AD 2 AERODROMES

RPLL AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RPLL - NINOY AQUINO INTERNATIONAL AIRPORT

RPLL AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	**ARP coordinates and site at AD**	143036N 1210049E.
2	**Direction and distance from (city)**	10 KM SE.
3	**Elevation/Reference temperature**	75 FT / 34.7ºC.
4	**Geoid undulation at AD ELEV PSN**	141 FT.
5	**MAG VAR/Annual Change**	3ºW (2021) / 6.0' increasing.
6	**AD Operator, address, telephone, telefax, telex, AFS**	Manila International Airport Authority MIAA Administration Building MIA Road, Pasay City, Metro Manila Phone: (632) 8877-1109 local 3431 / 3432 (Office of the General Manager) (632) 8877-1109 local 831 (Airport Operations Department) (632) 8877-1109 local 2028 / 2029 (Airport Integrated Command and Control Center) Email: gmo@miaa.gov.ph aod@miaa.gov.ph aiccc@miaa.gov.ph Website: http://www.miaa.gov.ph
7	**Types of traffic permitted (IFR/VFR)**	IFR-VFR.
8	**Remarks**	Nil.

RPLL AD 2.3 OPERATIONAL HOURS

1	**AD Operator**	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**	Airport Operations: H24.

RPLL AD 2.4 HANDLING SERVICES AND FACILITIES

1	**Cargo-handling facilities**	Forklifts, mechanized loaders and other standard equipment.
2	**Fuel/oil types**	80/87, 100/130, 115/145, Jet A1 and Jet B.
3	**Fuelling facilities/capacity**	By hydrant and tank truck. Service requires prior notice.
4	**De-icing facilities**	Nil.
5	**Hangar space for visiting aircraft**	Limited.
6	**Repair facilities for visiting aircraft**	Minor repairs for airframes, engines and avionics. Service requires prior arrangements.
7	**Remarks**	Ground Handling Services: Dubai National Air Travel Agency (DNATA), MacroAsia Airport Services Corporation, Philippine Airport Ground Service Solutions, Inc. (PAGSS), Philippine Skylanders International, Inc. (PSI), Aviation Partnership Philippines (Aplus), 1Aviation. Line Maintenance: Lufthansa Teknik Philippines Inc. Flight Catering Services: MacroAsia Airport Services Corporation.

RPLL AD 2.5 PASSENGER FACILITIES

1	**Hotels**	Unlimited in the city.
2	**Restaurants**	Limited at the airport. Unlimited in the city.
3	**Transportation**	Taxi, rent-a-car and buses. A transportation desk is available at designated areas within the airport.
4	**Medical facilities**	Limited medical facilities and services are available at the airport. Ambulances are available 24 hours for 10-minute-drive to nearest hospital.
5	**Bank and Post Office**	At AD, open within AD HR of OPS and in the city.
6	**Tourist Office**	Department of Tourism (DOT).
7	**Remarks**	Nil.

RPLL AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	**AD category for fire fighting**	CAT IX.
2	**Rescue equipment**	Ten (10) fire trucks [Two (2) Rosenbauer (12500 liters each), two (2) Rosenbauer (12000 liters each), three (3) E-One (12000 liters each), one (1) Spartan (5678 liters), two (2) Iveco Magirus (6000 liters each)] and four (4) Ambulances.
3	**Capability for removal of disabled aircraft**	Capable and equipped of conducting aircraft removal operations of disabled aircraft with sizes up to an A380 and B747. Disabled Aircraft Removal Plan (DARP) Coordinator: Manager, Emergency Services Department Phone: (632) 8877-1109 local 3897 +63 998 590 3900 (Mobile)
4	**Remarks**	45 Rescue and Fire Fighting personnel (MNM) per shift. 20 Medical personnel (MNM) per shift.

RPLL AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	**Types of clearing equipment**	Sweeper truck available. H24.
2	**Clearance priorities**	1 - RWY, 2 - TWY, 3 - APN, 4 - RWY Strips.
3	**Remarks**	Nil.

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

1	**Apron surface and strength**	Terminal 1 Surface: CONC. Strength: PCN 91 R/D/W/T. Terminal 2 Surface: CONC. Strength: PCN 92 R/D/W/T. Terminal 3 Surface: CONC. Strength: PCN 92 R/D/W/T. Terminal 4 Surface: CONC. Strength: PCN 91 F/D/W/U. RPA T1 Surface: CONC. Strength: PCN 91 R/C/W/U. RPA T2 Surface: CONC. Strength: PCN 92 R/C/W/U. RPA T2B Surface: CONC. Strength: PCN 91 R/C/W/U.	RPA T3 Surface: CONC. Strength: PCN 92 R/D/W/T. RPA T4 Surface: ASPH. Strength: PCN 91 F/C/W/U. 5J Ramp 1 Surface: CONC. Strength: PCN 92 R/C/W/U. 5J Ramp 2 Surface: CONC. Strength: PCN 92 R/C/W/U. Balagbag Surface: CONC. Strength: PCN 92 R/C/W/U. Cargo Terminal Surface: CONC. Strength: PCN 92 R/D/W/T.
2	**Taxiway width, surface and strength**	TWY C Width: 23 M. Surface: CONC. Strength: PCN 114 F/D/W/U. TWY D Width: 23 M. Surface: CONC + ASPH. Strength: PCN 91 F/D/W/U. TWY E1 Width: 36 M. Surface: ASPH. Strength: PCN 93 F/C/W/U. TWY E2 Width: 35 M. Surface: ASPH. Strength: PCN 92 F/C/W/U. TWY E4 Width: 35 M. Surface: ASPH. Strength: PCN 95 F/C/W/U. TWY E5 Width: 25 M. Surface: ASPH. Strength: PCN 91 F/C/W/U. TWY F1 Width: 41 M. Surface: ASPH. Strength: PCN 91 F/C/W/U.	TWY F1B Width: 18 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY F2 Width: 41 M. Surface: ASPH. Strength: PCN 91 F/C/W/U. TWY F3 Width: 22 M. Surface: ASPH. Strength: PCN 92 F/C/W/U. TWY F4 Width: 40 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY F5 Width: 45 M. Surface: ASPH. Strength: PCN 91 F/C/W/U. TWY G1 Width: 36 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY G2 Width: 52 M. Surface: CONC. Strength: PCN 90 R/C/W/U.

		TWY G3 Width: 47 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY G4 Width: 48 M. Surface: ASPH. Strength: PCN 91 F/C/W/U. TWY G5 Width: 45 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY G6 Width: 41 M. Surface: CONC + ASPH. Strength: PCN 95 F/C/W/U. TWY G8E Width: 66 M. Surface: ASPH. Strength: PCN 95 R/C/W/U. TWY G8W Width: 38 M. Surface: ASPH. Strength: PCN 95 R/C/W/U. TWY G9 Width: 48 M. Surface: CONC + ASPH. Strength: PCN 90 F/C/W/U. TWY G10 Width: 21 M. Surface: ASPH. Strength: PCN 92 F/C/W/U. TWY G11 Width: 49 M. Surface: ASPH. Strength: PCN 95 F/C/W/U. TWY G12 Width: 51 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY G13 Width: 51 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY G14 Width: 51 M. Surface: ASPH. Strength: PCN 90 F/C/W/U.	TWY G15 Width: 59 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY GA1 Width: 12 M. Surface: ASPH. Strength: PCN 91 F/C/W/U. TWY GA2 Width: 13 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY GA3 Width: 13 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY GA4 Width: 13 M. Surface: ASPH. Strength: PCN 92 F/C/W/U. TWY GA5 Width: 10 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY GA6 Width: 22 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY H1 Width: 49 M. Surface: CONC. Strength: PCN 114 F/D/W/U. TWY H2 Width: 25 M. Surface: CONC. Strength: PCN 114 F/D/W/U. TWY H3 Width: 41 M. Surface: CONC + ASPH. Strength: PCN 91 F/D/W/U. TWY H4 Width: 14 M. Surface: CONC + ASPH. Strength: PCN 91 F/D/W/U. TWY H5 Width: 22 M. Surface: CONC + ASPH. Strength: PCN 91 F/D/W/U.

		TWY J Width: 23 M. Surface: ASPH. Strength: PCN 92 F/C/W/U. TWY K Width: 54 M. Surface: CONC. Strength: PCN 95 R/C/W/U. TWY L Width: 36 M. Surface: CONC. Strength: PCN 91 R/D/W/U. TWY M1 Width: 45 M. Surface: CONC. Strength: PCN 110 R/C/W/U. TWY M2 Width: 48 M. Surface: ASPH. Strength: PCN 93 F/C/W/U. TWY M3 Width: 46 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. TWY N Width: 21 M. Surface: CONC. Strength: PCN 92 R/D/W/U. TWY P Width: 36 M. Surface: ASPH. Strength: PCN 90 F/C/W/U.	North TWY Width: 16 M. Surface: CONC. Strength: PCN 94 R/C/W/U. Rapid Exit TWY R1 Width: 30 M. Surface: CONC. Strength: PCN 110 R/C/W/U. Rapid Exit TWY R2 Width: 25 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. Rapid Exit TWY R3 Width: 25 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. Rapid Exit TWY R4 Width: 25 M. Surface: ASPH. Strength: PCN 90 F/C/W/U. Rapid Exit TWY R5 Width: 40 M. Surface: CONC. Strength: PCN 115 R/C/W/U. Rapid Exit TWY R6 Width: 30 M. Surface: CONC. Strength: PCN 115 R/C/W/U.
3	**Altimeter checkpoint location and elevation**	Nil.	
4	**VOR checkpoints**	Nil.	
5	**INS checkpoints**	Nil.	
6	**Remarks**	Nil.	

RPLL 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**	Taxiing aircraft should follow ground marshall. Follow-me vehicle available. Guide lines for Ninoy Aquino International Airport (NAIA) Passenger Terminal Aprons.
2	**RWY and TWY markings and LGT**	RWY 06: Designation, displaced THR LGTD, TDZ, CL LGTD, edge line LGTD. RWY 24: Designation, THR LGTD, TDZ, CL LGTD, edge line LGTD. RWY 13: Designation, displaced THR, TDZ, CL, edge line LGTD. RWY 31: Designation, CL, edge line LGTD, stop bar indicating end of RWY 31 LGTD. TWY C: CL LGTD, RWY holding position, intermediate holding position, edge line LGTD. TWY D: CL, intermediate holding position, edge line LGTD.

		TWY E1: CL, RWY holding position, edge line LGTD. TWY E2: CL, RWY holding position, edge line LGTD. TWY E4: CL, RWY holding position, edge line LGTD. TWY E5: CL, RWY holding position, edge line LGTD. TWY F1: CL LGTD, RWY holding position, edge line LGTD. TWY F1B: CL, RWY holding position, edge line LGTD. TWY F2: CL LGTD, RWY holding position, edge line LGTD. TWY F3: CL LGTD, RWY holding position, edge line LGTD. TWY F4: CL LGTD, RWY holding position, edge line LGTD. TWY F5: CL, RWY holding position, edge line LGTD. TWY G1: CL, intermediate holding position, edge line LGTD. TWY G2: CL, intermediate holding position, edge line LGTD. TWY G3: CL, RWY holding position, edge line LGTD. TWY G4: CL, edge line LGTD. TWY G5: CL, edge line LGTD. TWY G6: CL, edge line LGTD. TWY G8E: Edge line LGTD. TWY G8W: Edge line LGTD. TWY G9: CL, edge line LGTD. TWY G10: CL, edge line LGTD. TWY G11: CL, edge line LGTD. TWY G12: CL, edge line LGTD. TWY G13: CL, edge line LGTD. TWY G14: CL, edge line LGTD. TWY G15: CL, edge line LGTD. TWY H1: CL LGTD, RWY holding position, edge line LGTD. TWY H2: CL LGTD, RWY holding position, edge line LGTD. TWY H3: CL LGTD, RWY holding position, edge line LGTD. TWY H4: CL LGTD, RWY holding position, edge line LGTD. TWY H5: CL LGTD, RWY holding position, edge line LGTD. TWY J: CL, RWY holding position, intermediate holding position, edge line LGTD. TWY K: CL, intermediate holding position, edge line LGTD. TWY L: CL, intermediate holding position, edge line LGTD. TWY M1: CL, edge line LGTD. TWY M2: CL, edge line LGTD. TWY M3: CL, edge line LGTD. TWY N: CL, intermediate holding position, edge line LGTD. TWY P: CL, RWY holding position, edge line LGTD. North TWY: CL, intermediate holding position, edge line LGTD. Rapid Exit TWY R1: CL LGTD, RWY holding position, edge line LGTD. Rapid Exit TWY R2: CL LGTD, RWY holding position, edge line LGTD. Rapid Exit TWY R3: CL LGTD, edge line LGTD. Rapid Exit TWY R4: CL LGTD, edge line LGTD. Rapid Exit TWY R5: CL LGTD, RWY holding position, edge line LGTD. Rapid Exit TWY R6: CL LGTD, edge line LGTD.
3	**Stop bars and RWY guard lights**	TWY C: Stopbar LGT. TWY E1: Guard LGT, Stopbar LGT. TWY E2: Guard LGT, Stopbar LGT. TWY E4: Guard LGT, Stopbar LGT. TWY E5: Guard LGT, Stopbar LGT. TWY F1: Guard LGT. TWY F2: Guard LGT. TWY F3: Guard LGT. TWY F4: Guard LGT. TWY F5: Guard LGT, Stopbar LGT.

		TWY G3: Guard LGT, Stopbar LGT. TWY H1: Guard LGT, Stopbar LGT. TWY H2: Guard LGT, Stopbar LGT. TWY H3: Guard LGT. TWY H4: Guard LGT. TWY H5: Guard LGT. Rapid Exit TWY R1: Stopbar LGT. Rapid Exit TWY R2: Stopbar LGT. Rapid Exit TWY R3: Stopbar LGT. Rapid Exit TWY R4: Stopbar LGT. Rapid Exit TWY R5: Stopbar LGT. Rapid Exit TWY R6: Stopbar LGT.
4	**Other RWY protection measures**	Nil.
5	**Remarks**	Parking bays designation, restrictions available in AD 2.20 Local Aerodrome Regulations.

