6-5/6	13 JUL 23/01 DEC 22
1.6-7/8	01 DEC 22/01 DEC 20	1.6-7/8	13 JUL 23/13 JUL 23
		1.6-9/-	13 JUL 23/-
3.1-3/4	01 FEB 07/16 JUN 22	3.1-3/4	01 FEB 07/13 JUL 23
3.6-1/2	16 JUN 22/11 JUN 15	3.6-1/2	13 JUL 23/11 JUN 15
AD		AD	
1.2-1/-	02 JAN 97/-	1.2-1/-	13 JUL 23/-
2 – VMMC – 3/4	11 AUG 11/17 JUN 21	2 – VMMC – 3/4	13 JUL 23/17 JUN 21
2 – VMMC – 13/14	23 MAY 19/02 MAR 17	2 – VMMC – 13/14	13 JUL 23/13 JUL 23
2 – VMMC – 15/16	02 MAR 17/23 MAY 19	2 – VMMC – 15/16	02 MAR 17/13 JUL 23
2 – VMMC – 17/18	02 MAR 17/02 MAR 17	2 – VMMC – 17/18	13 JUL 23/13 JUL 23
2 – VMMC – 19/20	02 MAR 17/18 APR 13	2 – VMMC – 19/20	02 MAR 17/13 JUL 23
2 – VMMC – 25/26	17 APR 14/27 JAN 22	2 – VMMC – 25/26	13 JUL 23/27 JAN 22
2 – VMMC – 52/-	24 FEB 22/-	2 – VMMC – 52/-	13 JUL 23/-
2 – VMMC – 53/-	23 MAY 19/-	2 – VMMC – 53/-	13 JUL 23/-

4. INCORPORATE the following manuscript amendments :

NIL

5. Record entry of Amendment on page GEN 0.2 – 1

6. This Amendment incorporates information contained in the following AIP Supplement and/or NOTAM :

AIP Supplement: 06/20
NOTAM: NIL

GEN 0.4 CHECKLIST OF AIP PAGES

PART 1 - GENERAL (GEN)

GEN 0

0.1-1	01 FEB 07
0.1-2	01 FEB 07
0.1-3	01 FEB 07
0.2-1	11 JUN 15
0.3-1	02 JAN 97
0.4-1	13 JUL 23
0.4-2	13 JUL 23
0.5-1	02 JAN 97
0.6-1	05 APR 01
0.6-2	05 APR 01
0.6-3	02 JAN 97

GEN 1

1.1-1	20 FEB 14
1.1-2	20 FEB 14
1.1-3	16 JUN 22
1.2-1	16 JUN 22
1.2-2	24 NOV 16
1.2-3	24 NOV 16
1.2-4	24 NOV 16
1.2-5	24 NOV 16
1.2-6	24 NOV 16
1.3-1	24 NOV 16
1.3-2	24 NOV 16
1.3-3	24 NOV 16
1.3-4	24 NOV 16
1.3-5	24 NOV 16
1.3-6	24 NOV 16
1.3-7	24 NOV 16
1.3-8	24 NOV 16
1.3-9	20 FEB 14
1.3-10	20 FEB 14
1.4-1	19 NOV 20
1.4-2	19 NOV 20
1.5-1	19 NOV 20
1.6-1	13 JUL 23
1.6-2	13 JUL 23
1.6-3	23 MAY 19
1.6-4	13 JUL 23
1.6-5	13 JUL 23
1.6-6	01 DEC 22
1.6-7	13 JUL 23
1.6-8	13 JUL 23
1.6-9	13 JUL 23
1.7-1	16 JUN 22
1.7-2	01 DEC 22
1.7-3	01 DEC 22
1.7-4	24 FEB 22

GEN 2

2.1-1	27 MAR 08
2.1-2	27 MAR 08
2.2-1	02 JAN 97
2.2-2	02 JAN 97
2.2-3	02 JAN 97
2.2-4	02 JAN 97
2.2-5	02 JAN 97
2.2-6	02 JAN 97
2.2-7	16 JUN 22
2.2-8	02 JAN 97
2.2-9	26 APR 18
2.3-1	30 JUL 98
2.4-1	25 JUL 02
2.5-1	20 FEB 14
2.6-1	02 JAN 97
2.6-2	02 JAN 97
2.7-1	30 JUL 98
2.7-2	02 JAN 97

GEN 3

3.1-1	26 APR 18
3.1-2	01 DEC 22
3.1-3	01 FEB 07
3.1-4	13 JUL 23
3.1-5	16 JUN 22
3.1-6	16 JUN 22
3.1-7	16 JUN 22
3.2-1	01 FEB 07
3.2-2	01 FEB 07
3.2-3	20 MAR 14
3.3-1	11 AUG 11
3.3-2	26 APR 18
3.4-1	26 APR 18
3.4-2	11 AUG 11
3.4-3	12 JUL 12
3.4-4	12 JUL 12
3.4-5	10 FEB 00
3.4-6	02 JAN 97
3.5-1	20 FEB 14
3.5-2	20 MAR 14
3.5-3	20 FEB 14
3.5-4	20 MAR 14
3.5-5	23 NOV 17
3.5-6	23 NOV 17
3.5-7	23 NOV 17
3.6-1	13 JUL 23
3.6-2	11 JUN 15
3.6-3	11 JUN 15
3.6-5	10 FEB 00

GEN 4

4.1-1	01 FEB 07
4.1-2	01 FEB 07
4.1-3	18 APR 13
4.1-4	18 APR 13
4.2-1	02 JAN 97

PART 2 - EN-ROUTE (ENR)

ENR 0

0.6-1	02 JAN 97
0.6-2	02 JAN 97

ENR 1

1.1-1	01 FEB 07
1.1-2	01 FEB 07
1.2-1	01 FEB 07
1.2-2	04 JAN 18
1.3-1	01 FEB 07
1.4-1	05 APR 01
1.5-1	24 JUN 04
1.5-2	24 JUN 04
1.5-3	24 JUN 04
1.6-1	11 AUG 11
1.7-1	10 FEB 00
1.7-2	30 JUL 98
1.8-1	02 JAN 97
1.9-1	02 JAN 97
1.10-1	01 DEC 22
1.10-2	16 JUN 22
1.11-1	23 APR 20
1.12-1	24 FEB 22
1.12-2	24 FEB 22
1.12-3	24 FEB 22
1.13-1	12 JUL 12
1.14-1	01 FEB 07
1.14-2	01 FEB 07
1.14-3	01 FEB 07
1.14-4	01 FEB 07
1.14-5	01 FEB 07
1.14-7	17 APR 14
1.14-8	17 APR 14
1.14-9	17 APR 14
1.14-10	17 APR 14
1.14-11	17 APR 14

ENR 2

2.1-1	25 FEB 10
2.2-1	02 JAN 97

ENR 3

3.1-1	02 JAN 97
3.2-1	02 JAN 97
3.3-1	02 JAN 97
3.4-1	08 SEP 22
3.4-2	08 SEP 22
3.4-2A	28 JAN 21
3.4-3	08 SEP 22
3.4-3A	19 NOV 20