RPLL AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas			**In circling area and at AD**		**Remarks**
1			**2**		**3**
RWY/Area affected	**Obstacle type Elevation Markings/LGT**	**Coordinates**	**Obstacle type Elevation Markings/LGT**	**Coordinates**	
a	**b**	**c**	**a**	**b**	
06/TKOF	Condominium 243 FT	143151.5N 1210337.3E	Billboard 145 FT	143056.9N 1210016.4E	Exercise caution for helicopter operations on West side of RWY 13/31.
	Building 231 FT	143202.4N 1210326.1E			
	Tower 99 FT	143057.6N 1210151.1E			
24/TKOF	Antenna 70 FT	142938.8N 1205944.3E			
	Building 67 FT	142939.0N 1205944.8E			
	Building 54 FT	142941.0N 1205945.4E			
13/TKOF	Building 284 FT	142858.2N 1210237.8E			
	Electrical Post, Concrete 120 FT	143016.1N 1210118.8E			
31/TKOF	Building 232 FT	143227.5N 1205923.2E			
	Building 169 FT	143211.6N 1205911.5E			
	Hotel 159 FT	143207.9N 1205917.3E			
	Signboard 112 FT	143151.0N 1205937.4E			
	Building 48 FT	143138.9N 1210006.3E			
	Terminal 4 35 FT	143129.5N 1210004.0E			

RPLL AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	**Associated MET Office**	Aeronautical Meteorology Services Section (AMSS); Weather Division (WD); Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA); Department of Science and Technology (DOST).
2	**Hours of service** **MET Office outside hours**	H24. -
3	**Office responsible for TAF preparation** **Periods of validity**	AMSS, PAGASA - RPLLYMYX. H30.
4	**Trend forecast** **Interval of issuance**	Trend Forecast (appended in every METAR and SPECI) - issued every hour and as needed. Take-off and landing forecast condition - issued every 6 hours.
5	**Briefing/consultation provided**	Weather briefings or consultations are provided to the air navigation users (walk-in or phone calls or meetings).
6	**Flight documentation** **Language(s) used**	TAF of origin and destination; RPLL take-off and landing condition; WAFC products (Significant Weather (SIGWX) Chart (FL250-630), 500 hPa prognostic chart for Ascent/ Descent, 300 hPa and 200 hPa prognostic charts and other level upon request). English.
7	**Charts and other information available for briefing or consultation**	SIGWX chart (FL250-630), Upper air charts (700-, 500-, 300-, 200- hPa), TAFs/METARs/SPECI/SIGMETs from RPLLYMYX and other meteorological centers, satellite/radar images. Lightning information display and issuance of lightning alert advisory.
8	**Supplementary equipment available for providing information**	Satellite Animation and Interactive Diagnosis (SATAID), Radar monitoring station. AWOS: RWY 06/24 - ceilometer, transmissometer, pressure sensor, rain sensor, temperature and humidity sensor, wind sensor, AWOS observer workstation, AWOS forecaster workstation, AWOS viewing monitor (Aeroview) at Manila Tower. Model 928 Thunderstorm sensor at RWY 24 standalone and PAGASA lightning network (28 lightning sensors nationwide). WAFC workstation, AMHS workstation, computers with internet access, Telefax, copying machine, dedicated phone (AMSS - MIA Command Center) for lightning alert advisory.
9	**ATS units provided with information**	Manila Tower, Area Control Center (ACC), Air Traffic Control and Airspace Management Department (ATCAMD), MIA Command Center.
10	**Additional information (limitation of service, etc.)**	Close collaboration with ATS units is highly recommended for service enhancement. AMSS was provided with new office space by MIAA to resolve the difficulty in continuous weather observation in the aerodrome and its vicinity during the occurrence of thunderstorm. For the continuous remote weather monitoring of the aerodrome, specifically to address the limitation in the provision of aerodrome or wind shear warnings, there is a need to install a weather radar dedicated for RPLL.

RPLL AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE 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	Slope of RWY-SWY
1	2	3	4	5	6	7
06	060.30º	3514 X 60	PCN 114 F/D/W/U CONC+ASPH	THR COORD 142954.83N 1210005.11E RWY end COORD 143049.78N 1210144.02E THR GUND 142 FT	THR 14 FT TDZ 24 FT	Nil
24	240.30º	3514 X 60	PCN 114 F/D/W/U CONC+ASPH	THR COORD 143049.78N 1210144.02E RWY end COORD 142953.13N 1210002.07E THR GUND 142 FT	THR 74 FT TDZ 74 FT	0.516% downhill towards THR 06
13	134.80º	2249 X 45	PCN 104 R/A/W/T CONC+ASPH	THR COORD 143121.65N 1210018.16E RWY end COORD 143033.38N 1210108.07E THR GUND 142 FT	THR 15 FT TDZ 25 FT	Nil
31	314.80º	2249 X 45	PCN 104 R/A/WT CONC+ASPH	THR COORD 143033.38N 1210108.07E RWY end COORD 143124.95N 1210014.75E THR GUND 142 FT	THR 41 FT	Nil

SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location/ description of arresting system	OFZ	Remarks
8	9	10	11	12	13	14
Nil	150 X 150	3634 X 300	90 X 120	Nil	Nil	RWY end ELEV: 74 FT.
105 X 60	220 X 150	3634 X 300	90 X 120	Nil	Nil	RWY end ELEV: 14 FT.
Nil	Nil	2309 X 300	90 X 90	Nil	Nil	End Strip: 60 M X 300 M. RWY end ELEV: 41 FT.
Nil	144 X 150	2309 X 300	90 X 90	Nil	Nil	RWY end ELEV: 13 FT.

RPLL AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
06	3514	3664	3514	3409	Displaced by 105 M.
24	3409	3629	3514	3409	Nil.
13	2249	2309	2249	2105	Displaced by 144 M.
31	2105	2249	2105	NU	Limited to departure operations via TWY F5.

RWY Designator	Intersection departures	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6	7
06	TWY E4	2089	2239	2089	2089	Nil
06	TWY E5	3078	3228	3078	3078	Nil
24	TWY E1	3033	3253	3138	3033	Nil
24	TWY E2	2357	2577	2462	2357	Nil
13	TWY F1	1874	1934	1874	1874	Nil
13	TWY F2	1433	1493	1433	1433	Nil
31	TWY F4	1508	1652	1508	Nil	Nil
31	TWY F5	1986	2130	1986	Nil	Nil

RPLL AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type, LEN, INTST	THR LGT colour, WBAR	VASIS, (MEHT), PAPI	TDZ, LGT LEN
1	2	3	4	5
06	PALS CAT I, 900 M, LIH with sequenced FLG LGT	THR LGT Green, NR of WBAR: 10	PAPI 3.0º Left/Right (71.61 FT)	Nil
24	PALS CAT I, 900 M, LIH with sequenced FLG LGT	THR LGT Green, NR of WBAR: 10	PAPI 3.0º Left/Right (60.85 FT)	Nil
13	Nil	THR LGT Green, NR of WBAR: 10 RTIL White	PAPI 3.0º Left/Right (57.05 FT)	Nil
31	Nil	Nil	Nil	Nil

RWY Centre Line LGT LEN, spacing, colour, INTST	RWY Edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
6	7	8	9	10
3380 M, 15 M, White/Red, LIH	3300 M, 60 M, White/Amber, LIH	Red, NR of WBAR: 10	Nil	THR LGT ADDN Inset RWY THR LGT: 10 Green. PAPI Path WID: 0.50º. VIS RG: 5 NM. VER OBST CLR: 1.36º. Horizontal OBST CLR: -8.0º / +10 RWY CL. CL LGT Last 600 M of CL LGT: alternating Red/White, 300 M Red FM THR CL LGT commences 13 M FM RWY 06 THR and ends 16 M to RWY 24 THR. Edge LGT Last 600 M of edge LGT: Amber. Edge LGT commences 49 M FM RWY 06 THR and ends 60 M to RWY 24 THR. End LGT ADDN Inset RWY End LGT: 10 Red.

3380 M, 15 M, White/Red, LIH	3300 M, 60 M, White/Amber, LIH	Red, NR of WBAR: 10	Nil	THR LGT ADDN Inset RWY THR LGT: 10 Green. PAPI Path WID: 0.50º. VIS RG: 5 NM. VER OBST CLR: 1.36º. Horizontal OBST CLR: -8.0º / +10 RWY CL. CL LGT Last 600 M of CL LGT: alternating Red/White, 300 M Red FM THR CL LGT commences 16 M FM RWY 24 THR and ends 13 M to RWY 06 THR. Edge LGT Last 600 M of edge LGT: Amber. Edge LGT commences 60 M FM RWY 24 THR and ends 49 M to RWY 06 THR. End LGT ADDN Inset RWY End LGT: 10 Red.
Nil	2109 M, 60 M, White/Amber, LIH	Red, NR of WBAR: 10	Nil	THR LGT ADDN Inset RWY THR LGT: 10 Green. PAPI Path WID: 0.35º. VIS RG: 5 NM. VER OBST CLR: 1.36º. Horizontal OBST CLR: -8.0º / +10 RWY CL. Edge LGT Last 600 M of edge LGT: Amber. Last RWY Edge LGT is 80 M to the end of RWY 31.
Nil	2109 M, 60 M, White/Amber, LIH	Red	Nil	Edge LGT Last 600 M of edge LGT: Amber. End LGT Inset RWY End LGT: 10 Red.

RPLL AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	**ABN/IBN location, characteristics and hours of operation**	Nil.
2	**LDI location and LGT** **Anemometer location and LGT**	LDI Windcones: Balagbag: 143044.59N 1210107.51E, LGTD. RWY 06: 142957.74N 1210016.55E, LGTD. RWY 24: 143038.83N 1210133.64E, LGTD. RWY 13: 143115.87N 1210019.27E, LGTD. Anemometer RWY 06: 142957.20N 1210017.20E, LGTD. RWY 24: 143038.65N 1210133.06E, LGTD. RWY 13: 143111.90N 1210024.00E, LGTD. RWY 31: 143024.30N 1210109.80E, LGTD.
3	**TWY edge and centre line lighting**	TWY C: Edge LGT Blue, CL LGT Green. TWY D: Edge LGT Blue. TWY E1: Edge LGT Blue. TWY E2: Edge LGT Blue. TWY E4: Edge LGT Blue. TWY E5: Edge LGT Blue. TWY F1: Edge LGT Blue, CL LGT Green. TWY F1B: Edge LGT Blue. TWY F2: Edge LGT Blue, CL LGT Green. TWY F3: Edge LGT Blue, CL LGT Green. TWY F4: Edge LGT Blue, CL LGT Green. TWY F5: Edge LGT Blue. TWY G1: Edge LGT Blue. TWY G2: Edge LGT Blue. TWY G3: Edge LGT Blue. TWY G4: Edge LGT Blue. TWY G5: Edge LGT Blue. TWY G6: Edge LGT Blue. TWY G8E: Edge LGT Blue. TWY G8W: Edge LGT Blue. TWY G9: Edge LGT Blue. TWY G10: Edge LGT Blue. TWY G11: Edge LGT Blue. TWY G12: Edge LGT Blue. TWY G13: Edge LGT Blue. TWY G14: Edge LGT Blue. TWY G15: Edge LGT Blue. TWY H1: Edge LGT Blue, CL LGT Green. TWY H2: Edge LGT Blue, CL LGT Green. TWY H3: Edge LGT Blue, CL LGT Green. TWY H4: Edge LGT Blue, CL LGT Green. TWY H5: Edge LGT Blue, CL LGT Green. TWY J: Edge LGT Blue. TWY K: Edge LGT Blue. TWY L: Edge LGT Blue. TWY M1: Edge LGT Blue. TWY M2: Edge LGT Blue. TWY M3: Edge LGT Blue. TWY N: Edge LGT Blue. TWY P: Edge LGT Blue. North TWY: Edge LGT Blue. Rapid Exit TWY R1: Edge LGT Blue, CL LGT Green. Rapid Exit TWY R2: Edge LGT Blue, CL LGT Green. Rapid Exit TWY R3: Edge LGT Blue, CL LGT Green. Rapid Exit TWY R4: Edge LGT Blue, CL LGT Green. Rapid Exit TWY R5: Edge LGT Blue, CL LGT Green. Rapid Exit TWY R6: Edge LGT Blue, CL LGT Green.

4	**Secondary power supply/switch-over time**	15 SEC.
5	**Remarks**	Nil.

RPLL AD 2.16 HELICOPTER LANDING AREA

1	**Coordinates TLOF or THR of FATO Geoid undulation**	Nil.
2	**TLOF and/or FATO elevation M/FT**	Nil.
3	**TLOF and FATO area dimensions, surface, strength, marking**	Nil.
4	**True BRG of FATO**	Nil.
5	**Declared distance available**	Nil.
6	**APP and FATO lighting**	Nil.
7	**Remarks**	1. North Landing/Take-off Area Alpha - In front of Air Ads Hangar. 2. North Landing/Take-off Area Bravo - In front of Philippine Airlines (PAL) Simulator Building. 3. South Landing/Take-off Area Alpha - In front of North Star Airline (NSA) Hangar. 4. South Landing/Take-off Area Bravo - In front of Philippine National Police (PNP) Hangar.

RPLL AD 2.17 ATS AIRSPACE

1	**Designation and lateral limits**	MANILA AERODROME TRAFFIC ZONE (ATZ): A circle radius 5 NM centered on 143036N 1210049E (ARP). MANILA CONTROL ZONE (CTR): A circle radius 10 NM centered on 143028.7N 1210118.2E (MIA DVOR/DME) extending to 15 NM radius on the Northeast bounded by Radial 042 clockwise to Radial 115 and on the Southwest bounded by Radial 200 clockwise to Radial 255. MANILA IFR Climb/Descend Area: The airspace bounded by 143028.7N 1210118.2E (MIA DVOR/DME) Radial 042 clockwise to Radial 115 to the East and Radial 200 clockwise to Radial 255 to the Southwest starting from 5 NM of 143036N 1210049E (ARP) extending to 15 NM. MANILA VFR Corridor: All areas outside the IFR climb/descend areas within 15 NM from 143036N 1210049E (ARP) excluding ATZ. MANILA TERMINAL CONTROL AREAS (TMA): From 152932N 1204903E then a clockwise arc radius 60 NM centered on 143028.7N 1210118.2E (MIA DVOR/DME) - 150030N 1215500E - 144555N 1223005E - 143955N 1223005E - 142949N 1220309E then a clockwise arc radius 60 NM centered on 143028.7N 1210118.2E (MIA DVOR/DME) - 134525N 1202021E - 134525N 1200305E - 135037N 1195953E - 143440N 1202353E - 144740N 1202353E - 145658N 1204320E - 150704N 1204903E - 152932N 1204903E.

2	**Vertical limits**	ATZ: SFC up to but excluding 2000 FT. VFR Corridor: 5 NM to 10 NM - SFC to 2000 FT. : 10 NM to 15 NM - SFC to 2500 FT. CTR: SFC up to 1500 FT. IFR Climb/Descend Areas: GND to UNL. TMA: 1500 FT to FL200 (EXC ATS routes at FL130 and above) excluding ATZ. 1500 FT to 11000 FT (ATS routes inside TMA at 11000 FT and below) excluding ATZ. FL130 to FL200 (ATS routes inside TMA at FL130 and above).
3	**Airspace classification**	ATZ - B; CTR - D; TMA - D (EXC ATS routes at FL130 and above; ATS routes inside TMA at 11000 FT and below) and A (ATS routes inside TMA at FL130 and above).
4	**ATS unit call sign** **Language(s)**	ATZ - Manila Tower. CTR/TMA - Manila Radar Approach. In English.
5	**Transition altitude**	11000 FT.
6	**Hours of applicability**	H24.
7	**Remarks**	VFR Corridor - shall only be in effect between sunrise to sunset.

RPLL AD 2.18 ATS COMMUNICATION FACILITIES

Service Designation	Call Sign	Frequency	SATVOICE number	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
TWR	Manila Tower	118.1 MHZ 121.5 MHZ 118.4 MHZ	Nil	Nil	H24	PRI FREQ. Distress FREQ. SRY FREQ.
GND	Ground Control	121.8 MHZ 122.0 MHZ				PRI FREQ. SRY FREQ.
RAMP	Ramp Control One	121.7 MHZ 121.6 MHZ				PRI FREQ. SRY FREQ. Operating Agency: MIAA.
	Ramp Control Two	128.8 MHZ 122.45 MHZ				PRI FREQ. SRY FREQ. Operating Agency: MIAA.
	Ramp Control Three	121.35 MHZ 121.55 MHZ				PRI FREQ. SRY FREQ. Operating Agency: MIAA.
	Domestic Ramp	123.25 MHZ 123.65 MHZ				PRI FREQ. SRY FREQ. Operating Agency: MIAA.

Service Designation	Call Sign	Frequency	SATVOICE number	Logon address	Hours of operation	Remarks
1	2	3	4	5	6	7
APP	Final/Departure Control (FMI)	124.4 MHZ 127.7 MHZ				PRI FREQ. SRY FREQ.
	Manila South Sector (FMS)	124.8 MHZ 127.7 MHZ				PRI FREQ. SRY FREQ.
	Manila North Sector (FMN)	119.9 MHZ 127.7 MHZ				PRI FREQ. SRY FREQ.
CLNC DEL	Clearance Delivery	125.1 MHZ 125.5 MHZ			H24	PRI FREQ. SRY FREQ.
ACC	Manila Control	120.5 MHZ 128.7 MHZ 125.7 MHZ 132.7 MHZ	Nil	Nil		Central North sector FREQ. Central East sector FREQ. Central South sector FREQ. Central West sector FREQ.
ATIS	Manila ATIS	126.4 MHZ				Nil.
FSS	Manila Radio	5447.5 KHZ 3834.0 KHZ 124.0 MHZ			2100 - 1300	P/P PRI FREQ. P/P SRY FREQ. A/G communication.
FIS	Manila Radio	2998 / 6532 KHZ 6562 / 8903 KHZ 13300 / 17904 KHZ 3485 / 5655 KHZ 8942 / 11297 KHZ 11396 / 13309 KHZ			H24	Central West Pacific (CWP) FREQ. South East Asia (SEA-2) FREQ.