3.4-4	28 JAN 21
3.4-5	28 JAN 21
3.5-1	02 JAN 97
3.6-1	02 JAN 97
ENR 4	
4.1-1	02 JAN 97
4.2-1	02 JAN 97
4.3-1	02 JAN 97
4.4-1	04 JAN 18
ENR 5	
5.1-1	04 JAN 18
5.2-1	02 JAN 97
5.3-1	02 JAN 97
5.4-1	02 JAN 97
5.5-1	02 JAN 97
5.6-1	02 JAN 97
ENR 6	
6-1	02 JAN 97
PART 3 - AERODROMES (AD)	
AD 0	
0.6-1	16 JUL 20
0.6-2	20 MAR 14
0.6-3	20 MAR 14
AD 1	
1.1-1	15 JUL 10
1.1-2	11 AUG 11
1.1-3	26 APR 18
1.2-1	13 JUL 23
1.3-1	02 JAN 97
1.4-1	02 JAN 97
1.5-1	16 JUL 20
AD 2	
2 - VMMC - 1	26 APR 18
2 - VMMC - 2	23 MAY 17
2 - VMMC - 3	13 JUL 23
2 - VMMC - 4	17 JUN 21
2 - VMMC - 5	20 MAR 14
2 - VMMC - 6	24 MAY 18
2 - VMMC - 7	24 MAY 18
2 - VMMC - 8	23 FEB 23
2 - VMMC - 9	23 FEB 23
2 - VMMC - 10	01 FEB 07
2 - VMMC - 11	01 FEB 07
2 - VMMC - 12	01 FEB 07
2 - VMMC - 13	13 JUL 23
2 - VMMC - 14	13 JUL 23
2 - VMMC - 15	02 MAR 17
2 - VMMC - 16	13 JUL 23
2 - VMMC - 17	13 JUL 23
2 - VMMC - 18	13 JUL 23
2 - VMMC - 19	02 MAR 17
2 - VMMC - 20	13 JUL 23
2 - VMMC - 21	18 APR 13
2 - VMMC - 22	18 APR 13
2 - VMMC - 23	18 APR 13
2 - VMMC - 24	28 MAR 19
2 - VMMC - 25	13 JUL 23
2 - VMMC - 26	27 JAN 22
2 - VMMC - 27	18 APR 13
2 - VMMC - 50	23 MAY 19
2 - VMMC - 51	03 MAY 01
2 - VMMC - 52	13 JUL 23
2 - VMMC - 53	13 JUL 23
2 - VMMC - 54	04 JAN 18
2 - VMMC - 55	04 JAN 18
2 - VMMC - 56	02 JAN 97
2 - VMMC - 57	23 FEB 23
2 - VMMC - 57 A	27 JAN 22
2 - VMMC - 57 B	23 FEB 23
2 - VMMC - 57C	28 MAR 19
2 - VMMC - 58	28 JAN 21
2 - VMMC - 59	23 FEB 23
2 - VMMC - 60	23 FEB 23
2 - VMMC - 60 C	23 FEB 23
2 - VMMC - 60 D	27 JAN 22
2 - VMMC - 60 E	23 FEB 23
2 - VMMC - 60 F	20 FEB 14
2 - VMMC - 61	27 JAN 22
2 - VMMC - 62	04 JAN 18
2 - VMMC - 62 A	24 FEB 22
2 - VMMC - 62 B	04 JAN 18
2 - VMMC - 62 C	27 JAN 22
2 - VMMC - 62 D	23 APR 20
2 - VMMC - 62 E	24 FEB 22
2 - VMMC - 62 F	04 JAN 18
2 - VMMC - 62 G	27 JAN 22
2 - VMMC - 62 H	04 JAN 18
2 - VMMC - 62 I	27 JAN 22
2 - VMMC - 62 J	04 JAN 18
2 - VMMC - 63	23 FEB 23
2 - VMMC - 63 A	23 FEB 23
2 - VMMC - 64 A	23 FEB 23
2 - VMMC - 64 B	27 JAN 22
2 - VMMC - 64 C	27 JAN 22
2 - VMMC - 64 D	20 FEB 14
2 - VMMC - 64 E	27 JAN 22
2 - VMMC - 64 F	27 JAN 22
2 - VMMC - 64 G	27 JAN 22
2 - VMMC - 64 H	19 SEP 13
2 - VMMC - 65	23 FEB 23
2 - VMMC - 65 A	23 FEB 23
2 - VMMC - 66 A	23 FEB 23
2 - VMMC - 66 B	23 FEB 23
2 - VMMC - 66 C	27 JAN 22
2 - VMMC - 66 D	27 JAN 22
2 - VMMC - 67	27 JAN 22
2 - VMMC - 68	27 JAN 22
2 - VMMC - 68 A	27 JAN 22
2 - VMMC - 68 B	27 JAN 22
2 - VMMC - 68 C	27 JAN 22
2 - VMMC - 68 D	28 JAN 21
2 - VMMC - 68 E	27 JAN 22
2 - VMMC - 69	27 JAN 22
2 - VMMC - 69 A	24 FEB 22
2 - VMMC - 69 B	27 JAN 22
2 - VMMC - 69 C	27 JAN 22
2 - VMMC - 69 D	27 JAN 22
2 - VMMC - 69 E	27 JAN 22
2 - VMMC - 70	27 JAN 22
2 - VMMC - 71	23 FEB 23
2 - VMMC - 71 A	23 FEB 23
2 - VMMC - 71 B	27 JAN 22
2 - VMMC - 71 C	27 JAN 22
2 - VMMC - 71 D	23 FEB 23
2 - VMMC - 71 E	23 FEB 23
2 - VMMC - 71 F	27 JAN 22
2 - VMMC - 71 G	24 FEB 22
2 - VMMC - 72	04 JAN 18
2 - VMMC - 73	04 JAN 18
2 - VMMC - 74	04 JAN 18
AD 3	
3 - 1	04 JAN 18
3 - 2	24 NOV 16
3 - 3	24 NOV 16
3 - 4	24 FEB 22
3 - 5	24 NOV 16
3 - 6	04 JAN 18
3 - 7	24 NOV 16
3 - 8	24 NOV 16
3 - 9	04 JAN 18

GEN 1.6 SUMMARY OF MACAO SPECIAL ADMINISTRATIVE REGION LAWS, REGULATIONS AND INTERNATIONAL AGREEMENTS / CONVENTIONS

1 List of Laws and Regulations applicable to Civil Aviation in Macao Special Administrative Region:

Reference	Laws and Regulations
Decree Law n.10/91/M-4 February	Establishes the Civil Aviation Authority
Decree Law n. 52/94/M-7 November	Establishes the legal system governing the aeronautical restrictions in the territory of Macao
Decree Law n. 9/95/M-6 February	Amends the statute of the Civil Aviation Authority
Portaria n. 232/95/M-14 August	Rules the authorization process to operate non-scheduled flights in Macau International Airport
Portaria n. 233/95/M-14 August	Defines the surrounding areas of the Macau International Airport which are restricted by the aeronautical restrictions
Portaria n. 282/96/M-11 November	Updates the Macau International Airport charges
Decree Law n. 66/96/M-18 November	Rules the baggages and other objects abandoned in the Macau International Airport
Decree Law n. 10/98/M-30 March	Approves the system for aircraft registry
Portaria n. 152/98/M-15 June	Updates the Macau International Airport charges
Regulamento Administrativo n.º 31/2003	Administrative regulation regarding administrative infractions committed on board civil aircraft
Regulamento Administrativo n.º 10/2004	Defines the basic principles ruling the civil aviation activities in the Macao SAR.
Regulamento Administrativo n.º 11/2004	Rules the liability limits of the operators of aircraft a) Registered in the Macao SAR, b) Using Macao's civil aviation infrastructures or c) Using the air space assigned to the Macao SAR.

Ordem Executiva n. 36/2004	Updates the Macau International Airport charges
Executive Order no. 26/2006	Amends Articles 10 and 14 of Portaria no. 282/96/M of 11 November
Administrative Regulation no. 18/2008	Amends Administrative Regulation no. 10/2004 that defines the basic principles ruling the civil aviation activities in the Macao SAR
Despacho of Chief Executive no. 295/2010	Amends the Portaria no. 233/95/M of 14 August that defines the surrounding areas of Macau International Airport that are restricted by the aeronautical restrictions
Administrative Regulation no. 19/2011	Amends Administrative Regulation no. 11/2004 that rules the liability limits of the operators of aircraft
Administrative Regulation no. 18/2012	Aerodrome Certification
Executive Order no. 45/2012	Establishes the charging scheme of the Civil Aviation Authority for the scope of services it provides within its responsibilities
Law no. 2/2013	Civil Aviation Accident and Incident Investigation and Aviaton Safety Information Protection Law
Executive Order no. 13/2013	Updates the Macau International Airport charges
Executive Order no. 43/2021	Approves the Air Navigation Regulation of Macao
Administrative Regulation no. 16/2022	Air Transport Facilitation and Civil Aviation Security Systems
Despacho of Chief Executive no. 68/2023	Approves the Macao SAR Civil Aviation Security Programme

2. List of International Conventions on Civil Aviation matters applicable to Macao Special Administrative Region:

International Conventions
Convention on International Civil Aviation *Chicago, December 7th 1944*
Convention for the Unification of Certain Rules relating to International Carriage by Air *Warsaw, October 12th 1929*
Hague Protocol amending the Convention for the Unification of Certain Rules relating to International Carriage by Air *Hague, September 28th 1955*
Convention on the International Recognition of Rights in Aircraft *Geneva, June 19th 1948*
Convention on Offences and Certain Other Acts Committed on Board Aircraft *Tokyo, September 14th 1963*
Convention for the Suppression of Unlawful Seizure of Aircraft *Hague, December 16th 1970*
Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation *Montreal, September 23rd 1971*
Convention for the Unification of Certain Rules for International Carriage by Air *Montreal, May 28th 1999*
Protocol for the Suppression of Unlawful Acts of Violence at Airports serving International Civil Aviation *Montreal, February 24th 1988*
International Air Services Transit Agreement *Chicago, 7 December 1944*

TABLE 1.6.1

Air Navigation Order

Provision for Notification	**Notification**
Instrument Landing System	Notified in ENR Section.
Radio Frequencies	The radio frequencies in use by aeronautical radio stations are notified in the AD Section.
Mechanical radio watch	Frequencies fitted with suitable equipment to permit the maintenance of a mechanical radio watch are notified in the AD Section.

Provision for Notification	Notification
Definitions of an Aerodrome Traffic Zone	Controlled airspace is notified in the ENR Section.
Carriage of Radio Equipment	A requirement ensure two way communications with Air Traffic Control Unit.
Carriage of Transponder	A requirement for the carriage of a secondary surveillance radar transponder is notified in the GEN Section.
Holding and Instrument Approach Procedures	Holding and Instrument Approach Procedures are notified in the ENR Section.
Position Reports	Position Reporting Procedures are notified in the ENR Section.
Radio Frequencies for the Air Traffic Control communications at aerodrome	Notified in the AD Section.

3. Aeronautical Circular

The President of Civil Aviation Authority, in exercise of his power under Paragraph 89 of the Air Navigation Regulation of Macao (ANRM) and Article 35 of the Statutes of Civil Aviation Authority, approved by the Decree-Law 10/91/M, established this Aeronautical Circular (AC) system.