RPLL AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OP(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
DVOR/DME	MIA	114.4 MHZ/ CH91X	H24	143028.7N 1210118.2E	100 FT	193.66 M FM RWY 06/24 CL and 117.83 M FM extended RWY 13/31 CL. DVOR output power: 100 watts. DME output power: 1000 watts. Restriction: VOR Radial 090 to Radial 100 and Radial 114 to Radial 120 U/S beyond 50 NM.
LOC 06 ILS CAT I	IML	109.1 MHZ	H24	143052.7N 1210149.3E	Nil	Output: 25 watts. 0 M FM RWY 06 CL and 180 M FM RWY 24 THR. WID: 3.6º.
GP 06		331.4 MHZ	H24	142956.1N 1210015.9E	Nil	Output: 10 watts. 125 M right of RWY 06 CL and 300 M FM RWY 06 THR. TCH: 52 FT. Angle: 3.01º. WID: 0.75º.
DME 06		CH28X	H24	142956.1N 1210015.9E	Nil	Output: 100 watts.
LOC 24 ILS CAT I	IMA	109.9 MHZ	H24	142950.2N 1205956.9E	Nil	Output: 25 watts. 0 M FM RWY 24 CL and 286.34 M FM SWY end of RWY 24. WID: 3.6º.
GP 24		333.8 MHZ	H24	143039.6N 1210134.3E	Nil	Output: 10 watts. 125 M right of RWY 24 and 410 M FM RWY 24 THR. TCH: 50 FT. Angle: 3.06º. WID: 0.7º.
DME 24		CH36X	H24	143039.6N 1210134.3E	Nil	Output: 100 watts.

RPLL AD 2.20 LOCAL AERODROME REGULATIONS

1. Airport regulations

1.1 General

1.1.1 Entry and departure of international flights:

a. All Manila bound international scheduled or non-scheduled air carriers must land at NAIA and shall park at the assigned bay for Customs, Immigration, Quarantine, and Security (CIQS) clearance as approved by Manila International Airport Authority - Airport Ground Operations and Safety Division (MIAA-AGOSD) or Airport Integrated Command and Control Center (MIAA-AICCC) or General Aviation Operations Division (MIAA-GAOD);

b. No aircraft shall be released from the assigned bay to their respective hangars unless officially released by the CIQS and airport authority;

c. All international scheduled or non-scheduled air carriers intending to depart from NAIA shall proceed to the assigned bay for CIQS clearance;

d. Airport flight charges, clearance or payment is also required from departing non-scheduled air carriers;

e. Loading and unloading of cargoes and embarkation/disembarkation of passengers shall be done at the assigned bay; and

f. All air carriers intending to operate in Manila must ensure availability of ground handling equipment such as tow bar prior operations in the airport.

1.1.2 Check ride and all training flights from and/or to NAIA or within the Manila ATZ such as but not limited to the following are hereby prohibited:

a. Touch and go;

b. Solo flight;

c. Cross country;

d. Local flights (fixed wing); and

e. Helicopter training.

1.2 Local Flying Restrictions

1.2.1 Closed to aircraft operations without a functioning two-way radio.

1.2.2 No aircraft without a functioning ATC Transponder with a Mode C capability shall be authorized to operate within the Manila TMA.

1.2.3 The following are imposed on general aviation traffic at NAIA:

a. General Aviation operations and aerial works shall be prohibited to use NAIA from 0200 - 1100, except helicopter operations, medical evacuations, official government flights, official diplomatic flights and aircraft on emergency.

b. General Aviation operations and aerial works shall be limited to only two (2) cycles per hour, on the time periods of allowed operations at NAIA.

c. Exempted flights not exceeding 5682 KG are permitted to land only during 0200 - 0359 and only when RWY 13 in use.

d. All domestic general aviation aircraft operations (fixed and rotary wing) must submit flight advisory to MIAA through GAOD email address gaod@miaagovphils.onmicrosoft.com and genavdivision@gmail.com at least H24 before operations with the following details:

i. Operator Name;

ii. Aircraft Registry;

iii. Aircraft Type;

iv. Date of Operations;

v. Proposed ETA/ETD;

vi. Route;

vii. Number of Passengers, Flight Manifest or General Declaration (GenDec);

viii. RPLL Hangar/Parking Area Location;

ix. Submitted by (complete name and designation);

x. Contact Number;

xi. Nature of Flight; and

xii. Total Kilograms of Cargo.

1.2.4 To ensure compliance with the above parameters, the following rules on General Aviation operations are laid down:

a. All Domestic and International General Aviation flights departing and arriving NAIA shall secure a runway slot from ATS as a condition for the provision of ATC clearance.

b. Flight plans for Domestic operations may be filed in advance with the Manila Flight Planning and Briefing Station (FPBS), but the assignment of runway slot(s) shall only take place five (5) days before the Estimated Off-Block Time (EOBT).

c. Flight plans for International operations may be filed in advance with the Manila FPBS, but the assignment of runway slot(s) shall only take place ten (10) days before the EOBT.

1.2.5 All General Aviation flights departing and arriving NAIA between 1101-0159 daily are advised to secure runway slot from ATS via email atfm@caap.gov.ph.

1.2.6 General Aviation category aircraft in a state of emergency landing must, as much as possible, utilize RWY 13/31.

1.2.7 Food and fish runs are prohibited to take-off and land at NAIA.

1.2.8 Unless authorized by ATC, arriving aircraft shall enter Manila TMA at 250 KT IAS, to cross 20 NM at 210 KT IAS, and to cross 10 NM final at 180 KT IAS. For CAT C and D, cross Final Approach Fix (FAF/FAP) at 150 KT IAS. For CAT A and B, cross 5 NM final at 130 KT IAS.

Note: For ATR, cross 5 NM final at 150 KT IAS.

1.2.9 Aircraft with security emergency shall park and will be cleared by authorities at Isolation Parking Area located at TWY C between TWY H2 and TWY E5.

1.2.10 S1, S2 and S7 Terminal 1 Start-up areas are not allowed for 180º turn to all types of aircraft.

1.2.11 One way traffic flow in effect when entering/leaving Manila TMA.

For Central North Sector,	Arrival:	CIA W16 MIA
	Departure:	MIA DCT CAB
For Central East Sector,	Arrival:	POLIO DCT MIA
	Departure:	MIA DCT JOM
For Central West Sector,	Arrival:	GUKUM DCT LUBAN DCT MIA
		REKEL DCT LUBAN DCT MIA
		LEGED DCT LUBAN DCT MIA
		TOKON DCT LUBAN DCT MIA
	Departure:	MIA L628 KARAG
		MIA M765 EXORA MIA
		M646 BUCAL
For Central South Sector,	Arrival:	IBAGO B472 LIGPA DCT MIA
		LAIYA B473 LIGPA DCT MIA
		CONDE W11 MIA
		ALBAT DCT MIA
	Departure:	MIA A461 VERDE
		MIA B462 IPATA
		MIA W15 TIMON

Remarks: For flights arriving and departing MIA, file your flight plans accordingly.

1.2.12 To provide one way flow of air traffic between NAIA and Francisco B. Reyes Airport (Busuanga), flight should flight plan via the following route:

a. RPLL to RPVV
- MIA M646 until OLRAX

b. RPVV to RPLL
- Join AWY TELEN W3 OLRAX M646 MIA

1.2.13 A maximum of 1500 FT/MIN rate of climb/descent shall be observed by pilots prior to reaching the last 2000 FT of its assigned altitude/level.

1.2.14 All joiner flights arriving at NAIA are required to join via TMA boundary. The following shall be strictly observed and filled in Item NR 15 of the Standard ICAO Flight plan format to prevent rejection by the ATM System. Non adherence will result in unnecessary delays to the flights.

1.2.14.1 VFR to IFR inbound NAIA

Former Route	New Route to be filled in Standard ICAO Flight Plan Item NR 15
BALAY	BUCAL
30.0 DME	ALBAT
LIPA	IBAGO/LAIYA

1.2.15 For all aircraft arriving at NAIA, the following flight planned route shall be strictly observed and filled in Item NR 15 of the Standard ICAO Flight plan format to prevent rejection by the ATM System. Non adherence will result in unnecessary delays to the flights. Do not include STAR.

1. A461 - A461 CAB
2. A582 - A582 KANDU POLIO
3. A590 - A590 MUPOB KANDU POLIO
4. B462 - B462 CAB
5. B472 - B472 IBAGO
6. B473 - B473 LAIYA
7. L628 - L628 GUKUM LUBAN
8. M646 - M646 TOKON LUBAN
9. M646 - M646 BUCAL (Non-jet aircraft)
10. M765 - M765 REKEL LUBAN
11. N884 - N884 W1 CAB
12. N884 - N884 LUBAN
13. W3 - TELEN OLRAX LUBAN
14. W4 - W4 NABAL
15. W8 - W8 ALBAT
16. W9 - W9 ALBAT
17. W11 - W11 CONDE
18. W16 - W16 TADEL
19. W16A - W16A NABAL

Notes:

1. For aircraft departing Diosdado Macapagal International Airport (RPLC) bound for NAIA - OLIVA.
2. For aircraft departing Subic Bay Principal Airport (RPLB) bound for NAIA - OLONG.

1.3 RWY 13/31 Operations

1.3.1 RWY 13/31 Hours of Operations

a. MON, TUE, WED, FRI, SUN: H24.

b. THU, SAT: 0000 - 1500, 2000 - 2359.

1.3.2 During emergency, a 30-minute prior notice is required and must be approved by the Manager AGOSD of MIAA and/or his representative. Airlines' request for exemption to utilize the runway during closure brought by other operating requirements beyond emergency situation must be coordinated with all other concerned offices (e.g., Manila Control Tower/CAAP, OPCEN/PARCC/ MIAA Engineering and Command Center/Airlines) and shall also be approved by the Assistant General Manager for Operations (AGMO) of MIAA and/or his representative.

1.3.3 Touchdown on RWY 13 shall be made beyond threshold marker (MNM ALT 15 M).

1.3.4 Aircraft departing at RWY 13 to commence take-off roll at Arrow 1.

1.3.5 Take-off/landing on RWY 13/31 of Code C and lower category aircraft allowed based on the following limitations:

a. Take-off on RWY 13 allowed except THU and SAT 1500 - 2000.

b. Take-off on RWY 31 allowed to commence at TWY F5/G3.

1. Aircraft authorized for RNP1 operations shall indicate on filed flight plan field 18/RMK-PBN/01 AND/OR 02.

2. Aircraft not authorized for RNP1 operations provided during day visual operations only.

c. Landing on RWY 31 not allowed.

d. Landing on RWY 13 of Code C and lower category aircraft allowed whenever RWY 06/24 is closed.

1. Landing on RWY 13 during VMC is limited to General Aviation from 0200 - 0359 except for medical evacuation, official government flights, official diplomatic flights, and aircraft emergencies. Slotting of Category A and B aircraft shall be approved by the Air Traffic Flow Management (ATFM) of ATS.

Notes:

i. During IMC, no take-off/landing on RWY 13/31 of Code C aircraft whenever there is a Code C aircraft operating on TWY D.

ii. During VMC, no take-off/landing on RWY 13/31 of Code C aircraft whenever there is a Code D and E aircraft operating on TWY D.

e. All take-off and landing on RWY 13 must comply with the existing noise abatement procedure.

1.3.6 RWY 31 take-off from TWY F1, TWY F2 and TWY F3 intersection is not allowed.

1.3.7 Take-off on RWY 13 from West General Aviation hangar should commence at TWY F1B instead of going to TWY H3 or starting points S22 and S22A in order to de-clog the extension RWY 13 departure. VFR start-up clearance to be regulated by Ground Control.

1.3.8 Aircraft not exceeding 5682 KG shall be permitted to land only when RWY 13 in use.

1.3.9 RWY 13 landing shall vacate via TWY F4, TWY F5, TWY G3 or TWY P.

1.3.10 Code D and Code E aircraft may use RWY 13/31 for taxiing only from TWY F1 to TWY C and vice versa.

1.3.11 RWY 13 open for take-off for huskitted B737-200 aircraft from sunrise to sunset.

1.3.12 Vehicle crossing on RWY 13/31 is not permitted unless identified and cleared by Manila Control Tower through a two-way radio.

1.4 RWY 06/24 Operations

1.4.1 RWY 06/24 Hours of Operations

a. MON, WED, THU, FRI, SAT: 0000 - 2200, 2220 - 2359.

b. TUE, SUN: 0000 - 1630, 2130 - 2359.

1.4.2 During emergency, a 30-minute prior notice is required and must be approved by the Manager AGOSD of MIAA and/or his representative. Airlines' request for exemption to utilize the runway during closure brought by other operating requirements beyond emergency situation must be coordinated with all other concerned offices (e.g. Manila Control Tower/CAAP, OPCEN/PARCC/ MIAA Engineering and Command Center/Airlines) and shall also be approved by the AGMO of MIAA and/or his representative.

1.4.3 For Code F, airlines must submit a request for exemption at least five (5) days prior notice for using RWY 06/24 for special operations. Request shall be approved by the AGMO of MIAA and/or his representative, as well as ATFM of CAAP.

1.4.4 To expedite the flow of landing aircraft at NAIA, the following procedures are to be followed:

a. Landing RWY 06
   1. Code C and below - vacate via Rapid Exit Taxiways R2/R3 or TWY E4.
   2. Code D and above - vacate via TWY E2, Rapid Exit TWY R1 or TWY E1.

b. Landing RWY 24
   1. Code C and below - vacate via Rapid Exit TWY R4 or TWY E4.
   2. Code D and above - vacate via Rapid Exit Taxiways R5/R6 or TWY E5.

1.4.5 All take-off RWY 06/24 every 1000 - 2200 daily shall contact departure Functional Volume of Manila Inner (FMI) on 124.4 MHZ upon passing 1000 FT AGL.

2. Taxiing to and from stands

2.1 General

2.1.1 Departure Procedures

2.1.1.1 Aircraft should not commence pushback or any other maneuvers on the apron (including idle power start-up on bays) unless clearance to do so has been obtained from Ramp Control. Request for clearance to pushback shall be made only on the following conditions:

a. the aircraft doors are closed, and aerobridge tack-out;

b. towbar/tow truck is engaged; and,

c. the aircraft is ready for departure.

2.1.1.2 When delay is expected, Ramp Control will advise the pilot of the earliest time of departure.

2.1.1.3 After pushback/engine start, taxi clearance will be given by Ramp Control for movement with the apron area towards the specified exit gateways.

2.1.1.4 Change to Ground Control frequency (121.8 MHZ) prior to entering the main taxiway or as instructed by ATC. Do not proceed to the main taxiway without clearance from Ground Control.

2.1.2 Arrival Procedures

2.1.2.1 After the aircraft has landed, the pilot shall change to Ground Control immediately after clearing the runway or as instructed by ATC. Ground Control will instruct the aircraft to proceed to specified entrance gateways.

2.1.2.2 Contact Ramp Control or as instructed by ATC for approval to continue taxiing to the apron towards assigned parking bay.

2.1.2.3 Aircraft entering the apron are to follow closely the apron taxi guide lines so as to maintain safe distance between taxiing and parked aircraft.

2.1.2.4 All arriving scheduled air carriers operating at Terminal 4 including remote parking bays NR 81 and 82 shall contact Domestic Ramp Control for traffic flow, tow-in, and bay assignment, from designated release points of Ground Control or as authorized by ATC.

2.2 Void time of ATC Clearance for Delayed Start-up

2.2.1 Departures

2.2.1.1 The Pilot shall call Clearance Delivery on 125.1 MHZ for ATC clearance five (5) minutes from the estimated start-up time. After receiving clearance, the pilot shall switch to Ground Control on 121.8 MHZ for start-up clearance then after receiving start-up clearance, the pilot shall switch to ramp control for pushback clearance or any other maneuver on the apron (including idle power start-up on bays).

Note: Start-up shall commence at designated starting point only.

2.2.2 Domestic Procedures

2.2.2.1 The pilot shall call Clearance Delivery specifying preferred runway and request for ATC clearance five (5) minutes from estimated start-up time. After receiving clearance, the pilot shall switch to Ground Control on 121.8 MHZ for start-up clearance then after receiving start-up clearance, the pilot shall switch to ramp control for pushback clearance or any other maneuver on the apron (including idle power start-up on bays).

Note: Start-up shall commence at designated starting point only.

2.2.3 Validity of ATC Clearance

2.2.3.1 Failure to start-up engine within the specified start-up time shall render the ATC clearance void. Any anticipated delay in starting shall be relayed to Clearance Delivery.

2.3 Communication Failure Between Pilot and Ramp Control

2.3.1 If communication cannot be established by a departing or arriving aircraft with Ramp Control, all aircraft movement within the apron shall be controlled by the ground marshall or by a follow-me vehicle.

2.3.2 When communication has been re-established with Ramp Control, departing aircraft shall immediately contact Clearance Delivery for ATC clearance.

2.4 Domestic Ramp Control Procedures

2.4.1 All arriving scheduled air carriers operating at Terminal 4 and Remote Parking Apron T4 shall contact Domestic Ramp Control for traffic flow, tow-in, and bay assignment, from designated release points of Ground Control or as authorized by ATC.

2.4.2 After securing ATC clearance from Clearance Delivery or when authorized by ATC, all departing scheduled air carriers originating at Terminal 4 shall contact Domestic Ramp Control for gate holding and subsequent pushback to designated starting points prior to start-up.

2.4.3 All general aviation aircraft (including rotary wing) operating in the General Aviation area shall contact Domestic Ramp Control (123.25 MHZ) for clearance/traffic advisory/information service prior commencing aircraft movement and operations such as towing/ground taxiing/air taxiing and start-up/run-up to and from respective hangar/helipad/parking area. Contact Ground Control (121.8 MHZ) for start-up clearance.

2.4.4 When unable to contact Domestic Ramp Control frequency, all aircraft on the Domestic Passenger and General Aviation aprons shall switch to Manila Ground Control frequency.

2.4.5 All aircraft on East and West maintenance area (Lima Gate and Delta Gate) and at TWY F1B shall provide their own separation until positive control with Domestic Ramp Control.

2.4.6 All aircraft on the General Aviation movement area TWY GA1 to TWY GA6 (for passive vehicular control along these Taxiways) must exercise caution due to ramp control restrictive vision.

3. Parking Bays and Remote Parking Apron

3.1 All parking bays are allocated on a first come first serve basis with due regard to aircraft type, location of airline handling facilities and the prevailing or anticipated traffic situation. Normally, parking bays shall be assigned at least three (3) hours prior to parking.

Note: Long term parking or aircraft staying overnight may be required to park at the cargo apron and/or Remote Parking Area.

3.2 Assignment of Parking Bays at the Terminal 1 Apron, Remote Parking Apron T1 (RPA T1), Cargo Terminal Apron (ICT), Terminal 2 Apron, Remote Parking Apron T2 (RPA T2), Remote Parking Apron T2B (RPA T2B), Terminal 3 Apron, Remote Parking Apron T3 (RPA T3), Terminal 4 Apron, Remote Parking Apron T4 (RPA T4), Balagbag Apron, 5J Ramp 1 Apron, 5J Ramp 2 Apron.

3.2.1 Terminal 1 Apron

a. East Wing

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
1 (Single Tunnel)	143020.88N 1210018.55E	B757, B737, B727, A321, A320, A319, A310.	Nil.
2 (Single Tunnel)	143020.02N 1210020.70E	B767, B757, B737, B727, B787-8, A321, A320, A319, A310, A300.	Nil.
3 (Double Tunnel)	143020.80N 1210023.17E	B744, B743, B742, B741, B772, B767, B757, A343, A342, A330, A321, A320, A319, A310, A300.	Tow-in procedure with wing-walker for B744, B743, B742, B741, B772.
4 (Single Tunnel)	143020.06N 1210024.44E	B744, B743, B742, B741, B773, B787-8, B787-900, B772, B767, B757, B737, A343, A342, A330, A321, A320, A319, A310, A300.	Tow-in procedure with wing-walker for B744, B743, B742, B741, B773, B772.
5 (Single Tunnel)	143018.40N 1210024.70E	B744, B743, B742, B741, B773, B772, B767, B757, B727, B707, A346, A345, A343, A342, A330, A321, A320, A319, A310, A300.	A346 and A345 utilizing first class tube on L1 door only due to bridge limitation.
6 (Double Tunnel)	143017.68N 1210023.59E	B744, B743, B742, B741, B773, B772, B767, B727, B707, B787-900, A343, A342, A330, A300.	Nil.
7 (Single Tunnel)	143017.93N 1210021.37E	B744, B743, B742, B741, B773, B772, B767, B757, B727, B707, B787-8, B787-900, A343, A342, A330, A321, A320, A319, A310, A300.	Tow-in procedure implemented.

Note: Wingtip marshaller/guide is mandatory for aircraft operations.

b. Center

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
8	143015.12N 1210020.39E	All types of aircraft.	No aerobridge. For wide bodied aircraft, Bays NR 7 and 9 closed.

Note: Wingtip marshaller/guide is mandatory for aircraft operations.

c. West Wing

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
9 (Double Tunnel)	143016.40N 1210017.37E	B773, B744, B743, B742, B741, B772, B767, B757, B727, B707, B737-800, B787-8, A343, A342, A330, A321, A320, A319, A310, A300.	Nil.
10 (Single Tunnel)	143013.85N 1210016.51E	B744, B743, B742, B741, B773, B772, B767, B757, B737, B727, B707, B787-8, B787-900, A343, A342, A330, A321, A320, A319, A310, A300.	Nil.
11 (Double Tunnel)	143012.94N 1210015.48E	B744, B743, B742, B741, B773, B772, B767, B757, B727, B737-800, B787-900, A346, A345, A343, A342, A330, A321, A320, A319, A310, A300.	A346 and A345 utilizing first class tube on L1 door only due to bridge limitation.
12 (Single Tunnel)	143013.86N 1210014.09E	B744, B743, B742, B741, B773, B772, B767, B757, B737, B727, B707, B787-900, A343, A342, A330, A321, A320, A319, A310, A300.	All inbound aircraft for Terminal 1 Bays NR 12, 14, 15, and 16 should apply minimum power during taxi when RPA T1 Bay NR 20 to 24 are occupied to avoid jet blast. Bay NR 14 - A345 utilizing first class tube on L1 door only due to bridge limitations.
14 (Double Tunnel)	143015.40N 1210014.17E	B744, B743, B742, B741, B772, B767, B757, B737, B727, B707, B777-300, A345, A343, A342, A330, A321, A320, A319, A310, A300.	
15 (Single Tunnel)	143016.56N 1210015.51E	B744, B743, B742, B741, B773, B772, B767, B757, B737, B727, B707, A343, A342, A330, A321, A320, A319, A310, A300.	
16 (Single Tunnel)	143018.97N 1210016.03E	B767, B757, B737, B727, B707, A321, A320, A319, A310, A300.	

Notes:

1. Terminal 1 Auto-Docking Guidance System (ADGS) for parking bays NR 3, 4, 5, 6, 7, 9 and 10 not available. Manual marshalling of aircraft implemented.

2. Pilot stop line markings available for all parking bays except Bay NR 8.

3. Wingtip marshaller/guide is mandatory for aircraft operations.

4. Terminal 1 starting points and coordinates are:

S1	143023.30N 1210025.65E
S2	143019.26N 1210029.17E
S4	143013.88N 1210023.62E
S5	143009.62N 1210016.00E
S6	143008.67N 1210010.38E
S7	143014.42N 1210010.33E

3.2.2 Cargo Terminal Apron (ICT)

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
17	143021.20N 1210030.85E	A321 and lower category aircraft.	Nil.
18	143022.94N 1210033.52E	B747-400, B777-200, A350-900 and lower category aircraft.	Can accommodate B747-400, B777-200 and A350-900 aircraft provided that Bays NR 17, 18A and 18B are vacant. Last-out procedure for B747-400, B777-200 and A350-900 if Bay NR 17 is occupied by A321 and lower category aircraft.
18A	143021.92N 1210032.15E	A321 and lower category aircraft.	Can accommodate A321 and lower category aircraft provided that Bay NR 18 is vacant.
18B	143022.64N 1210033.45E	A321 and lower category aircraft.	Can accommodate A321 and lower category aircraft provided that Bay NR 18 is vacant.
18C	143023.36N 1210034.75E	A321 and lower category aircraft.	Can accommodate A321 and lower category aircraft provided that Bay NR 19 is vacant.
19	143024.51N 1210036.32E	B777-200, A340-300, A330-300 and lower category aircraft.	Can accommodate B777-200, A340-300 and A330-300 aircraft provided that Bays NR 18B, 18C and 19A are vacant. Last-out procedure implemented for said aircraft if Bay NR 18 is occupied by A321 and lower category aircraft.
19A	143024.08N 1210036.06E	A321 and lower category aircraft.	Can accommodate A321 and lower category aircraft provided that Bay NR 19 is vacant.

Notes:

1. Wingtip marshaller/guide is mandatory for aircraft operations.
2. Cargo Terminal Starting point and coordinates:

S3	143019.34N 1210033.71E

3.2.3 Remote Parking Apron T1 (RPA T1)

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
20	143016.80N 1210006.81E	B777-300, B747, B767, A320, B737.	Nil.
21	143014.45N 1210006.60E	B777-300, B777-200, B747, A330-200, A330-300, B767, A320, B737.	Nil.
22	143012.01N 1210006.40E	B777-300, B747, A330, A330-200, B767, A320, B737.	Nil.
23	143009.75N 1210006.12E	B747-800, B777-300, A350-900, B747-400, A330-300, A330-200, B767, A320, B737.	Nil.
24	143006.45N 1210007.12E	B747-800, B747, B777-300, A330-300, A330-200, B767, B737.	Nil.

Note: Wingtip marshaller/guide is mandatory for aircraft operations.

3.2.4 Remote Parking Apron T2 (RPA T2)

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
25	143024.21N 1210038.40E	A320 and lower category.	Taxi-in/tow-out procedures implemented. TWY G6 limited to A321 and lower category aircraft provided that RPA T2 is occupied. TWY L between S3A and S3 closed for Code D and above category if RPA T2 is occupied.
26	143024.85N 1210039.56E	A320 and lower category.	
27	143025.50N 1210040.73E	A320 and lower category.	TWY L between S3A and TWY G6 closed for code D and above category if there is an aircraft parked at RPA T2.
28	143026.14N 1210041.89E	A320 and lower category.	

Notes:

1. Pilot stop line markings available for all parking bays.
2. Designated aircraft safety envelope markings have been established.
3. Tow tractors shall only be attached to the aircraft tow bar when all aircraft doors have been closed.
4. Wingtip marshaller/guide is mandatory for aircraft operations.

3.2.5 Terminal 2 Apron

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
30	143028.85N 1210042.93E	A330, A321, A320, Q400 and lower category aircraft.	A340 and A330 can occupy Bay NR 30 if Bay NR 32 is occupied by A320 and lower category. Taxi-in/tow-out for A330 aircraft at Terminal 2 Bay NR 30 not allowed when S3A is occupied.
32	143029.72N 1210044.44E	A321, A320, Q400 and lower category aircraft.	Nil.
33	143029.93N 1210045.82E	A321, A320, Q400 and lower category aircraft.	Nil.
34	143030.94N 1210046.72E	A321, A320, Q400 and lower category aircraft.	Nil.
35	143031.39N 1210048.02E	A321, A320, Q400 and lower category aircraft.	Nil.
36	143032.16N 1210049.12E	A321, A320, Q400 and lower category aircraft.	Nil.
38	143033.18N 1210050.64E	B777-300ER, A350-900, A330, A321, A320, Q400 and lower category aircraft.	B777-300ER and A350-900 will be towed-in to Bay NR 38 if Bay NR 39 is occupied by A350-900 or B777-300ER.
39	143034.32N 1210052.18E	B777-300ER, A350-900, A321, A320, Q400 and lower category aircraft.	Tow-in procedure for B777-300ER and A350-900 if Bay NR 38 is occupied by A350-900 or B777-300ER. Bay NR 40 must be vacant.
40	143034.73N 1210054.38E	Q400.	Nil.
42	143035.19N 1210051.41E	B777-300ER, A350-900, A330, A321, A320, Q400 and lower category aircraft.	Tow-in procedure for B777-300ER and A350-900 if Bay NR 43 is occupied by A350-900 or B777-300ER.

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
43	143036.47N 1210050.10E	B777-300ER, A350-900, A330, A321, A320, Q400 and lower category aircraft.	Tow-in procedure for B777-300ER and A350-900 if Bays NR 45 and 42 are occupied by A350-900 or B777-300ER.
45	143037.89N 1210048.64E	B777-300ER, A350-900, A330, A321, A320, Q400 and lower category aircraft.	Tow-in procedure for B777-300ER and A350-900 if Bays NR 47 and 49 are occupied by A350-900 or B777-300ER.
47	143039.40N 1210047.07E	B777-300ER, A350-900, A330, A321, A320, Q400 and lower category aircraft.	Tow-in procedure for B777-300ER and A350-900 if Bays NR 45 and 49 are occupied by A350-900 or B777-300ER.
49	143041.05N 1210045.37E	B777-300ER, A350-900, A330, A321, A320, Q400 and lower category aircraft.	Tow-in procedure for B777-300ER, A350-900 and A330 to parking bay NR 49 when unable to taxi via TWY P due to maneuvering restrictions. Tow-in procedure for B777-300ER and A350-900 if bay NR 47 is occupied by B777-300ER. Tow-in procedure for B777-300ER, A350-900 and A330 and to parking bay NR 49 via TWY K.

Notes:

1. Pilot stop line markings available for all parking bays.

2. Designated aircraft safety envelope markings established.

3. Lighted aircraft parking bay coordinates have been provided with the exception of Bay NR 40 due to the existing location.

4. Terminal 2 Apron Fuel Hydrant Pit Valve serviceable on all parking bays/stands.

5. Terminal 2 starting points and coordinates are:

S3A	143024.42N 1210042.77E
S3B	143021.29N 1210037.08E
S8	143028.16N 1210049.48E
S8A	143030.04N 1210052.81E
S9	143031.17N 1210054.84E
S9A	143031.88N 1210056.12E
S10	143035.97N 1210056.08E
S11	143040.23N 1210051.68E

6. Wingtip marshaller/guide is mandatory for aircraft operations.

3.2.6 Remote Parking Apron T2B (RPA T2B)

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
54A	143047.21N 1210039.35E	A321 and lower category aircraft.	Bay NR 54A can accommodate A321 and lower category aircraft for maintenance and live flights. For live flights, no aircraft is allowed to park at Bays NR 54B and 55B.
54B	143048.32N 1210040.56E	A321 and lower category aircraft.	Bay NR 54B can accommodate A321 and lower category aircraft provided that no wide body aircraft parked at Bay NR 55B. Parking available for live flights, maintenance and Remain Over Night operations.
55A	143048.14N 1210038.40E	A321 and lower category aircraft.	Bay NR 55A can accommodate A321 and lower category aircraft for maintenance and live flights. For live flights, no aircraft is allowed to park at Bays NR 56B, 55B and 54B provided that no wide body aircraft parked at Bay NR 56A.
55B	143049.24N 1210039.61E	B777ER and lower category aircraft.	Bay NR 55B can accommodate B777ER/ A350/A330 or wide body aircraft provided that no aircraft parked on Bays NR 54B and 56B. Parking available for maintenance and Remain Over Night for wide body aircraft. Live flights for narrow body aircraft only (A321 and lower category aircraft).
56A	143049.10N 1210037.44E	B777ER and lower category aircraft.	Bay NR 56A can accommodate B777ER and lower category aircraft provided that Bays NR 56A, 56B and 57A are vacant. Parking available for maintenance and Remain Over Night only.
56B	143050.16N 1210038.67E	A321 and lower category aircraft.	Bay NR 56B can accommodate A321 and lower category aircraft provided that no wide body aircraft parked at Bay NR 56A. Parking is available for live flights, maintenance and Remain Over Night operations.
57A	143050.00N 1210036.50E	A321 and lower category aircraft.	Bay NR 57A can accommodate A321 and lower category aircraft. No wide body aircraft is allowed to park at Bays NR 56A and 58A. Parking available for maintenance and Remain Over Night only.