3.1 General (GEN)

Number	Version	Subject
AC/GEN/001	R03	New System of Issuance of Aeronautical Circulars
AC/GEN/002	R05	Rules Concerning Aeronautical Accidents and Incidents
AC/GEN/003	R02	Mandatory Occurrence Reporting Scheme
AC/GEN/004	R00	Units Of Measurement To Be Used In Air And Ground Operations
AC/GEN/005	R05	Safety Management System Requirements
AC/GEN/006	R01	Macao Runway Safety Programme
AC/GEN/007	R00	Exemption Procedure
AC/GEN/008	R05	Cancellation of several Aeronautical Circulars
AC/GEN/009	R01	Macao Confidential Aviation Reporting System
AC/GEN/010	R01	Safety Information Protection
AC/GEN/012	R00	Monitoring, reporting and verification (MRV) of aeroplane operator annual CO2 emissions
AC/GEN/013	R00	Operator Permit for Unmanned Aircraft Operations in Macao

3.2 Airport (AGA)

Number	Version	Subject
AC/AGA/003	R01	Aviation Fuel at Aerodromes - Storage, Handling and Quality Control
AC/AGA/004	R00	Bird Strike Reporting
AC/AGA/007	R00	Aerodrome Director Responsibilities, Authority and Qualifications
AC/AGA/008	R00	Aerodrome Manual Requirements
AC/AGA/010	R01	Manual of Standards - Aerodromes
AC/AGA/011	R00	Manual of Standards - Heliports
AC/AGA/012	R00	Restrictions on carriage of Liquids, Aerosols and Gels (LAGs) and Prohibited Articles
AC/AGA/013	R02	Restrictions on Dangerous Goods
AC/AGA/014	R00	Global Reporting Format for Runway Surface Condition

3.3 Air Traffic Services

Number	Version	Subject
AC/ATS/001	R01	Scheme of Working Hours of Air Traffic Controllers
AC/ATS/003	R05	ATS Requirements
AC/ATS/004	R02	Air Traffic Service Manual Requirements
AC/ATS/005	R04	Air Traffic Control Approval Requirements
AC/ATS/006	R08	Manual of Standards - Air Traffic Management
AC/ATS/008	R01	Instrument Flight Procedures Approval Requirements

3.4 Airworthiness

Number	Version	Subject
AC/AW/001	R03	Process for Acceptance of Used Engines, Engine Modules, Auxiliary Power Units (APUs) and Propellers for Use on Aircraft Requiring a Macao Certificate of Airworthiness
AC/AW/002	R05	Acceptance of Aircraft Components
AC/AW/004	R18	Macao Aviation Requirements MAR-1 Airworthiness Procedures
AC/AW/005	R02	Coding and Registration of Macao 406 MHz Emergency Locator Transmitter (ELT) for Search and Rescue
AC/AW/011	R02	Macao Aviation Requirements MAR-145 Approved Maintenance Organisations
AC/AW/012	R00	Extension/Variation of Aircraft Maintenance Programme Inspection Schedules
AC/AW/013	R00	Mandatory Modifications, Inspections and Changes to Approved Documentation
AC/AW/015	R00	Disposition of Scrap Aircraft Parts & Materials

AC/AW/016	R00	Detecting and Reporting of Unapproved Parts
AC/AW/017	R00	Return to Service of Aircraft Items Recovered from Aircraft Involved in Accidents/Incidents
AC/AW/021	R04	Cooperation Arrangement on Mutual Acceptance of Certificates of Airworthiness Between Civil Aviation Administration of China, Civil Aviation Department, Hong Kong, China and Civil Aviation Authority-Macao, China
AC/AW/022	R02	Acceptable Means of Compliance and Interpretative / Explanatory Material (AMC & IEM) to the Nineteenth Schedule of Air Navigation Regulations of Macau (ANRM)
AC/AW/023	R09	Flight Recorders
AC/AW/026	R02	Cooperation Arrangement on Mutual Acceptance of Approvals of Design Change and Repair Design Among Civil Aviation Administration of China, Civil Aviation Department, Hong Kong, China and Civil Aviation Authority - Macao, China
AC/AW/028	R00	Weight and Balance of Aircraft
AC/AW/029	R02	Certificate of Maintenance Review
AC/AW/030	R00	Airborne Collision Avoidance System Requirement
AC/AW/034	R00	Markings and placards
AC/AW/035	R00	Cooperation Arrangement on Joint Maintenance Management between Civil Aviation Administration of China, Civil Aviation Department of the Hong Kong Special Administrative Region Government, China and Civil Aviation Authority of the Macao Special Administrative Region, China
AC/AW/036	R00	Runway Overrun Awareness and Alerting System
AC/AW/037	R00	Location of an Aeroplane in Distress
AC/AW/038	R00	Aircraft Maintenance Programme (with effect from 01 May 2023)

3.5 Flight Operations

Number	Version	Subject
AC/OPS/002	R11	Operations Manual Requirements
AC/OPS/003	R00	Flight Safety Documents System
AC/OPS/004	R07	Application Procedures for the Issuance of an Air Operator Certificate (AOC)
AC/OPS/005	R06	Transport of Dangerous Goods by Air
AC/OPS/013	R00	Avoidance of Fatigue in Aircrew
AC/OPS/014	R02	Documents to be Carried by Aircraft Registered in Macao
AC/OPS/015	R01	Aircraft Leasing
AC/OPS/016	R03	Qualifications and Training Requirements for Cabin Crew
AC/OPS/018	R00	Operational Approval of Extended Range Operations (ETOPS)
AC/OPS/019	R00	Air Operator Quality System Requirements
AC/OPS/020	R01	Operation in Reduced Vertical Separation Minimum (RVSM) Airspace
AC/OPS/021	R01	Airborne Collision Avoidance System (ACAS) Operational Procedures and Training Requirements
AC/OPS/022	R03	Operation in Performance-based Navigation (PBN) Prescribed Airspace
AC/OPS/023	R01	Operations in Automatic Dependent Surveillance-broadcast (ADS-B) Prescribed Airspace
AC/OPS/024	R01	Minimum Equipment List (MEL) Requirements
AC/OPS/025	R04	Training and Testing Requirements for Flight Crew Member and Flight Operations Officer
AC/OPS/026	R01	Organization and Post-holders Requirements
AC/OPS/027	R02	Operational Control Requirements
AC/OPS/029	R01	Electronic Flight Bag
AC/OPS/030	R01	Aircraft Loading Requirements
AC/OPS/031	R01	Low Visibility Operations
AC/OPS/032	R00	Use of Portable Electronic Devices
AC/OPS/034	R00	Flight Data Analysis Programme
AC/OPS/035	R00	Global Reporting Format of Runway Surface Conditions
AC/OPS/036	R00	Dangerous Goods Handling Permit
AC/OPS/037	R00	Use of Representative Training Devices

3.6 Personnel Licensing

Number	Version	Subject
AC/PEL/002	R01	Language Proficiency Requirements
		Attachment – ICAO Language Proficiency Rating Scale
AC/PEL/003	R01	New Format of the Medical Certificate
AC/PEL/004	R02	Update of Medical Provisions
AC/PEL/006	R01	Approved Training Organization
AC/PEL/011	R00	Recurrent Competence Requirements of Air Traffic Controller Licence
AC/PEL/012	R00	Approved Training Organization for Air Traffic Controller
AC/PEL/013	R01	MAR-66 Licensing of Aircraft Maintenance Engineer
AC/PEL/014	R01	MAR-147 Approved Maintenance Training/Examinations

3.7 Communication, Navigation and Surveillance

Number	Version	Subject
AC/CNS/001	R00	Aeronautical Telecommunication and Radio Navigation Service

3.8 Aeronautical Information Services

Number	Version	Subject
AC/AIS/001	R00	Manual of Standards -Aeronautical Information Services

3.9 Aviation Security

Number	Version	Subject
AC/SEC/004	R03	Macao SAR Air Transport Facilitation Programme
AC/SEC/005	R00	Requirements on Operators' Security Programme
AC/SEC/006	R00	Integration of Civil Aviation Security Measures in the Design and Construction of Aerodrome Facilities
AC/SEC/007	R00	Requirements on Protection and Management of Civil Aviation Security Information
AC/SEC/008	R00	Approval Requirements of Aerodrome Security Services Providers
AC/SEC/009	R00	Requirements on Aerodrome Access Control
AC/SEC/010	R00	Background Check within the scope of Civil Aviation Security
AC/SEC/011	R00	Security Control on Persons, Baggage, Vehicles, Supplies, Cargo and Mail
AC/SEC/012	R00	Civil Aviation Security Measures for Air Operators
AC/SEC/013	R00	Civil Aviation Security Measures for Air Traffic Services Providers

AC/SEC/014	R00	Requirements on the Implementation of Security Tests
AC/SEC/015	R00	Guidelines on Civil Aviation Security Quality Control Activities and Civil Aviation Security Assessment
AC/SEC/016	R00	Civil Aviation Security Incident Reporting Requirements
AC/SEC/017	R00	Cyber Security Measures
AC/SEC/018	R00	Enhanced Civil Aviation Security Measures
AC/SEC/019	R00	Requirements for Personnel Recruitment, Selection, Training and Certification

INTENTIONALLY

LEFT

BLANK

3.4 AIP supplements

AIP Supplements are used to publish temporary information of long duration (3 months or longer) and/or information of operational significance containing comprehensive texts, charts or diagrams, even if this information is of short duration (less than 3 months). The information is to be inserted within the AIP, at the beginning of the appropriate subsection, following the indications given on the cover sheet of each supplement.

AIP Supplements may have a defined period validity or an estimate date of terminus. In each case of supplement must be kept within the AIP during the complete period of validity. The supplements may be cancelled (or replaced) by other supplements, by AIP amendment or by NOTAM.

There are two types of supplements :

- Regular supplements, containing information which is not of operational significance for the safe conduct of a flight and does not require an advanced notification to the users. These supplements are published whenever necessary.
- AIRAC supplements, containing information which is of operational significance for the safe conduct of a flight and requires an advanced notification to the users. AIRAC procedures will be followed as for the amendments (see 3.3 above).

The numbering of the supplements will be consecutive and based on the calendar year.

The cover page of each supplement will give indications on the subject (s), validity, correct place for the introduction of the supplement pages, and NOTAM cancellation or replacement by the supplement. All Supplements are coloured (yellow) in order to be conspicuous, no differentiation is made between regular and AIRAC supplements (the acronym AIRAC will appear in bold on the front page of the AIRAC type supplements). A checklist of supplements in force will be published each month by means of the monthly printed plain language summary of NOTAM in force.

3.5 NOTAM and Pre-flight Information Bulletins (PIB)

NOTAM are distributed by telecommunications (AFTN) only. They are distributed by the Macao International NOTAM office as follows :

- One single series A containing information about Macau International Airport and Macao Heliport, information of interest to both international and domestic recipients, such as regulations and procedures, air/ground communications, navigation warnings and unserviceability of air navigation obstacles lights in accordance with ICAO Annex 15 paragraph 5.1.1.1.
- A checklist of NOTAM in force is issued every month.
- NOTAM are distributed to all states which interchange NOTAM information with Macao International NOTAM office.

Macao International NOTAM Office - NOTAM interchange

ICAO location indicator	NOTAM office	Rec. Series	Country	Received	Send
AGGHYNYX	Honiara		Solomon Is.		X
ANAUYNYX	Nauru		Nauru		X
AYPMYNYX	Port Moresby	A	Papua N. G.	X	
CYHQYNYX	Ottawa	C/D/E/F/G/H/S	Canada	X	X
EBBRYNYX	Bruxelles	A	Belgium	X	X
EDDZYNYX	Frankfurt	A	Germany	X	
EETNYNYX	Tallinn	A	Estonia	X	
EFHKYNYX	Helsinki	A	Finland	X	
EGGNYNYX	UK	A/B/P/V	United Kingdom	X	X
EHAMYNYX	Amsterdam	A	Netherlands	X	X
EHMCYNYX	Amsterdam	M	Netherlands	X	X
EINNYNYX	Shannon	A/B/D/H/J/N/V	Ireland	X	X
EKCHYNYX	Kobenhavn	A	Denmark	X	
ENGMYNYX	Oslo	A	Norway	X	
EPWWYNYX	Warszawa	A/B/C/D/E/F/G/H/L	Poland	X	
ESSAYNYX	Stockholm	A/B	Sweden	X	X
FAJNYNYX	Johannesburg		South Africa		X
FSIAYNYX	Mahe		Seychelles		X
HECAYNYX	Cairo		Egypt		X
HKJKYNYX	Nairobi		Kenya		X
KDCAYNYX	Washington	A + (1)	United States	X	X
LBSFYNYX	Sofia	A	Bulgaria	X	
LCNCYNYX	Nicosia	A	Cyprus	X	X
LDZAYNYX	Zagreb	A/M	Croatia	X	X
LEANYNYX	Madrid	A/B/D/E/F/G/R	Spain	X	X
LFFAYNYX	Paris	A/F/R/W	France	X	
LGGGYNYX	Athinai	A/B	Greece	X	X
LHBPYNYX	Budapest	A	Hungary	X	X
LIIAYNYX	Rome	A/W	Italy	X	X
LJLAYNYX	Wien Ljubljana	A	Slovenia	X	X
LKPRYNYX	Praha	A	Czech Rep.	X	
LLADYNYX	Tel Aviv	A	Israel	X	X
LMMMYNYX	Malta	A	Malta	X	X
LOWWYNYX	Wien	A	Austria	X	X
LPPPYNYX	Lisboa	A	Portugal	X	
LRBBYNYX	Bucuresti	A/B/C/D/F/M	Romania	X	X
LSSNYNYX	Zurich	A	Switzerland	X	X
LTAAYNYX	Ankara	A/B/C	Turkey	X	X
LYBBYNYX	Beograd	A	Srbija/Crna Gora/Serbia and Montenegro	X	
LZIBYNYX	Bratislava	A	Slovakia	X	
NFOFYNYX	Nadi	A	Fiji	X	X
NZCHYNYX	Christchurch	B/P	New Zealand	X	X
OAKBYNYX	Kabul	D/G/P	Afghanistan	X	
OBBBYNYX	Bahrain	A	Bahrain	X	X
OEJDYNYX	Jeddah	A/W	Saudi Arabia	X	X
OIIIYNYX	Tehran	A	Iran	X	X
OJAIYNYX	Amman	A	Jordan	X	X
OKNOYNYX	Kuwait	A	Kuwait	X	X
OMAEYNYX	Abu-Dhabi	A	Un. Arab Em.	X	X
OOMSYNYX	Muscat	A	Oman	X	X
OPKCYNYX	Karachi	A	Pakistan	X	X
OSDIYNYX	Damascus	A	Syrian	X	
OTBDYNYX	Doha		Qatar		X
RJAAYNYX	Tokyo	A/B/C/D/E/F/G/H/J/K/L/M/N/O/P/Q/R/U/V/W/X/Y/Z	Japan	X	X
RKRRYNYX	Seoul	A/C/D/E/G/Z	Korea	X	X
RPLLYNYX	Manila	B	Phillipines	X	X
UAAKYNYX	Almaty	A/K	Kazakhstan	X	X
UBBUYNYX	Baku	A	Azerbaijan	X	
UCFMYNYX	Bishkek	A	Kyrgyzstan	X	X
UDDDYNYX	Armenia	A	Armenia	X	X
UGTBYNYX	Tbilisi	G/N	Georgia	X	
UKKRYNYX	Ukraine	A	Ukraine	X	X
UTDAYNYX	Tajikistan	A	Tajikistan	X	X
UTTTYOYX	Tashkent	D	Uzbekistan	X	X
UUUUYNYX	Moskva	A/E/G/H/J/K/L/N/O/P/Q/U/V/W/X/Y/Z	Russia	X	X

GEN 3.6 SEARCH AND RESCUE

1. Responsible service

The Civil Aviation Authority is the Authority for Search and Rescue in the Macao ATZ.

Macao Tower will be responsible for the activities of all measures and plans for immediate Rescue (or Search, if being the case).

Within the limits of Macao ATZ, local helicopters and or light aircraft may be deployed in cooperation with craft and personnel from other departments of the Macao Special Administrative Regional Government (namely ships from Marine and Water Bureau) or may be requested to private owned enterprises, according to a prefixed plan.

For medium and long range SAR activities over the high seas, aircraft whose destination is Macao or has origin in Macao, will be assisted under the authority and coordination of the Rescue Coordination Centre of Guangzhou in the People's Republic of China or of the Rescue Coordination Centre of the Civil Aviation Department of Hong Kong.

The search and rescue service is provided in accordance with the ICAO Standards, recommended Practices and Procedures contained in the following documents:

Annex 12 Search and Rescue

Annex 13 Aircraft Accident Investigation

DOC 7030 Regional Supplementary Procedures

2. Area of responsibility

Search and rescue service is provide within Macao ATZ.

3. Type of services

3.1. Details of Rescue Units are given in Table 3.6.3. In addition, various elements of the Marine and Water Bureau, the Security Forces and Security Service departments, Merchant Marine and Public Telecommunications, are available to the Search and Rescue Organisation.

Table 3.6.3 Search and rescue units

Name	Location	Facilities	Remarks
Macau International Airport	22°08'58"N 113°35'29"E	5 boats for rescue and fire fighting in the vicinity of airport	Speed 31 kt Capacity *
Marine and Water Bureau	22°11'45.89"N 113°33'36.19"E	1 search and rescue vessel at Outer Harbour	Speed 30 kt MAX Capacity **
	22°12'33.12"N 113°32'24.66"E	1 search and rescue vessel at Doca da Ilha Verde	Speed 30 kt MAX Capacity **

* 2 life rafts with a capacity of 38 persons each, on each rescue boat.

** Max rescue capacity: 43 persons and 4 life rafts (50 person each raft)

3.2. Rescue co-ordination service

Macao Rescue Unit (Macao TWR)

Coordination of SAR operations – Emergency Operation Centre

Postal Address :	Macau International Airport (SAR) PAC ON Taipa Macao, China
AFTN Address :	Macao TWR – VMMCZTZX Airport Emergency Centre - VMMCYVYX
Fax number :	(853) 2886 0024
Telephone :	(853) 2886 0019, 2886 0020, 2886 0021

3.3. Maritime Search & Rescue Service

3.3.1. The Maritime Search and Rescue Coordination Centre (CC) formed under the Vessel Traffic Control Centre of Macao (Macao VTS) is responsible for maritime search and rescue operations within Macao waters, and its operation is activated once the need arises.

The Vessel Traffic Control Centre of Macao is abbreviated as the "Macao VTS".

The Macao VTS offers round-the-clock services to vessels sailing in Macao waters, and any vessels that need its help may contact the centre via the following means:

VHF radio channel 16 (156.800 MHz) and channel 10 (156.500 MHz)

Telephone: (853) 28726766

Fax: (853) 28726769

Upon picking up a distress signal, the Macao VTS will immediately alert all the relevant search and rescue authorities and coordinators. Meanwhile the centre will stay in touch with all relevant parties until rescuers arrive at the scene of the incident. Should the need arise, the Macao VTS will activate the Search and Rescue Coordination Centre (CC).

Search and Rescue Coordination Centre (CC)

Once activated, the Coordination Centre will take charge of the search and rescue efforts, and communicate with other parties via the following means:

VHF radio channel 10 (156.500 MHz) (or the other radio channels mentioned above)

Telephone: (853) 28726743

Fax: (853) 28726769

AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN

1. Rescue and fire fighting services

Adequate rescue and fire fighting vehicles are provided at Macau International Airport. The degree of protection has been determined in accordance with attachment A to Annex 14. In addition, 5 rescue and fire-fighting vessels with foam and water fire-fighting capability will be available 24 hours a day. AD 2.6 refers.

2. Snow Plan

NIL.

INTENTIONALLY

LEFT

BLANK

VMMC AD 2.5 PASSENGER FACILITIES

1	Hotels	Unlimited in city hotels.
2	Restaurants	In the city and at airport.
3	Transportation	Taxis and buses.
4	Medical facilities	First aid treatment and hospitals in city.
5	Bank and Post Office	Bank is not available. Only ATM machines and Money exchange counters. Post Office is at AD.
6	Tourist Office	At AD.
7	Remarks	NIL.