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
57B	143051.10N 1210037.71E	B777ER and lower category aircraft.	Bay NR 57B can accommodate wide body aircraft provided that no aircraft parked at Bays NR 56B and 58B. Parking is available for maintenance and Remain Over Night operations for wide body aircraft. Live flights for narrow body aircraft only (A321 and lower category aircraft).
58A	143050.93N 1210035.55E	B777ER and lower category aircraft.	Bay NR 58A can accommodate B777ER and lower category aircraft. No narrow body aircraft is allowed to park at Bays NR 57A and 59A. Parking available for maintenance and Remain Over Night operations only.
58B	143052.03N 1210036.76E	A321 and lower category aircraft.	Bay NR 58B can accommodate A321 and lower category aircraft provided that no wide body aircraft parked on Bays NR 59B and 57B. Parking available for maintenance and Remain Over Night operations only. No live flights allowed.
59A	143051.86N 1210034.60E	A321 and lower category aircraft.	Bay NR 59A can accommodate A321 and lower category aircraft provided that no wide body aircraft parked at Bays NR 60A and 58A. Parking available for maintenance and Remain Over Night operations only.
59B	143052.96N 1210035.81E	B777ER and lower category aircraft.	Bay NR 59B can accommodate wide body aircraft category provided that no aircraft parked on Bays NR 60B and 58B. Parking available for maintenance and Remain Over Night operations only. No live flights are allowed.
60A	143052.80N 1210033.65E	B777ER and lower category aircraft.	Bay NR 60A can accommodate B777ER and lower category aircraft. No aircraft shall be parked at Bay NR 59A. Parking available for maintenance and Remain Over Night operations only.
60B	143053.89N 1210034.85E	A321 and lower category aircraft.	Bay NR 60B can accommodate A321 and lower category aircraft provided that no wide body aircraft parked on Bay NR 59B. Parking is available for maintenance and Remain Over Night operations only. No live flights are allowed.
61A	143053.72N 1210032.70E	Nil.	Closed for equipment parking.
61B	143054.82N 1210033.91E	A321 and lower category aircraft.	Parking is available for maintenance and Remain Over Night operations only. No live flights are allowed.

Notes:

1. Wingtip marshaller/guide is mandatory for aircraft operations.

2. RPA T2B Starting points and coordinates are:

S11A	143049.07N 1210042.49E
S11B	143052.84N 1210038.58E

Remarks: Parking available for maintenance and Remain Over Night operations for wide body and narrow body aircraft. Live flights allowed only for narrow body aircraft category.

3.2.7 Terminal 4 Apron

Bay Number	Coordinates	Aircraft Type	Restrictions/Remarks
71	143123.05N 1210007.77E	A321 and lower category aircraft.	Nil.
72	143124.37N 1210007.73E	A321 and lower category aircraft.	Nil.
73	143125.69N 1210007.68E	A320 and lower category aircraft.	Nil.
74	143127.28N 1210007.55E	A321 and lower category aircraft.	Nil.
75	143128.58N 1210007.30E	A321 and lower category aircraft.	Nil.
76	143129.89N 1210006.81E	A321 and lower category aircraft.	Nil.
77	143131.19N 1210005.49E	A321 and lower category aircraft.	Nil.
78	143132.47N 1210004.21E	A321 and lower category aircraft.	Nil.
79	143133.77N 1210002.95E	A321 and lower category aircraft.	Nil.
80	143135.07N 1210003.01E	A321 and lower category aircraft.	Nil.

Notes:

1. Wingtip marshaller/guide is mandatory for aircraft operations.

2. Terminal 4 Apron aircraft safety parking envelope established at parking bays NR 71 to 80 and can be identified by red and white lines ramp pavement markers.

3. Terminal 4 Starting points and coordinates are:

S22	143125.23N 1210010.56E
S22A	143123.68N 1210010.41E
S25	143131.60N 1210013.92E
S26	143133.96N 1210007.87E
S27	143133.35N 1210011.69E

3.2.8 Remote Parking Apron T4 (RPA T4)

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
81	143135.12N 1210005.51E	ATR-72-600 and ATR-42-500.	Remote parking bay is only available for parking at 0700 until 1200 or in special cases, FLT approved by GAOD and AICCC tow-in, nose out.
82	143134.88N 1210007.48E	A321 and lower category aircraft.	Remote parking bay is only available for parking at 0700 until 1200 or in special cases, FLT approved by GAOD and AICCC tow-in, nose out.

Notes:

1. Wingtip marshaller/guide is mandatory for aircraft operations.

2. Vehicle roadway pavement markings crossing the taxiway established and can be identified by white zipper type markings on the following areas:

   a. Taxiways GA1, GA2, GA3, GA4, GA5, GA6 and F1B.

      Remarks: Pilots and drivers are advised to exercise caution when passing these areas due crossing/movement of aircraft and vehicles.

3. General Aviation inner taxilanes are named and designated with erected identification signboards as follows:

   a. GA1 - TWY H4 leading to Air Mabuhay Corporation 2, Seven Trackers, Jet Aviation 2, Asia Aircraft Overseas Phils Inc. 1 and 2, Asian Aeronautics, Air Asia, LR Sky Aviation, Marcventures, LBC and World Citi Colleges hangars;

   b. GA2 - TWY H4 leading to Air Juan, Pitmaster, Philippine Aerospace Development Corp., LCS and Airlink hangars;

   c. GA3 - North TWY leading to Subic Air hangar;

   d. GA4 - North TWY leading to Air Ads hangar;

   e. GA5 - North TWY leading to Interisland, San Miguel Corp., Misibis, Unilab Inc. and Challenger Aero hangars; and

   f. GA6 - North TWY leading to Ayala, Asian Aerospace, A. Soriano, Skyard, CAAP, Machscan Maintenance, Airtrav, Vev Air Maintenance and Lepanto hangars.

      Remarks: Pilots are instructed to report to Domestic Ramp control upon reaching these areas.

3.2.9 Terminal 3 Apron

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
101	143103.80N 1210056.40E	B737, A321, A320, A319, ATR.	Nil.
102	143102.30N 1210057.71E	B737, A321, A320, A319, ATR.	Nil.
103	143102.30N 1210058.80E	B737, A321, A320, A319, ATR.	Nil.
104	143100.98N 1210059.46E	B737, A321, A320, A319, ATR.	Nil.

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
105	143059.53N 1210100.62E	B737, A321, A320, A319, ATR.	Nil.
106	143059.40N 1210101.80E	B737, A321, A320, A319, ATR.	Nil.
107	143057.10N 1210058.64E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
108	143058.74N 1210056.91E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
109	143100.41N 1210055.20E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
110	143102.10N 1210053.50E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
111	143103.73N 1210051.80E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
112	143105.60N 1210049.90E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
113	143107.22N 1210048.15E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
114	143108.90N 1210046.43E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
115	143110.60N 1210044.71E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
116	143112.21N 1210042.99E	B747, B777, B787-1000, B787-900, B787-800, B767, B737, A350-1000, A350-900, A321, A320, A319.	Nil.
117	143114.50N 1210041.52E	A330, A321, A320, A319.	Nil.
118	143116.12N 1210039.82E	B767, A330, A321, A320, A319.	Nil.
119	143117.80N 1210038.10E	A330, A321, A320, A319.	Nil.
120	143119.50N 1210036.40E	A330, A321, A320, A319.	Nil.

Notes:

1. Wingtip marshaller/guide is mandatory for aircraft operations.

2. Fuel hydrant system at Terminal 3 Apron commissioned for parking bays NR 101 to 120.

3. Terminal 3 Starting points and coordinates are:

S12	143128.86N 1210019.63E
S12A	143125.89N 1210022.71E
S13	143122.90N 1210025.76E
S14	143117.57N 1210031.27E
S15	143112.84N 1210036.18E

S16	143107.47N 1210041.75E
S17	143103.77N 1210045.63E
S18	143058.34N 1210051.19E
S19	143054.91N 1210054.74E
S20	143104.53N 1210100.39E
S20A	143101.56N 1210103.48E
S20B	143057.83N 1210103.26E

Remarks:

Pushback Procedures

a. Aircraft shall pushback to the nearest starting point unless two or more aircraft are requesting pushback utilizing different departure runway or an arriving aircraft would be obstructed if a departing aircraft pushes back on a starting point in the way of the arriving aircraft.

b. Arriving aircraft shall have priority over departing aircraft.

c. First to contact ramp control shall be prioritized.

d. Generally, aircraft at Bays NR 101, 102 and 103 shall pushback to starting point S20. Aircraft at Bays NR 104, 105 and 106 shall pushback to starting point S20A. Starting point S20B can be utilized for start-up and as holding point to maximize use and expedite aircraft movement.

4. Terminal 3 TWY N including Gateways G10, G11, G12, G13 and G14 is open to aircraft operations.

3.2.10 Remote Parking Apron T3 (RPA T3)

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
121	143120.87N 1210034.40E	B777, B787, B767, A350, A330, A321, A320, A319, ATR, Q400, Q300.	Nil.
122	143121.46N 1210031.86E	A321, A320, A319, ATR.	Nil.
122A	143122.61N 1210033.02E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
122B	143121.67N 1210031.12E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
123	143122.34N 1210030.84E	A321, A320, A319, ATR.	Nil.
123A	143123.42N 1210031.91E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
123B	143122.62N 1210030.15E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
124	143123.23N 1210029.81E	A321, A320, A319, ATR.	Nil.

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
124A	143124.09N 1210030.67E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
124B	143123.54N 1210029.10E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
125	143124.22N 1210028.78E	A321, A320, A319, ATR.	Nil.
125A	143125.08N 1210029.65E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
125B	143124.50N 1210028.10E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
126	143125.15N 1210027.80E	A321, A320, A319, ATR.	Nil.
126A	143126.01N 1210028.67E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
126B	143125.44N 1210027.12E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
127	143125.78N 1210026.51E	A321, A320, A319, ATR.	Nil.
127A	143126.95N 1210027.70E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
127B	143126.25N 1210026.03E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
128	143126.72N 1210025.54E	A321, A320, A319, ATR.	Nil.
128A	143127.89N 1210026.72E	A321, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
128B	143127.19N 1210025.05E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
129	143127.66N 1210024.56E	A321, A320, A319, ATR.	Nil.
129A	143128.82N 1210025.76E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
129B	143128.11N 1210024.09E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
130	143128.57N 1210023.61E	A321, A320, A319, ATR.	Nil.

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
130A	143129.73N 1210024.77E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.
130B	143129.06N 1210023.06E	A321, A320, A319, ATR.	Tow-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200 only.
131	143129.58N 1210022.56E	A321, A320, A319, ATR.	Nil.
131A	143130.64N 1210023.62E	A321, A320, A319, ATR.	Power-in and pushback operations shall be implemented during arrival and departure, respectively, from 1400 to 2200.

Notes:

1. Fuel hydrant system at Terminal 3 Apron commissioned for parking bays NR 121 to 128.

2. Wingtip marshaller/guide is mandatory for aircraft operations.

3.2.11 5J Ramp 1 Apron

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
1	143046.50N 1210113.10E	A320.	If A330neo and A330ceo are parked at parking bays NR 2A and 4A, Bay NR 1 unusable to all aircraft.
2	143046.27N 1210111.70E	A320.	A330neo or A330ceo not allowed to be towed at the common TWY and exit to TWY G2 whenever an aircraft is parked at Bay NR 4A. Power-in parking of A330neo, A330ceo and A321 not allowed. If A330neo and A330ceo are parked at parking bays NR 2A and 4A, Bay NR 1 unusable to all aircraft.
2A	143046.16N 1210111.28E	A330neo, A330ceo, A321, A320.	A330neo or A330ceo not allowed to be towed at the common TWY and exit to TWY G2 whenever an aircraft is parked at Bay NR 4A. Power-in parking of A330ceo and A321 not allowed.
2B	143046.01N 1210111.04E	A330ceo, A321, A320.	A330neo or A330ceo not allowed to be towed at the common TWY and exit to TWY G2 whenever an aircraft is parked at Bay NR 4A. Power-in parking of A330neo, A330ceo and A321 not allowed.

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
2C	143045.93N 1210110.89E	A330neo, A330ceo, A321, A320.	A330neo or A330ceo not allowed to be towed at the common TWY and exit to TWY G2 whenever an aircraft is parked at Bay NR 4A. Power-in parking of A330neo, A330ceo and A321 not allowed. If A330neo and A330ceo are parked at parking bays NR 2A and 4A, Bay NR 1 unusable to all aircraft.
3	143045.90N 1210110.33E	A320.	Nil.
4	143045.22N 1210109.20E	A320.	Nil.
4A	143045.10N 1210109.11E	A330neo, A330ceo, A321, A320.	A330neo or A330ceo not allowed to be towed at the common TWY and exit to TWY G2 whenever an aircraft is parked at Bay NR 4A. Power-in parking of A330neo, A330ceo and A321 not allowed. If A330neo and A330ceo are parked at parking bays NR 2A and 4A, Bay NR 1 unusable to all aircraft.
5	143046.04N 1210110.89E	A330ceo, A321.	A330neo or A330ceo not allowed to be towed at the common TWY and exit to TWY G2 whenever an aircraft is parked at Bay NR 4A. Power-in parking of A330ceo and A321 not allowed.

Note: Wingtip marshaller/guide is mandatory for aircraft operations.

3.2.12 5J Ramp 2 Apron

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
A1	143112.99N 1210016.10E	ATR72.	Nil.
A1L	143112.73N 1210016.35E	A320.	Nil.
A2	143112.26N 1210016.84E	ATR72.	Nil.
A3	143111.55N 1210017.57E	ATR72.	Nil.
A3R	143111.72N 1210017.41E	A320.	Nil.
A4	143110.82N 1210018.31E	ATR72.	Nil.
A4L	143110.77N 1210018.34E	A320.	Nil.
A5	143110.09N 1210019.04E	ATR72.	Nil.
A6	143108.36N 1210019.89E	A320, ATR72.	Nil.

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
A7	143113.76N 1210017.52E	ATR72.	For Remain Over Night only, must be parked facing TWY F1B. Remain Over Night parking bays NR A7 and A8 will not be available whenever Remain Over Night parking bays NR A9 or A10 are occupied. Remain Over Night parking bays NR A7, A8 and A9 will be available whenever Remain Over Night parking bay NR A10 is occupied. Remain Over Night parking bays NR A7, A8, A9 and A10 will not be available whenever starting points S29 or S29A are occupied.
A8	143112.66N 1210018.63E	ATR72.	For Remain Over Night only, must be parked facing TWY F1B. Remain Over Night parking bays NR A7 and A8 will not be available whenever Remain Over Night parking bays NR A9 or A10 are occupied. Remain Over Night parking bays NR A7, A8 and A9 will be available whenever Remain Over Night parking bay NR A10 is occupied. Remain Over Night parking bays NR A7, A8, A9 and A10 will not be available whenever starting points S29 or S29A are occupied.
A9	143111.55N 1210019.74E	ATR72.	For Remain Over Night only, must be parked facing TWY F1B. Remain Over Night parking bays NR A7, A8 and A9 will be available whenever Remain Over Night parking bay NR A10 is occupied. Remain Over Night parking bays NR A7, A8, A9 and A10 will not be available whenever starting points S29 or S29A are occupied.
A10	143110.46N 1210020.84E	ATR72.	For Remain Over Night only, must be parked facing TWY F1B. Remain Over Night parking bays NR A7, A8, A9 and A10 will not be available whenever starting points S29 or S29A are occupied.