VMMC AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	Category IX
2	Rescue equipment	Yes Additional: • 5 rescue and fire-fighting (foam with water) vessels • 2 SAR vessel from Marine and Water Bureau (max rescue capacity: 86 persons, and 8 life rafts-50 person each raft)
3	Capability for removal of disabled aircraft	Lifting capability: up to 224 tons
4	Remarks	Fire fighting media and operational reserves in accordance with the equipment laid down in ICAO ANNEX 14.

VMMC AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	NIL.
2	Clearance priorities	NIL.
3	Remarks	NIL.

VMMC AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATION DATA

1	Apron surface and strength	surface: concrete strength: PCN 65/R/B/W/T	
2	Taxiway width, surface and Strength	Taxiway C2, C3	width: 23 m surface: concrete strength: PCN 66/R/B/W/T
		Connection ways	
		G	width: 39 m surface: concrete strength: PCN 66/R/B/W/T
		D, E, F	width: 25 m surface: concrete strength: PCN 66/R/B/W/T
		Taxiway Bridge H	width: 23-39 m surface: concrete strength: B747-400 *
		Taxiway Bridge C1	width: 23 m surface: concrete strength: B747-400 *
		*PCN not established because they are bridges, actual calculated resistance up to 3970 KN equivalent to a loaded B747-400.	
3	ACL location and elevation	Location: holding points of RWY 16 and 34 (see AD Chart) Elevation: 6.2 m (20 ft) AMSL.	
4	VOR/INS checkpoints	VOR: see AD Chart INS: see AD Chart	
5	Remarks	Load limit for a B747-400 taking off is 395 900 kg.	

(3) The scale of equipment carried by the aircraft is adequate for flying at night.

(4) The flight is contained in Macau ATZ, or

(5) The flight has been initiated and authorised by adjacent ATS Unit, or has been accepted by an adjacent ATZ unit.

8 Push - back and start - up procedures

8.1 All aircraft other than helicopters are to call one of the following services five minutes prior to start-up to put their clearance on request:

8.1.1 Macau Ground 121.725 MHz permanent

8.1.2 Macau Tower 118.000 MHz permanent

8.2 Pilots are to inform Macau Ground/Tower as appropriate their callsign, parking bay number/location and proposed flight level if it is different from the filed flight plan when they make the call as per para. 8.1 above.

8.3 Aircraft should not commence start-up, push back or any other manoeuvre on the apron unless they have obtained clearance from Macau Ground/Tower as appropriate.

8.4 Aircraft start-up engines will be allowed by Macau Control Tower, after the engines clear the white taxi line protection.

8.5 Whilst push back procedure is being conducted it is essential for safety reasons that communications contact is maintained between pilot and ground engineer in charge.

8.6 Once a request for clearance has been made as per para. 8.1 above, delays in getting ready to start, taxi or take-off may result in withdrawal of ATC clearance.

8.7 Color-Coded Aircraft Pushback Procedures

STAND NUMBER	RWY 34/16 Departure	
	Normal pushback & start-up	Pushback after engine started-up
A1-A15,A17, B1-B6, B8	BLUE	BLUE
B7, B10, B10L, B10R	GREEN	GREEN/PINK
G01-G15	FOLLOW BREAKAWAY POINT “X”, “Y” OR “Z”	N/A

Color-coded Push back Procedures

Color Code	*Detailed Description*
BLUE	Aircraft pushback facing South or North depending on the Runway-in-use. If necessary, special instruction will be issued by Control Tower. Startup can be commenced after the engines cross the white taxi line protection.
GREEN	Pushback of aircraft with wingspan less than 36m on B7, B10 , B10L, B10R shall be done by pushing the aircraft tail towards GAP and then towed forward until Breakaway Point 1 in normal situation or in situation that aircraft with APU problem and requires starting up engine on stand while No aircraft is parked on G05 to G08. Pushback of aircraft with wingspan equal to or greater than 36m on B7, B10 shall be done by pushing the aircraft tail towards GAP and then towed forward until Breakaway Point 2 in normal situation or in situation that aircraft with APU problem and requires starting up engine on stand while No aircraft is parked on G05 to G08. **Except that the startup on stand due to APU problem, other startup can only be commenced when the pushback finishes at Breakaway Point.**
PINK	The pink procedure requires pushing the aircraft tail towards North until either the beginning of Taxiway C1 for RWY16 departure or taxiway A for RWY34 departure. Except that the startup on stand due to APU problem, other startup can only be commenced when the pushback finishes. The procedure applies for Pushback of aircraft with APU problem, which requires to start up engine on stand B7 or B10, B10L or B10R while aircraft is parked on G05 to G08.

Remarks:

1. For aircraft parked on Stands B1 and B3, no simultaneous pushback is allowed.
2. For aircraft start up on the Stand, coordination shall be done in advance among ATC, Pilot and AOCC (for follow-me to inspect the surrounding area of the aircraft involved) in order to guarantee ground safety.
3. The Breakaway point 1 mentioned above is the one at B7 and Breakaway point 2 is one between B5 and B7.
4. For blue procedure, the color code may be omitted in the air-ground communication between ATC and pilot.

G01 – G15 Push Back /Tow Procedures

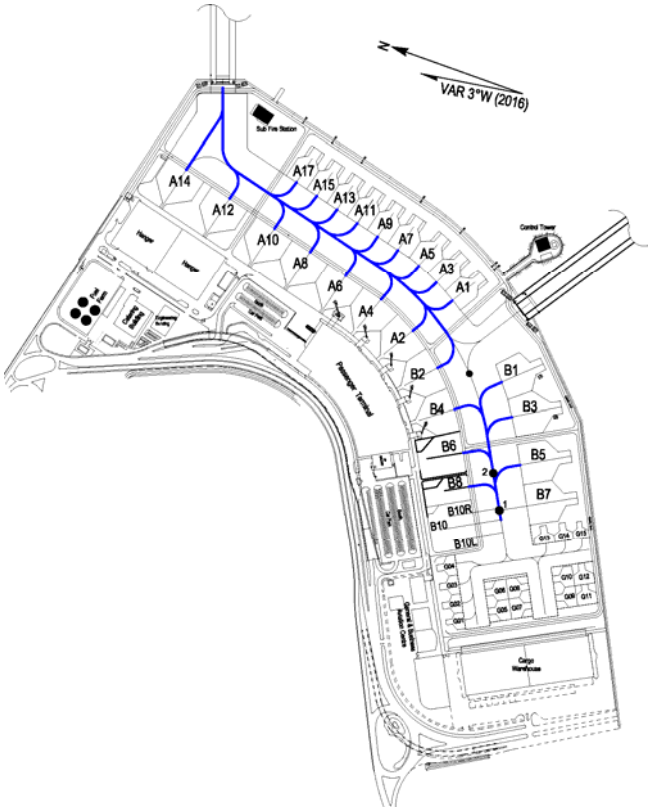
Aircraft Stand	*Nose wheel on Breakaway Point*	*Detailed Description*
G01, G02, G03, G04	X	Aircraft shall be pushed back following the BLUE lead out line until the aircraft tail towards Cargo Roadway, and then pull ahead up to Breakaway Point "X".
G05, G06		Aircraft shall be towed out following the BLUE lead out line until the aircraft tail towards Cargo Roadway, and then pull ahead up to the Breakaway Point "X".
G07, G08, G09, G10	Y	Aircraft shall be towed out following the BLUE lead out line and until the aircraft tail towards Cargo Roadway, and then pull ahead up to the Breakaway Point "Y".
G11, G12	Z	Aircraft shall be towed out following the BLUE lead out line and taxilane centre line up to the Breakaway Point "Z".
G13, G14, G15		Aircraft shall be pushed back following the BLUE lead out line until the aircraft tail towards East Roadway, and then pull ahead up to the Breakaway Point "Z".

Remarks:

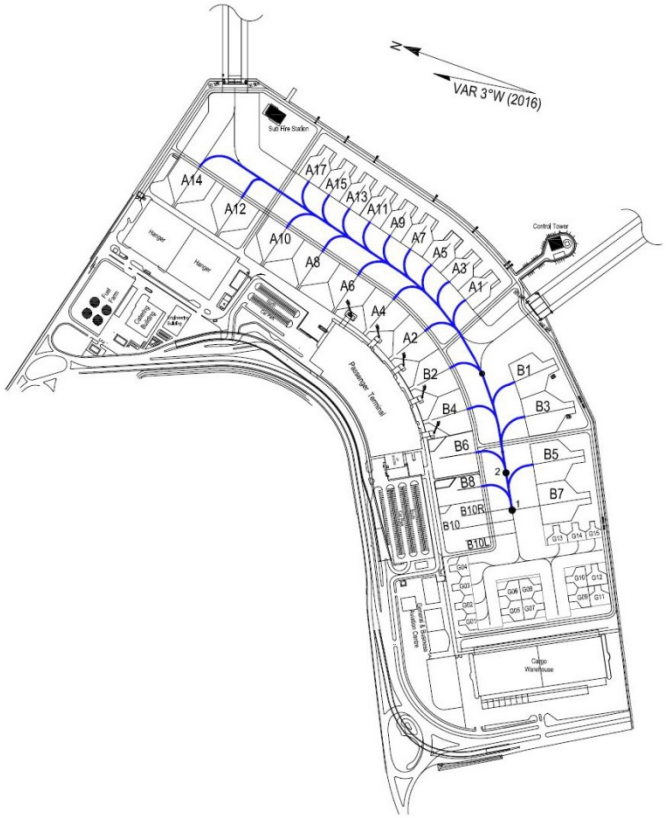
1) All GA/helicopter arrivals will be guided by Follow-me to the designated aircraft stands.
2) The Breakaway Points "X", "Y" and "Z" are located on the taxilane centre line behind G03, ahead of G10, and behind G13 respectively.
3) Helicopter operations are exempted from following the defined Breakaway Points but are required to be pushed /towed to the taxilane abeam its parking stand for startup and taxi out.
4) Two wing walkers are mandatory to be present for all pushback/tow manoeuvres.
5) NO simultaneous pushback / tow operations on Breakaway Points "Y" and "Z" is allowed.
6) NO engine start up on stand before pushback / tow is allowed. Exception can be considered for aircraft parked on G06, G08, G10 or G13 with coordination made in advance among AOCC, Ground Handling Agent (GHA), Pilot and ATC. Follow-me shall inspect the surrounding area of the aircraft involved and ensure the following conditions are met prior to aircraft start up and taxi out at its own power.

Aircraft Stand	**Direct-taxi-out Conditions**
G06	G05 & G08 are clear
G08	G06 & G07 are clear
G10	G09 & G12 are clear
G13	B07 & adjacent Equipment Parking Areas are clear

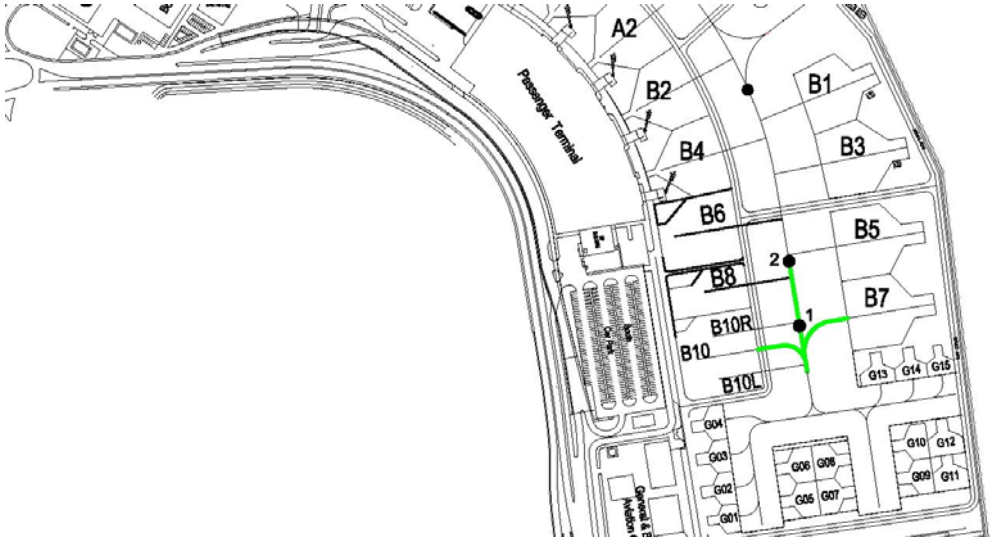
AIRCRAFT PUSHBACK BLUE PROCEDURE (RWY 34)



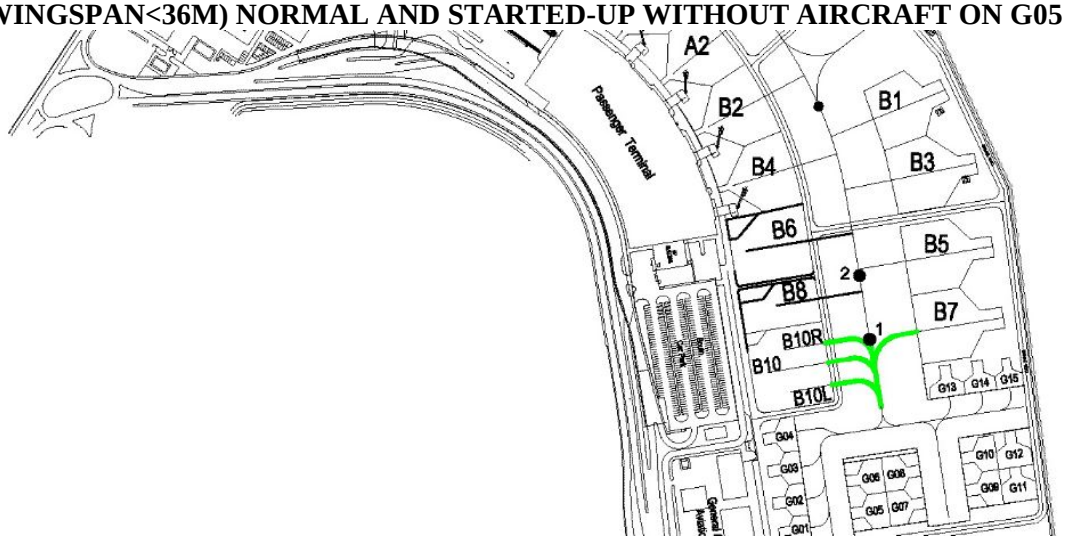
AIRCRAFT PUSHBACK BLUE PROCEDURE (RWY 16)



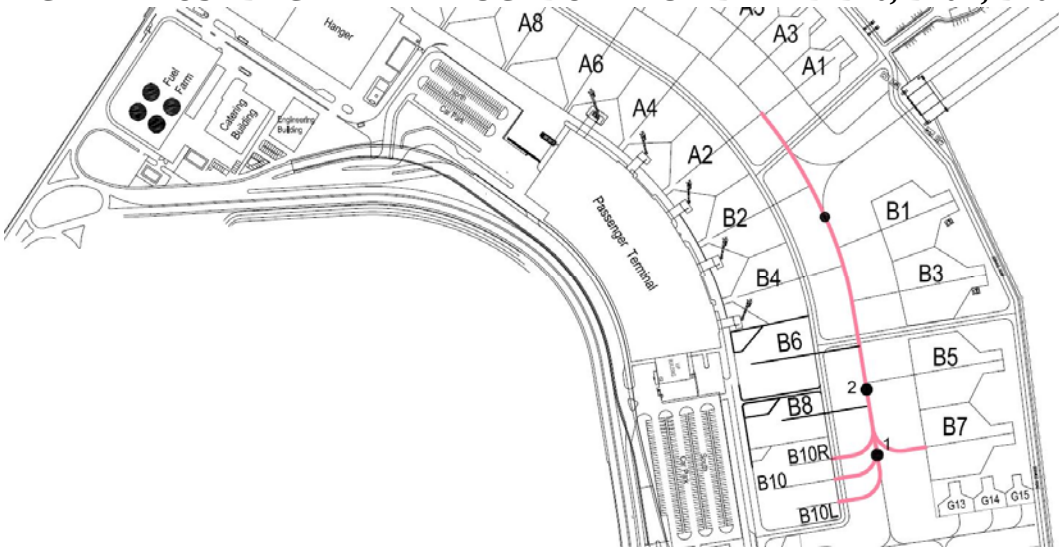
AIRCRAFT PUSHBACK GREEN PROCEDURE FOR B7 AND B10 (WINGSPAN⩾36M) NORMAL AND STARTED-UP WITHOUT AIRCRAFT ON G05 to G08



AIRCRAFT PUSHBACK GREEN PROCEDURE FOR B7, B10, B10L AND B10R (WINGSPAN<36M) NORMAL AND STARTED-UP WITHOUT AIRCRAFT ON G05 to G08



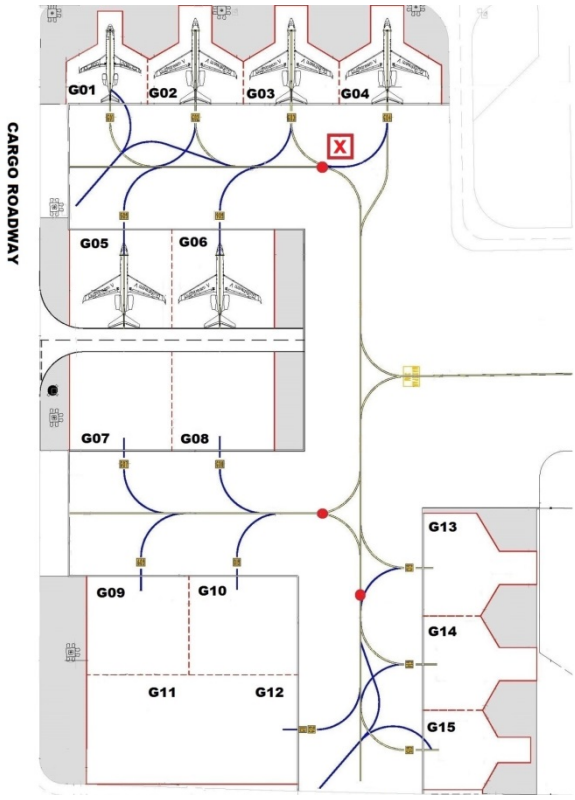
AIRCRAFT PUSHBACK PINK PROCEDURE FOR B7 AND B10, B10L, B10R (RWY 34)



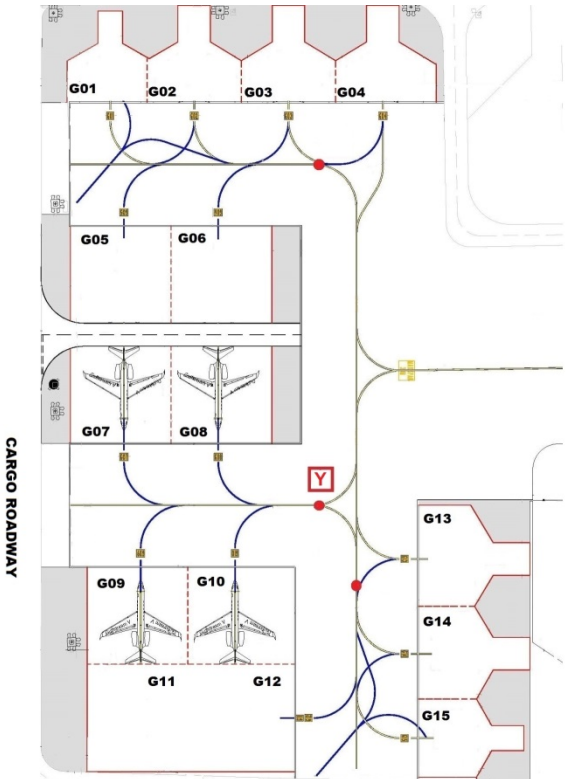
AIRCRAFT PUSHBACK PINK PROCEDURE FOR B7 AND B10, B10L, B10R (RWY 16)