Notes:

1. Wingtip marshaller/guide is mandatory for aircraft operations.
2. 5J Ramp 2 starting points and coordinates are:

S29	143111.13N 1210020.17E
S29A	143112.99N 1210018.29E

3.2.13 Balagbag Apron

Bay Number	Coordinates	Aircraft type	Restrictions/Remarks
B1	143042.90N 1210111.13E	A300 and lower category aircraft.	Nil.
B2	143043.70N 1210112.70E	A300 and lower category aircraft.	Nil.
B3	143044.55N 1210114.20E	A300 and lower category aircraft.	Nil.

Note: Wingtip marshaller/guide is mandatory for aircraft operation.

4. Taxiing - limitations

4.1 All aircraft taxiing out from Terminal 2 Apron via TWY G5 should apply minimum taxi power requirements to avoid jet blast hazards.

4.2 North TWY limited to Code C and below category aircraft.

4.3 TWY H4 limited to Code C and below category aircraft.

4.4 A321, A319 and B737 type of aircraft are advised to exercise minimum taxi power from TWY H4 towards TWY N when there is an aircraft at starting point S27 due to jet blast hazard.

4.5 No entry on Rapid Exit TWY R1, R3, R4, R5 and R6 for aircraft traffic coming from TWY C.

4.6 Rapid Exit TWY R2, R3 and R4 limited to Code C and below category aircraft.

4.7 Rapid Exit TWY R1, R5 and R6 passable for Code F category aircraft with the following restrictions:

a. Code F aircraft movement limited during non-peak hours.

b. No other aircraft allowed to taxi at TWY C during Code F aircraft movement.

c. No landing/take-off at RWY 06/24 allowed except Code F aircraft during its movement at TWY C or TWY L.

4.8 Portion of Rapid Exit TWY R2 going to TWY C and RWY 31 closed. Observe stop bar light.

4.9 Pilots are advised to exercise caution and follow the center line of TWY E5. Non-bearing shoulders are painted with yellow diagonal lines on both sides.

5. Training Flights

5.1 Touch-and-go landings and helicopter training flights are prohibited.

6. Helicopter Traffic - limitations

6.1 Except when a clearance is obtained from an air traffic control unit, VFR helicopter flights shall not take-off or land at the Ninoy Aquino International Heliport within its control zone, or enter its aerodrome traffic zone:

a. when the ceiling is less than 150 M (500 FT); and

b. when the ground visibility is less than 1.5 KM (1 mile).

6.2 Helicopter operating VFR may be allowed outside controlled airspace with flight visibility below 1.5 KM (1 mile) provided that:

a. the helicopter is clear of clouds and the ground or water is in sight at all times; and

b. the helicopter shall be maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstruction to avoid collision.

RPLL AD 2.21 NOISE ABATEMENT PROCEDURES

1. General

The noise abatement procedures described below are applicable to all aircraft operating at NAIA.

1.1 Departure Procedures for All Runways

1.1.1 For jet aircraft, a speed of V2 plus 10 KT shall be maintained up to 3000 FT AGL after take-off, after which, acceleration to flap refraction may be commenced. Climb thrust shall be selected at 1500 FT AGL.

1.1.2 All other (non-jet) aircraft shall attempt to attain 3000 FT AGL as soon as practicable to be consistent with safe operational practices for subject aircraft climb performance.

1.1.3 In all the above cases, SID procedures shall be tracked as published.

1.1.4 The above procedures shall be terminated and standard climb out procedures be implemented immediately should any event affecting climb performance occur (i.e. problem with or loss of engine power).

1.2 Arrival Procedures

1.2.1 RWY 06 or RWY 24 Landings: Observe published aerodrome traffic circuit, altitudes/speeds.

Note: IFR aircraft from the North and landing on RWY 24 shall be radar vectored to the RIGHT base leg at 2000 FT or higher.

1.3 Modified Noise Abatement Procedures for RWY 13 Departure (South Bound)

1.3.1 For jet aircraft, a speed of V2 plus 10 KT shall be maintained to 3000 FT AGL after take-off, after which, flap retraction may be commenced. Climb thrust shall be selected at 1500 FT AGL.

1.3.2 In all cases, SID procedures shall be tracked as published.

1.3.3 The above procedures shall be terminated and standard climb-out procedures shall be implemented immediately should any event affecting climb performance occur (i.e. problem with loss of power).

RPLL AD 2.22 FLIGHT PROCEDURES

1. Procedures for the Control of VFR and IFR Traffic

1.1 VFR Operations

1.1.1 All VFR aircraft operating within the VFR areas shall:

1.1.1.1 Be equipped with 118.1 MHZ transceivers and any of the following approach frequencies: 124.4 MHZ, 124.8 MHZ, 119.9 MHZ, 127.7 MHZ (SRY FREQ) and 125.1 MHZ (Clearance Delivery).

1.1.1.2 Prior to entering the designated VFR areas, contact Manila Tower on 118.1 MHZ.

1.1.1.3 Adhere to the established Manila VFR arrival/departure routings.

1.1.1.4 Maintain the required altitude of 2500 FT or below within 15 NM from the ARP. Cruise/climb to higher altitude shall be on a prior approval from Manila Approach.

1.1.1.5 When intending to transit the IFR climb/descend areas, contact Manila Approach on 124.4 MHZ, 124.8 MHZ, 119.9 MHZ, 127.7 MHZ (SRY FREQ) and/or 125.1 MHZ (Clearance Delivery) for the necessary clearance.

1.1.1.6 When requesting radar vector within 15 NM radius, maintain 2500 FT unless otherwise instructed by Manila Approach Control.

1.1.2 Special VFR operations not allowed at NAIA due to speed restrictions within the Manila TMA.

1.2 IFR Operations

1.2.1 The radar traffic circuit shall not penetrate the ATZ.

1.2.2 IFR traffic radar vector to final approach of RWY 06/24 shall maintain 3500 FT prior to entering the IFR climb/descend area. Descent shall be made without violating the radar minimum altitude.

1.2.3 In the event of radar and/or radio communication failure, descent to 3000 FT shall be effected only in the designated VFR areas - 10 miles from the ARP. Otherwise, follow the Lost Communication Procedures.

1.2.4 Arriving aircraft on radar vector to Manila shall not cancel IFR clearance within 20 NM.

1.2.5 All IFR flights landing RWY 06/24/13 shall contact Manila Tower on 118.1 MHZ at 5 NM final approach.

1.2.6 All IFR departing aircraft at NAIA shall contact Manila Approach on 124.4 MHZ when passing 2000 FT or at 5 NM out.

1.3 Simultaneous Operations on NAIA RWY 06/24 and RWY 13/31

During period of traffic congestion, simultaneous operations on RWY 06/24 and RWY 13/31 may be authorized by the controller in accordance with the procedures and separation minima described below.

1.3.1 Departure

a. Between aircraft taking-off on either RWY 06/24 and aircraft taking-off RWY 31: No separation is necessary between the two departures regardless of type, provided that the departure in RWY 31 shall commence its take-off not farther than the intersection of RWY 31 and RWY 06/24.

b. Between aircraft taking-off on either RWY 06/24 and aircraft taking-off on RWY 13: Sufficient separation shall be effected between the two departures to ensure that the first departing aircraft shall have passed the intersection of two runways before the second departing aircraft shall commence its take-off.

1.3.2 Arrivals

a. Between aircraft landing on either RWY 06 or RWY 24 ahead of another aircraft landing on RWY 13: Sufficient separation shall be effected between the two arrivals to ensure that the aircraft landing on RWY 13 shall not cross the Filinvest Cyberzone Building (2.3 NM) on its final glide until the landing aircraft on RWY 06 or RWY 24 shall have passed and is clear of the intersection of the two runways.

b. Between aircraft landing on RWY 13 ahead of another aircraft landing on RWY 06 or RWY 24.

1. The landing aircraft on RWY 06 shall not cross the Las Piñas shoreline (2.63 NM) on its final glide until the landing aircraft on RWY 13 shall have turned into the taxiway, or have made a 180-degree turn, or made a full-stop before reaching the intersection of RWY 13 and RWY 06/24.

2. The landing aircraft on RWY 24 shall not cross Cypress Tower (2.6 NM) on its final glide until the landing aircraft on RWY 13 shall have turned into the taxiway, or have made a 180-degree turn, or made a full-stop before reaching the intersection of RWY 13 and RWY 06/24.

c. Between aircraft landing on RWY 13 ahead of another aircraft taking-off on either RWY 06 or RWY 24: Sufficient separation shall be effected between the two aircraft to ensure that the departing aircraft on RWY 06 or RWY 24 shall not commence its take-off until the landing aircraft on RWY 13 shall have turned into the taxiway, or have made a 180-degree turn, or made a full-stop, before reaching the intersection of the two runways.

d. Between aircraft landing on either RWY 06 or RWY 24 ahead of another aircraft taking-off on RWY 13: Sufficient separation shall be effected between the two aircraft to ensure that the aircraft departing on RWY 13 shall not commence its take-off until the landing aircraft on either RWY 06 or RWY 24, shall have passed, or have stopped short, and will remain clear of, the intersection of the two runways.

e. Between aircraft taking-off on RWY 13 is ahead of another aircraft landing on either RWY 06 or RWY 24:

1. Sufficient separation shall be effected between the two aircraft to ensure that the landing aircraft on RWY 06 or RWY 24 shall not cross the Las Piñas shoreline (2.63 NM) or Cypress Tower (2.6 NM), as the case may be, on its final glide until the departing aircraft on RWY 13 shall have passed the intersection of the two runways.

2. Sufficient separation shall be effected between the two aircraft to ensure that a departing aircraft on RWY 13 shall not converge with a landing aircraft on the downwind leg of either RWY 06 or RWY 24.

1.3.3 Go-around procedures

a. RWY 06: Follow Instrument Missed Approach Procedure.

b. RWY 24: Follow Instrument Missed Approach Procedure.

c. RWY 13: Make a right turn before Baclaran Church and join downwind RWY 13.

d. Simultaneous use of RWY 06/24 and RWY 13/31 for jet aircraft shall be prohibited.

e. The controller on duty may deviate from the above procedures if in his best judgment such deviation are in the interest of safety and efficiency.

1.3.4 A320 and below type of aircraft to limit Runway Occupancy Time - ARR (ROTA) on RWY 06/24 and RWY 13/31 to 55 seconds and Runway Occupancy Time - DEP (ROTD) on RWY 06/24 and RWY 13, to 45 seconds, provided the runway is dry. Utilizing the most expeditious means out of the runway. If unable, pilots are to notify Manila Control Tower upon initial contact.

Notes:

1. ROTA will start at the time the aircraft crosses the runway threshold marker on its final glide to the time it vacates the runway from a specified point.

2. ROTD will start at the time the aircraft reaches NR 1 PSN (lined-up on the runway threshold marker) and the pilot reads back to the ATC's take-off clearance to the time it is airborne (wheels off ground).

2. Procedures for VFR Departure/Arrival Flights

2.1 General

2.1.1 The following air traffic procedures shall apply to all VFR flights operating within the Manila TMA:

2.1.1.1 VFR aircraft intending to fly along SIDs and/or STARs routes shall inform Manila Approach on 124.4 MHZ, 124.8 MHZ, 119.9 MHZ and 127.7 MHZ (SRY FREQ).

2.1.1.2 All VFR aircraft shall maintain continuous listening watch on 124.4 MHZ while operating within the Manila TMA excluding the ATZ.

2.1.1.3 All departing VFR flights shall maintain a listening watch on Manila Tower frequency 118.1 MHZ up to the exit points.

2.1.1.4 All arriving VFR flights shall initiate contact and remain on listening watch thereafter with Manila Tower upon entering the Manila CTR.

2.1.1.5 Any deviation from the departure/arrival procedures shall have prior approval from Manila Tower.

2.2 VFR departure flights

2.2.1 Northbound aircraft

a. RWY 13/06 Take-off: Climb straight ahead. After passing runway intersection make a right climbing turn to join downwind RWY 06. Obtain clearance from Manila Control Tower before crossing final approach of RWY 06. Climb to 2000 FT after crossing final approach of RWY 06. Execute a left turn abeam threshold of RWY 13 to fly West of SOUTH HARBOR. Report abeam MALABON then proceed to destination.

b. RWY 31 Take-off: Make a left turn after take-off to fly West of SOUTH HARBOR, continue climb to 2000 FT. Report abeam MALABON then proceed to destination.

c. RWY 24 Take-off: Climb straight ahead. Make a right turn at the end of the runway. Execute a left turn abeam threshold of RWY 13 to fly West of SOUTH HARBOR. Report abeam MALABON then proceed to destination.

d. SOUTH HARBOR Take-off: After take-off, fly westward towards abeam NORTH HARBOR. Then report abeam MALABON. Proceed to destination or as instructed by Manila Control Tower.

e. Sangley Take-off: Fly northwestward abeam NORTH HARBOR. Report to Manila Approach for traffic information.

2.2.2 Southbound aircraft

a. RWY 13 Take-off: Make a straight-out departure climbing to 2000 FT towards the East side of the MERALCO CHIMNEYS.

b. RWY 31 Take-off: Climb straight ahead and execute a left climbing turn. Obtain clearance from Manila Control Tower before crossing over the threshold of RWY 06. Fly straight ahead climbing to 2000 FT towards the East side of the MERALCO CHIMNEYS.

c. RWY 06 Take-off: Climb straight ahead and execute a right turn towards the East side of the MERALCO CHIMNEYS.

d. RWY 24 Take-off: Climb straight ahead and execute a left turn towards the East side of the MERALCO CHIMNEYS.

e. SOUTH HARBOR Take-off:

1. Via NAIC RIVER MOUTH: After take-off, fly westward to abeam NORTH HARBOR. Report to Manila Control Tower when airborne. Contact Sangley Tower or as instructed by Manila Control Tower. Continue towards TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP. Fly towards NAIC RIVER MOUTH.

2. Via PICO DE LORO: After take-off, fly westward abeam NORTH HARBOR. Report to Manila Control Tower when airborne. Contact Sangley Tower or as instructed by Manila Control Tower. Continue towards TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP. Fly southwestward via PICO DE LORO.

f. Sangley Take-off:

1. Via NAIC RIVER MOUTH: After take-off, fly westward to TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP. Fly towards NAIC RIVER MOUTH.

2. Via PICO DE LORO: After take-off, fly westward to TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP. Fly southwestward via PICO DE LORO.

2.2.3 Westbound aircraft

a. RWY 13/06 Take-off: Climb straight ahead. After passing runway intersection, execute a right climbing turn to join downwind RWY 06. Obtain clearance from Manila Control Tower before crossing final approach of RWY 06. Climb to 2000 FT after crossing final approach of RWY 06. Execute a left turn abeam the threshold of RWY 13 towards abeam NORTH HARBOR. Contact Sangley Tower or as instructed by ATC.

b. RWY 31 Take-off: Make a left turn after take-off towards abeam NORTH HARBOR. Continue climb to 2000 FT. Contact Sangley Tower or as instructed by ATC.

c. RWY 24 Take-off: Climb straight ahead. Make a right turn at the end of the runway. Execute a left turn abeam the threshold of RWY 13 towards abeam NORTH HARBOR. Continue climb to 2000 FT. Contact Sangley Tower or as instructed by ATC.

d. SOUTH HARBOR Take-off: After take-off, fly westward to abeam NORTH HARBOR. Report to Manila Control Tower when airborne. Contact Sangley Tower or as instructed by Manila

Control Tower. Continue towards TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP.

e. Sangley Take-off: After take-off, fly westward to TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP.