AIRCRAFT PUSHBACK / TOW PROCEDURE FOR BREAKAWAY POINT "X" (RWY 34 / 16)

Stands G01 – G06

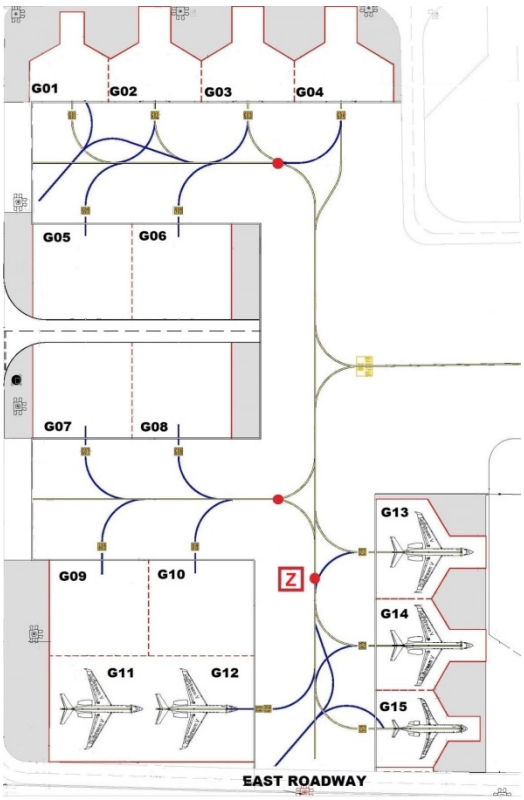


AIRCRAFT PUSHBACK / TOW PROCEDURE FOR BREAKAWAY POINT "Y" (RWY 34 / 16)
Stands G07 – G10



AIRCRAFT PUSHBACK / TOW PROCEDURE FOR BREAKAWAY POINT "Z" (RWY 34 / 16)

Stands G11 – G15



9 Advanced-Visual Docking Guidance System (AVDGS)

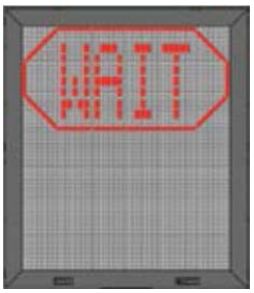
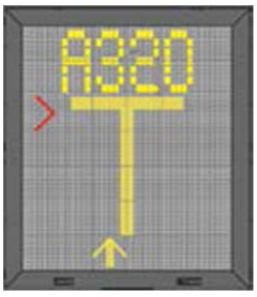
9.1 The Advanced-Visual Docking Guidance System (AVDGS) provides both pilots with guidance for manoeuvring the aircraft into the gate to the correct centerline and stop-position Aircraft parking visual docking guidance system.

AVDGS is installed on stands A06, A04, A02, B02, B04, B06, B08 and B10/10L/10R.

The Airport Authority will provide marshalling service for other aircraft not included on AVDGS .

In all other stands, the aircraft parking manoeuvre will be signaling by a marshaller.

9.2 AVDGS Procedure

1	START-OF-DOCKING The system is started by pressing one of the aircraft type buttons on the Operator Panel. When the button has been pressed, WAIT will be displayed.	
2	CAPTURE The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. It shall be checked that the correct aircraft type is displayed. The lead-in line shall be followed. THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.	
3	TRACKING When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow center line indicator. A flashing red arrow indicates the direction to turn. The vertical yellow arrow shows position in relation to the center line. This indicator gives correct position and azimuth guidance.	
4	CLOSING RATE The closing rate is the final countdown from a specific distance to the stop position. A yellow vertical closing rate bar/center line indicator appears with or without a digital countdown, depending on the configuration. The closing rate bar represents the distance from stop, it consists of a number of rows representing 0.5m per row. Each row turns	

4 Engine tests and ground runs

Engine run-up are subject to the following conditions:

4.1 Normally engine runs above ground idle power are not permitted during the critical hours of 2200 to 0700 local time. Exception may be considered case by case, depending on actual operational analyses (e.g. time needed for engine run-up, expected movements, etc).

4.2 Engine Ground Run Procedures

4.2.1 An engine ground run is defined as any engine start up not associated with the planned aircraft departure. Maintenance or test running of jet engine not mounted on an aircraft is prohibited unless performed in a test cell of adequate design.

4.2.2 Normally, engine ground running at idle power for duration not exceeding 15 minutes may be conducted on aircraft parking bays with previous coordination with Airport Operation Coordination Centre (AOCC). Extension of such limitation is subject to AOCC approval depending on airport conditions. Power runs above idle for maintenance purpose must be conducted at designated areas.

4.2.3 Initial requests for a ground run at any time should be made by telephone to Airport Operation Coordination Centre. The airline or their representatives are responsible for ensuring that all safety precautions against injury to persons or damage to properties, aircraft, vehicles, marine vessels (when the jet blast is directed towards the sea) and equipment in the vicinity are adopted. When ready to conduct the engine run, clearance from Macau Ground on 121.725 MHz. A listening watch must be maintained on the frequency throughout the engine run. The aircraft anti-collision beacons must be activated for the entire duration and that Macau Ground should be advised on its completion.

VMMC AD 2.22 FLIGHT PROCEDURES

See AD Charts

VMMC AD 2.23 ADDITIONAL INFORMATION

1 Automatic Terminal Information Service (ATIS)

STATION	BROADCAST ON FREQUENCY	HOURS	CONTENTS	REMARKS
MACAU International Airport	126.4 MHz	24 hours	Continuous broadcast in voice by Aerodrome control: - Runway in use, - Surface wind, - Visibility, - Runway visual range when it is less than 1500m - Present weather - Cloud - Trend forecast - Aerodrome QNH, - Air temperature and Dew Point, - Any essential information considered to be useful to operation of aircraft e.g. low visibility operation in force, thunderstorms warnings, typhoon signal no. 8 or above, aerodrome surface conditions, unserviceability of navigation aids, type(s) of approach to be expected etc.	Pilots are required to acknowledge the identifier at first contact on the frequency of responsible approach control unit (Zhuhai APP 120.35 (123.85), Hong Kong radar 126.3 MHz and 119.1 MHz) if aircraft is arriving and on 118.0 / 121.725 MHz as appropriate (see AD 2.20) if aircraft is departing

2 GNSS RAIM Prediction Services and Associated NOTAM Information

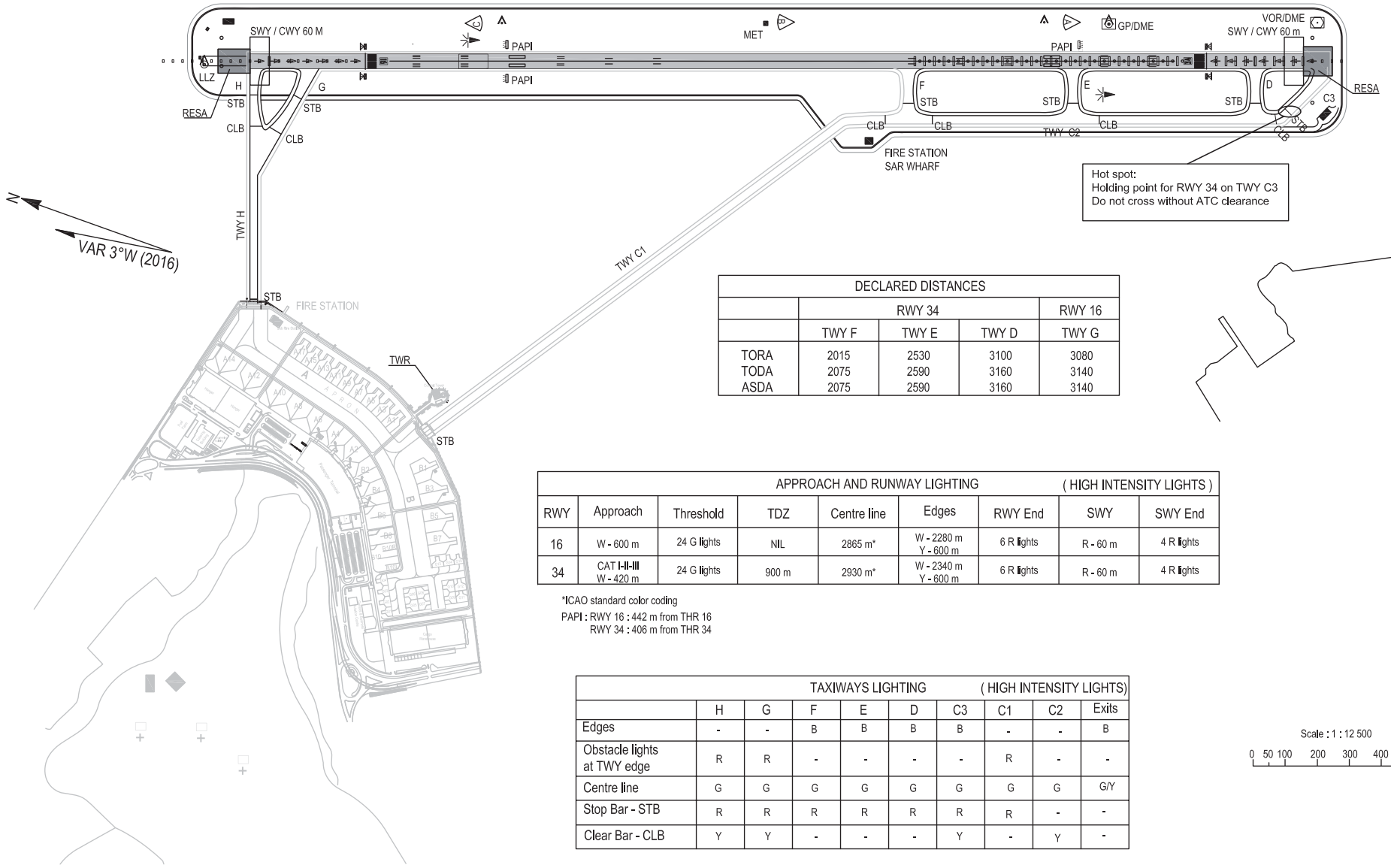
GNSS RAIM availability prediction service and the associated NOTAM information related to GNSS availability will not be provided by AACM or Macau International Airport.

In accordance with ICAO Doc 9613, PBN Manual, aircraft operators shall subscribe the necessary information provided by other service providers to verify the RAIM availability for the intended route of flight.

ELEVATIONS IN FEET AMSL
DIMENSIONS IN METRES
BEARINGS ARE MAGNETIC

ELEV 20

LOW VISIBILITY OPERATION MINIMUM FOR TAKE-OFF = 175 METRES



DECLARED DISTANCES				
	RWY 34			RWY 16
	TWY F	TWY E	TWY D	TWY G
TORA	2015	2530	3100	3080
TODA	2075	2590	3160	3140
ASDA	2075	2590	3160	3140

APPROACH AND RUNWAY LIGHTING (HIGH INTENSITY LIGHTS)								
RWY	Approach	Threshold	TDZ	Centre line	Edges	RWY End	SWY	SWY End
16	W - 600 m	24 G lights	NIL	2865 m*	W - 2280 m Y - 600 m	6 R lights	R - 60 m	4 R lights
34	CAT I-II-III W - 420 m	24 G lights	900 m	2930 m*	W - 2340 m Y - 600 m	6 R lights	R - 60 m	4 R lights

*ICAO standard color coding

PAPI : RWY 16 : 442 m from THR 16
RWY 34 : 406 m from THR 34

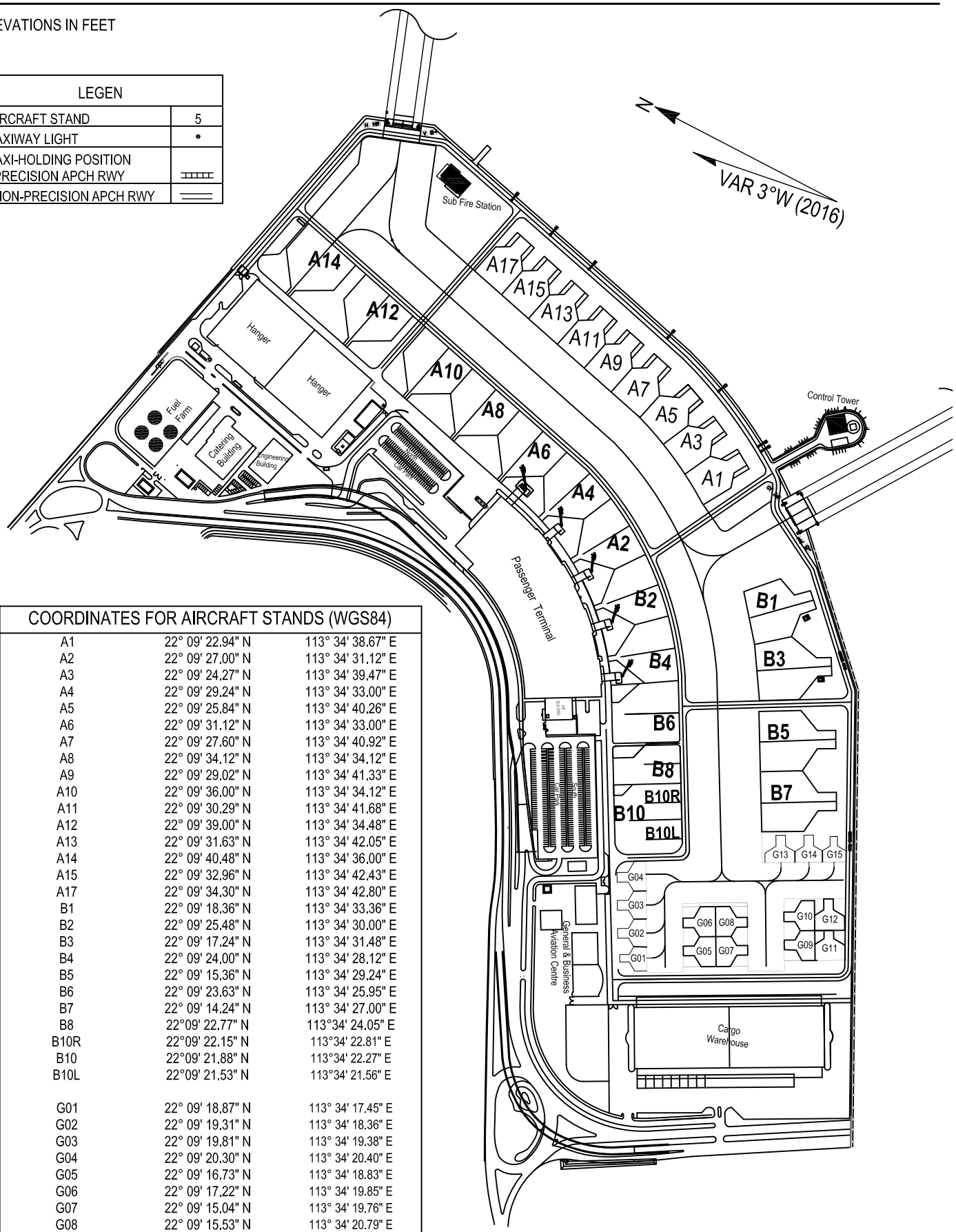
TAXIWAYS LIGHTING (HIGH INTENSITY LIGHTS)									
	H	G	F	E	D	C3	C1	C2	Exits
Edges	-	-	B	B	B	B	-	-	B
Obstacle lights at TWY edge	R	R	-	-	-	-	R	-	-
Centre line	G	G	G	G	G	G	G	G	G/Y
Stop Bar - STB	R	R	R	R	R	R	R	-	-
Clear Bar - CLB	Y	Y	-	-	-	Y	-	Y	-

Scale : 1 : 12 500

0 50 100 200 300 400 500 m

ELEVATIONS IN FEET

LEGEN	
AIRCRAFT STAND	5
TAXIWAY LIGHT	•
TAXI-HOLDING POSITION PRECISION APCH RWY	
NON-PRECISION APCH RWY	



COORDINATES FOR AIRCRAFT STANDS (WGS84)		
A1	22° 09' 22.94" N	113° 34' 38.67" E
A2	22° 09' 27.00" N	113° 34' 31.12" E
A3	22° 09' 24.27" N	113° 34' 39.47" E
A4	22° 09' 29.24" N	113° 34' 33.00" E
A5	22° 09' 25.84" N	113° 34' 40.26" E
A6	22° 09' 31.12" N	113° 34' 33.00" E
A7	22° 09' 27.60" N	113° 34' 40.92" E
A8	22° 09' 34.12" N	113° 34' 34.12" E
A9	22° 09' 29.02" N	113° 34' 41.33" E
A10	22° 09' 36.00" N	113° 34' 34.12" E
A11	22° 09' 30.29" N	113° 34' 41.68" E
A12	22° 09' 39.00" N	113° 34' 34.48" E
A13	22° 09' 31.63" N	113° 34' 42.05" E
A14	22° 09' 40.48" N	113° 34' 36.00" E
A15	22° 09' 32.96" N	113° 34' 42.43" E
A17	22° 09' 34.30" N	113° 34' 42.80" E
B1	22° 09' 18.36" N	113° 34' 33.36" E
B2	22° 09' 25.48" N	113° 34' 30.00" E
B3	22° 09' 17.24" N	113° 34' 31.48" E
B4	22° 09' 24.00" N	113° 34' 28.12" E
B5	22° 09' 15.36" N	113° 34' 29.24" E
B6	22° 09' 23.63" N	113° 34' 25.95" E
B7	22° 09' 14.24" N	113° 34' 27.00" E
B8	22°09' 22.77" N	113°34' 24.05" E
B10R	22°09' 22.15" N	113°34' 22.81" E
B10	22°09' 21.88" N	113°34' 22.27" E
B10L	22°09' 21.53" N	113°34' 21.56" E
G01	22° 09' 18.87" N	113° 34' 17.45" E
G02	22° 09' 19.31" N	113° 34' 18.36" E
G03	22° 09' 19.81" N	113° 34' 19.38" E
G04	22° 09' 20.30" N	113° 34' 20.40" E
G05	22° 09' 16.73" N	113° 34' 18.83" E
G06	22° 09' 17.22" N	113° 34' 19.85" E
G07	22° 09' 15.04" N	113° 34' 19.76" E
G08	22° 09' 15.53" N	113° 34' 20.79" E
G09	22° 09' 13.38" N	113° 34' 20.91" E
G10	22° 09' 13.87" N	113° 34' 21.94" E
G11	22° 09' 12.28" N	113° 34' 21.96" E
G12	22° 09' 12.78" N	113° 34' 23.01" E
G13	22° 09' 15.62" N	113° 34' 24.68" E
G14	22° 09' 14.66" N	113° 34' 25.21" E
G15	22° 09' 13.81" N	113° 34' 25.68" E

INTENTIONALLY

LEFT

BLANK