2.2.4 Eastbound aircraft

a. SOUTH HARBOR Take-off:

1. Via NAIC RIVER MOUTH: After take-off, fly westward abeam NORTH HARBOR. Report to Manila Control Tower when airborne. Contact Sangley Tower or as instructed by Manila Control Tower. Continue towards TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP. Fly towards NAIC RIVER MOUTH.

2. Via Downwind RWY 31: After take-off, request clearance from Manila Control Tower to cross the threshold of RWY 06. Fly straight ahead towards the East side of the MERALCO CHIMNEYS or as instructed by ATC.

Note: While requesting for take-off clearance, Manila Control Tower shall be advised of the desired route to be utilized for departure.

b. Sangley Take-off: After take-off, fly westward to TAIL OF CORREGIDOR and contact Manila Approach before crossing final approach of RWY 06 not above 2000 FT beyond 20 NM ARP. Fly towards NAIC RIVER MOUTH.

2.3 VFR Arrival flights

2.3.1 From the North

a. Report to Manila Control Tower approaching MALABON.

b. RWY 13 Landing: Request to make straight-in approach before SOUTH HARBOR. When request is approved, report to PHILIPPINE NAVY. If request is disapproved, join downwind RWY 13 or any other maneuver as instructed by the ATC.

c. RWY 31 Landing
Note: Landing allowed in case of emergency and subject to ATC instructions.

d. RWY 06 Landing
Note: Landing allowed in case of RWY 13/31 closure and emergency subject to ATC instructions.

e. RWY 24 Landing
Note: Landing allowed in case of RWY 13/31 closure and emergency subject to ATC instructions.

f. SOUTH HARBOR Landing: Report over SOUTH HARBOR. Report on the water.

g. Sangley Landing: Report over SOUTH HARBOR. Make a right turn then contact Sangley Tower or as instructed by Manila Control Tower.

2.3.2 From the South

1. Via SOUTHMALL:

   a. Report to Manila Control Tower approaching MUNTINLUPA.

   b. Report over SOUTHMALL.

   c. RWY 13 Landing: Request for clearance to cross over threshold or final approach RWY 06 prior to entering downwind at traffic altitude.

   d. RWY 31 Landing
   Note: Landing allowed in case of emergency and subject to ATC instructions.

   e. RWY 06 Landing
   Note: Landing allowed in case of RWY 13/31 closure and emergency subject to ATC instructions.

   f. RWY 24 Landing
   Note: Landing allowed in case of RWY 13/31 closure and emergency subject to ATC instructions.

   g. SOUTH HARBOR/Sangley Landing

      1. Via PICO DE LORO: Report to Manila Approach approaching PICO DE LORO at or below 2500 FT. Continue towards TAIL OF CORREGIDOR. Cross final approach of RWY 06 beyond 20 NM ARP. Contact Sangley Tower or as instructed by Manila Approach.

      2. Via NAIC RIVER MOUTH (From Southeast): Report to Manila Approach approaching TRECE MARTIRES at or below 2500 FT. Fly towards NAIC RIVER MOUTH then cross final approach RWY 06 beyond 20 NM ARP. Contact Sangley Tower or as instructed by Manila Approach.

2.3.3 From the West

a. RWY 13 Landing: Report to Manila Approach approaching TAIL OF CORREGIDOR at or below 2500 FT. Continue towards abeam Sangley, contact Manila Control Tower prior entering downwind at traffic altitude.

b. RWY 31 Landing:
Note: Landing allowed in case of emergency and subject to ATC instructions.

c. RWY 06 Landing:
Note: Landing allowed in case of RWY 13/31 closure and emergency subject to ATC instructions.

d. RWY 24 Landing:
Note: Landing allowed in case of RWY 13/31 closure and emergency subject to ATC instructions.

e. SOUTH HARBOR/Sangley Landing: Report to Manila Approach approaching TAIL OF CORREGIDOR at or below 2500 FT. Cross final approach of RWY 06 beyond 20 NM ARP. Contact Sangley Tower or as instructed by Manila Approach.

3. Helicopter Operations

The procedures for the control of VFR and IFR traffic shall apply to all helicopters flying within established corridors and routes when departing and arriving at NAIA.

3.1 Day VFR Helicopter Operations

The following Day VFR Helicopter Routes and Procedures shall apply to all helicopters flying in and out of North Landing/Take-off Areas (East side of RWY 13/31) and South Landing/Take-off Areas (West side of RWY 13/31) of NAIA.

3.1.1 General Procedures

3.1.1.1 All helicopters operating within Manila TMA must have a functioning ATC Transponder with Mode C.

3.1.1.2 All helicopters must squawk 1200 while operating within Manila TMA unless otherwise a specific transponder code is provided by the appropriate ATS facility.

3.1.1.3 All arriving helicopters shall contact Manila Control Tower 10 NM to Manila.

3.1.1.4 All helicopters departing outside NAIA shall contact Manila Control Tower for route clearance to destination.

3.1.1.5 All helicopters must secure approval from Manila Control Tower before crossing the final approach of RWY 06/24 and RWY 13/31.

3.1.1.6 Aircrew assumes responsibility for separation with terrain and obstacles.

3.1.1.7 Each pilot shall maintain vigilance so as to see and avoid other aircraft.

3.1.1.8 The holding areas for helicopters requesting to cross the final approach of RWY 13 are the following:

a. From the East - MAGALLANES at 600 FT;

b. From the West - SOLAIRE at 500 FT;

c. From the North - NORTH HARBOR at 500 FT.

3.1.1.9 Helicopters may request to cross the final approach of RWY 13 via Baclaran Redemptorist Church subject to Manila Control Tower's approval.

3.1.1.10 Helicopters inbound from the North for landing to the North Landing/Take-off Area may be instructed to utilize the 10 NM route via GUADALUPE to accommodate RWY 31 departures.

3.1.1.11 Helicopters inbound from and outbound to the North, to and from South Landing/Take-off Area may be instructed to fly direct certain visual reporting points for lateral separation between arrivals and departures.

3.1.1.12 Any deviation from these prescribed departure/arrival procedures and/or requests for alternate routing due to degraded visibility shall have prior approval from Manila Control Tower.

3.1.2 Departure Procedures

3.1.2.1 From North Landing/Take-off Area

a. Helicopters shall request start-up clearance from Manila Ground Control on frequency 121.8 MHZ.

b. After obtaining start-up clearance, helicopters shall request clearance from Domestic Ramp Control for air taxi to:

i. North Landing/Take-off Area Alpha - In front of Air Ads Hangar;

ii. North Landing/Take-off Area Bravo - In front of Philippine Airlines (PAL) Simulator Building.

c. After air taxi, helicopters shall contact Manila Control Tower on frequency 118.1 MHZ for take-off clearance and follow the appropriate helicopter departure procedures or as instructed by ATC.

3.1.2.1.1 Eastbound: Fly towards East of MAGALLANES, then continue towards East of GUADALUPE Bridge via right of EDSA flying not above 1500 FT. Proceed to destination or as instructed by ATC.

3.1.2.1.2 Northbound: Fly towards East of STAR CITY avoiding the final approach of RWY 13. Continue towards East of SOUTH HARBOR at 500 FT, avoiding RP-P1. Proceed to destination or as instructed by ATC.

3.1.2.1.3 Southbound via AGUINALDO SHRINE: Fly towards STAR CITY and request clearance to cross final approach RWY 13 via SOFITEL towards SM MOA coastline. Continue towards SOLAIRE coastline and turn right towards West of COVELANDIA maintaining at least 1.5 NM distance from Las Piñas - Parañaque shoreline. Continue towards AGUINALDO SHRINE climbing to 500 FT. Report when cleared of the final approach course and proceed to destination or as instructed by ATC.

3.1.2.1.4 Southbound via MANGGAHAN FLOODWAY: Fly towards East of MAGALLANES, continue towards East of GUADALUPE via right of EDSA flying not above 1500 FT, then fly to the East towards MANGGAHAN FLOODWAY descending to 500 FT. Cross the final approach of RWY 24 along the West side of MANGGAHAN FLOODWAY at 500 FT. Report when cleared of the final approach course and proceed to destination or as instructed by ATC.

3.1.2.2 From South Landing/Take-off Area

a. Helicopters shall request start-up clearance from Manila Ground Control on frequency 121.8 MHZ.

b. After obtaining start-up clearance, helicopters shall request clearance from Domestic Ramp Control for air taxi to:

i. South Landing/Take-off Area Alpha - In front of North Star Airline (NSA) Hangar;

ii. South Landing/Take-off Area Bravo - In front of Philippine National Police (PNP) Hangar.

c. After air taxi, helicopters shall contact Manila Control Tower on frequency 118.1 MHZ for take-off clearance and follow the appropriate helicopter departure procedures or as instructed by ATC.

3.1.2.2.1 Eastbound: Fly towards SM MOA avoiding the final approach of RWY 13. Request clearance to cross the final approach of RWY 13 via HK-SUN PLAZA towards East of MAGALLANES. Continue towards East of GUADALUPE via right of EDSA flying not above 1500 FT. Proceed to destination or as instructed by ATC.

3.1.2.2.2 Northbound via STAR CITY: Fly towards SM MOA avoiding the final approach of RWY 13. Request clearance to cross final approach of RWY 13 towards HK-SUN PLAZA. Continue towards East of SOUTH HARBOR via STAR CITY avoiding RP-P1, climbing to 500 FT. Proceed to destination or as instructed by ATC.

3.1.2.2.3 Northbound for Lateral Separation from the Arrival: Fly towards SM MOA avoiding the final approach of RWY 13. Continue direct to East of SOUTH HARBOR climbing to 500 FT and report abeam SOFITEL. Proceed to destination or as instructed by ATC.

3.1.2.2.4 Southbound via AGUINALDO SHRINE: Fly towards SOLAIRE Coastline and turn left towards West of COVELANDIA maintaining 1.5 NM distance from Las Piñas - Parañaque shoreline. Continue towards AGUINALDO SHRINE climbing to 500 FT. Report when cleared of the final approach course and proceed to destination or as instructed by ATC.

3.1.2.2.5 Southbound via MANGGAHAN FLOODWAY: Fly towards SM MOA avoiding final approach of RWY 13. Request clearance to cross final approach of RWY 13 towards HK-SUN PLAZA and fly towards East of MAGALLANES. Continue towards East of GUADALUPE via right of EDSA flying not above 1500 FT, then fly to the East towards MANGGAHAN FLOODWAY descending to 500 FT. Cross final approach RWY 24 along the West side of MANGGAHAN FLOODWAY at 500 FT. Report when cleared of the final approach course and proceed to destination or as instructed by ATC.

3.1.3 Arrival Procedures

3.1.3.1 Landing to North Landing/Take-off Area

3.1.3.1.1 From the South via BINAKAYAN: Fly towards BINAKAYAN descending to 500 FT. After crossing final approach of RWY 06, fly towards OKADA via East of COVELANDIA maintaining at least a 1.0 NM distance away from the Las Piñas - Parañaque shoreline. Continue towards SM MOA and request clearance to cross final approach of RWY 13 towards HK-SUN PLAZA. Fly towards MAGALLANES then turn right and proceed to the intended North Landing/Take-off Area for landing. Report upon landing, and contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.1.2 From the South via MANGGAHAN FLOODWAY: Fly towards the East side of MANGGAHAN FLOODWAY descending to 500 FT. After crossing the final approach of RWY 24, fly towards MERALCO then turn left towards right of GUADALUPE flying not above 1500 FT. Continue towards MAGALLANES following EDSA and proceed to the intended North Landing/Take-off Area for landing. Report upon landing, and contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.1.3 From the North via NORTH HARBOR: Fly towards West of SOUTH HARBOR, descending to 500 FT. Continue towards West of STAR CITY avoiding the final approach of RWY 13 and RP-P1. Fly towards MAGALLANES then turn right and proceed to the intended North Landing/Take-off Area for landing. Report upon landing, and contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.1.4 From the North via 10 NM (RWY 31 in use): At 10 NM, fly towards GUADALUPE avoiding RP-P1 flying not above 1500 FT. Continue towards MAGALLANES following EDSA. At MAGALLANES, proceed to the intended North Landing/Take-off Area for landing. Report upon landing, and contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.2 Landing to South Landing/Take-off Area

3.1.3.2.1 From the South via BINAKAYAN: Fly towards BINAKAYAN descending to 500 FT. After crossing final approach of RWY 06, fly towards OKADA via East of COVELANDIA maintaining at least 1.0 NM distance away from Las Piñas - Parañaque shoreline. At OKADA, turn right and proceed to the intended South Landing/Take-off Area for landing. Report upon landing, and contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.2.2 From the South via MANGGAHAN FLOODWAY: Fly towards the East side of MANGGAHAN FLOODWAY descending to 500 FT. After crossing final approach of RWY 24, fly towards MERALCO then turn left towards West of GUADALUPE flying not above 1500 FT. Continue towards STAR CITY and request clearance to cross final approach of RWY 13 via SOFITEL towards SM MOA coastline. Continue towards SOLAIRE coastline, turn left and proceed to the intended South Landing/Take-off Area for landing. Report upon landing and contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.2.3 From the North: Fly towards West of SOUTH HARBOR descending to 500 FT. Continue towards STAR CITY avoiding the final approach of RWY 13 and RP-P1. Turn right and request clearance to cross final approach of RWY 13 towards SM MOA coastline via SOFITEL. Continue towards SOLAIRE coastline, turn left and proceed to the intended South Landing/Take-off Area for landing. Report upon landing then contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.1.3.2.4 From the North for Lateral Separation from the DEPARTURE: Fly towards West of SOUTH HARBOR descending to 500 FT. Continue direct SM MOA coastline and report abeam SOFITEL. Continue towards SOLAIRE coastline, turn left and proceed to the intended South Landing/Take-off Area for landing. Report upon landing then contact Domestic Ramp Control on frequency 123.25 MHZ for air taxi to assigned hangar.

3.2 IFR Helicopter Operations

3.2.1 Helicopters desiring to fly IFR shall adhere to the IFR procedures provided for, provided that:

a. The helicopter is IFR rated;

b. The pilot is IFR rated; and

c. The helicopter and pilot meet all other requirements.

3.2.2 Any deviation from these procedures shall have prior approval from the appropriate ATC unit.

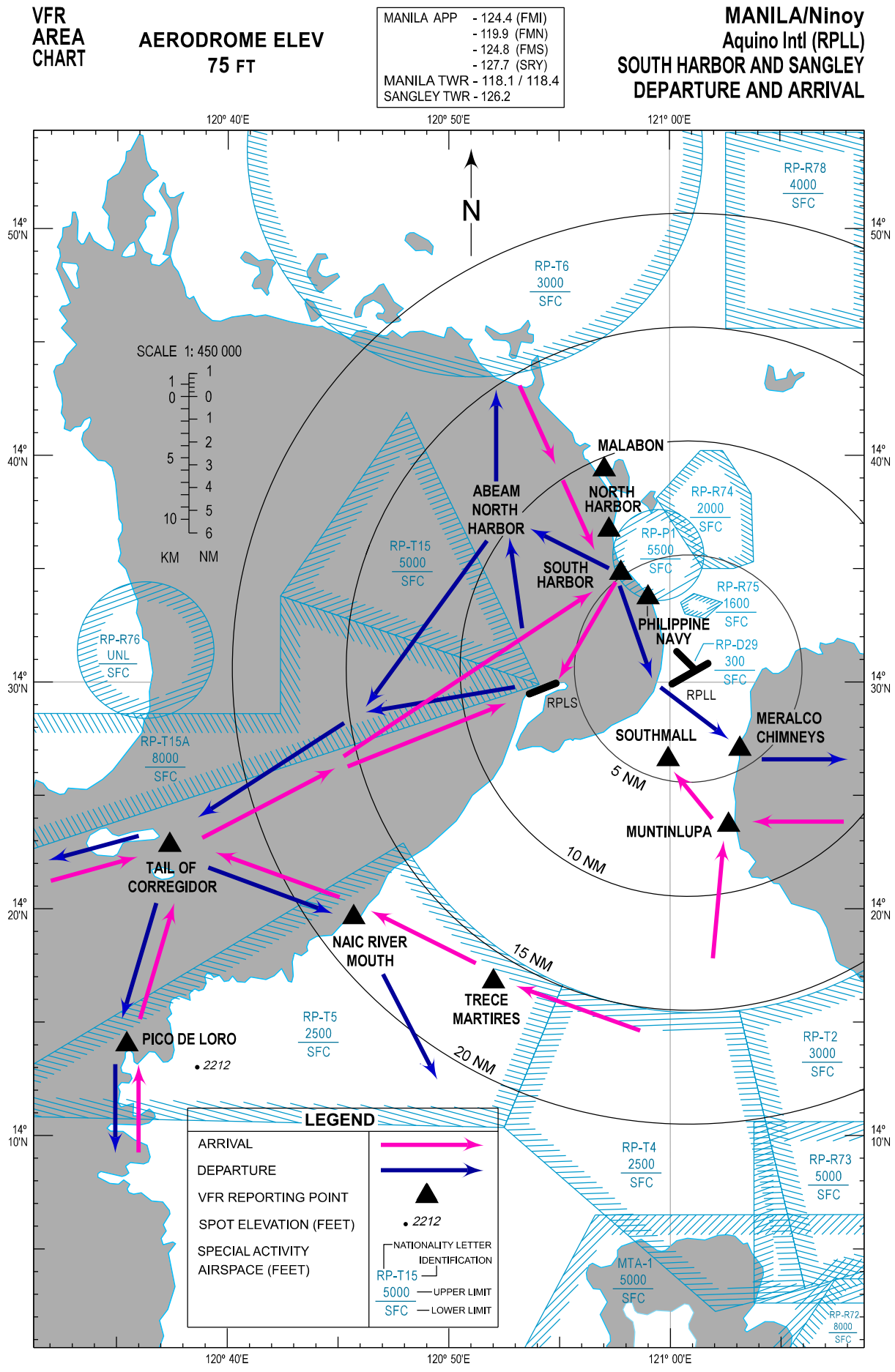
3.3 Security Measures

3.3.1 Helicopters shall not fly within the Malacañang airspace (RP-P1).

4. List of VFR Reporting Points

VISUAL REPORTING POINT	COORDINATES	DISTANCE FROM ARP (NM)	RELATIVE POSITION FROM ARP	DESCRIPTION
AGUINALDO SHRINE	142642N 1205425E	7.3	SW	Aguinaldo Shrine Building
BINAKAYAN	142715N 1205501E	6.6	SW	Binakayan Toll Plaza
COVELANDIA	142757N 1205511E	6.1	SW	POGO Hub
GUADALUPE	143406N 1210246E	4.0	NE	Guadalupe Bridge
HK-SUN PLAZA	143246N 1205920E	2.6	N	HK-Sun Plaza Building
MAGALLANES	143225N 1210101E	1.8	NE	Magallanes Interchange
MALABON	143923N 1205702E	10.0	NNW	Malabon Public Market
MANGGAHAN FLOODWAY	143335N 1210641E	6.4	E	Manggahan Floodway
MERALCO	143518N 1210349E	5.5	NE	Meralco Building
MERALCO CHIMNEYS	142703N 1210310E	4.2	SE	4-Chimneys along Meralco Road, Sucat, Parañaque

VISUAL REPORTING POINT	COORDINATES	DISTANCE FROM ARP (NM)	RELATIVE POSITION FROM ARP	DESCRIPTION
MUNTINLUPA	142342N 1210239E	7.0	SSE	Muntinlupa Municipal Hall
NAIC RIVER MOUTH	141938N 1204542E	18.0	WSW	C-shaped river mouth, Naic Cavite
NORTH HARBOR	143643N 1205715E	7.0	NW	North Harbor Port Area, Manila
OKADA	143049N 1205854E	1.9	W	Okada Hotel
PHILIPPINE NAVY	143344N 1205901E	3.5	NW	Philippine Navy near Manila Yacht Club
PICO DE LORO	141401N 1203527E	30.0	SW	Island West of Pico de Loro
SM MOA	143155N 1205902E	2.2	NW	SM MOA Arena
SOFITEL	143311N 1205850E	3.2	N	Sofitel Hotel
SOLAIRE	143122N 1205849E	2.1	NW	Solaire Hotel
SOUTH HARBOR	143449N 1205747E	5.0	NW	South Harbor Port Area, Manila
SOUTHMALL	142636N 1205955E	4.1	S	SM Southmall, Muntinlupa
STAR CITY	143322N 1205910E	3.2	N	Star City
TAIL OF CORREGIDOR	142249N 1203723E	24.0	W	Eastern tip of Corregidor Island
TRECE MARTIRES	141648N 1205201E	16.0	SW	Trece Martires Provincial Capitol


VFR
AREA
CHART
AERODROME ELEV
75 FT
MANILA APP - 124.4 (FMI)
- 119.9 (FMN)
- 124.8 (FMS)
- 127.7 (SRY)
MANILA TWR - 118.1 / 118.4
SANGLEY TWR - 126.2
MANILA/Ninoy
Aquino Intl (RPLL)
SOUTH HARBOR AND SANGLEY
DEPARTURE AND ARRIVAL
120° 40'E
120° 50'E
121° 00'E
14° 50'N
14° 40'N
14° 30'N
14° 20'N
14° 10'N
N
SCALE 1: 450 000
KM
NM
RP-R78
4000
SFC
RP-T6
3000
SFC
RP-T15
5000
SFC
RP-R74
2000
SFC
RP-P1
5500
SFC
RP-R75
1600
SFC
RP-R76
UNL
SFC
RP-D29
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RP-T15A
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RP-T2
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SFC
RP-T4
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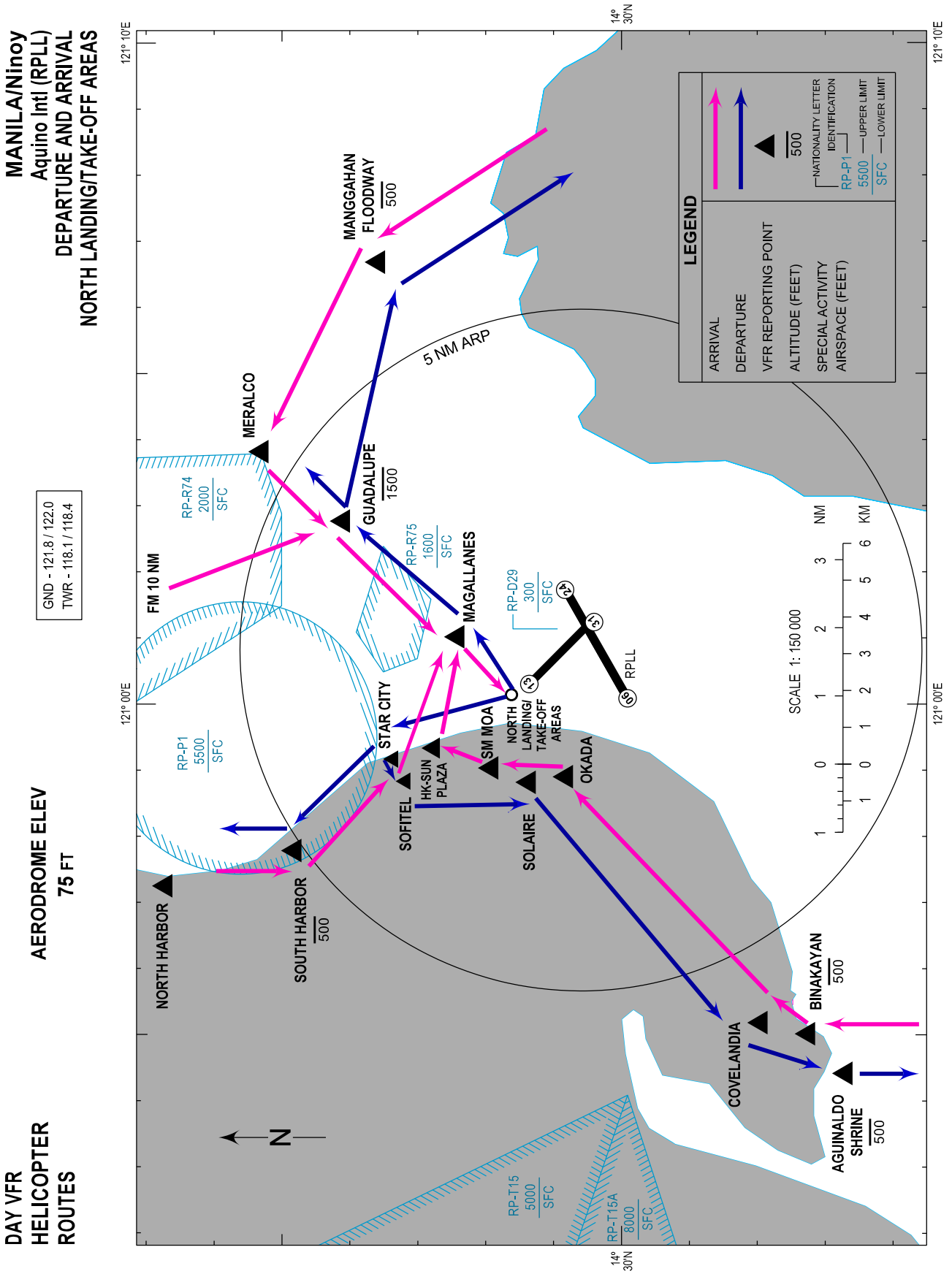
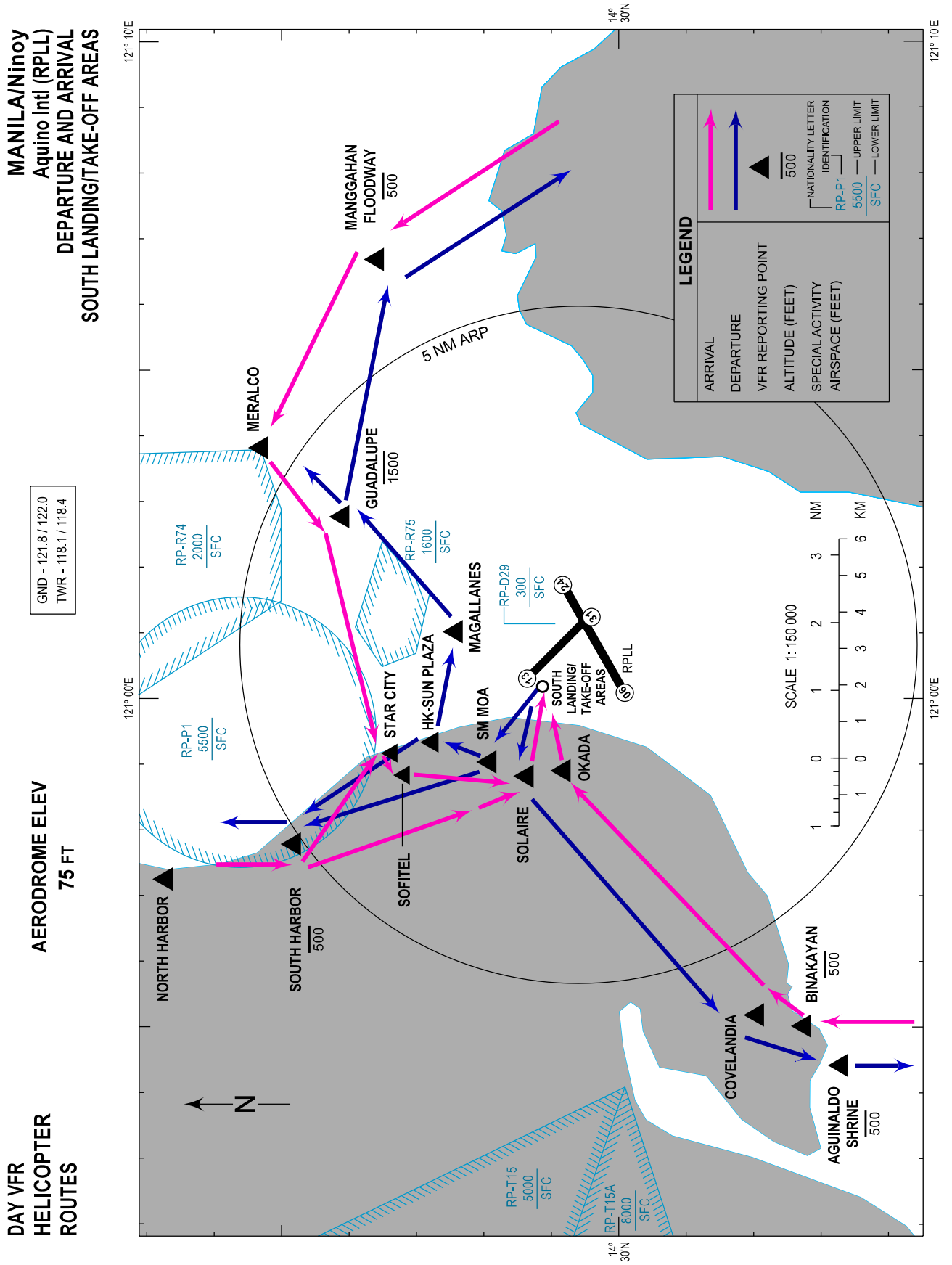
SFC
RP-R73
5000
SFC
MTA-1
5000
SFC
RP-R72
8000
SFC
MALABON
ABEAM
NORTH
HARBOR
NORTH
HARBOR
SOUTH
HARBOR
PHILIPPINE
NAVY
RPLS
RPLL
SOUTHMALL
MERALCO
CHIMNEYS
MUNTINLUPA
5 NM
10 NM
15 NM
20 NM
TAIL OF
CORREGIDOR
NAIC RIVER
MOUTH
TRECE
MARTIRES
PICO DE LORO
• 2212
LEGEND
ARRIVAL
DEPARTURE
VFR REPORTING POINT
SPOT ELEVATION (FEET)
SPECIAL ACTIVITY
AIRSPACE (FEET)
• 2212
NATIONALITY LETTER
IDENTIFICATION
RP-T15
5000
SFC
UPPER LIMIT
LOWER LIMIT


MANILA/Ninoy
Aquino Intl (RPLL)
DEPARTURE AND ARRIVAL
NORTH LANDING/TAKE-OFF AREAS
AERODROME ELEV
75 FT
DAY VFR
HELICOPTER
ROUTES
GND - 121.8 / 122.0
TWR - 118.1 / 118.4
LEGEND
ARRIVAL
DEPARTURE
VFR REPORTING POINT
ALTITUDE (FEET)
SPECIAL ACTIVITY
AIRSPACE (FEET)
NATIONALITY LETTER
IDENTIFICATION
RP-P1
5500
SFC
UPPER LIMIT
LOWER LIMIT
500
5 NM ARP
FM 10 NM
MANGGAHAN
FLOODWAY
500
MERALCO
GUADALUPE
1500
MAGALLANES
STAR CITY
SM MOA
NORTH
LANDING/
TAKE-OFF
AREAS
OKADA
SOFITEL
HK-SUN
PLAZA
SOLAIRE
NORTH HARBOR
SOUTH HARBOR
500
COVELANDIA
BINAKAYAN
500
AGUINALDO
SHRINE
500
RPLL
RP-R74
2000
SFC
RP-R75
1600
SFC
RP-D29
300
SFC
RP-P1
5500
SFC
RP-T15
5000
SFC
RP-T15A
8000
SFC
121° 00'E
121° 10'E
14° 30'N
SCALE 1: 150 000
NM
KM
N


MANILA/Ninoy Aquino Intl (RPLL)
DEPARTURE AND ARRIVAL
SOUTH LANDING/TAKE-OFF AREAS
AERODROME ELEV
75 FT
GND - 121.8 / 122.0
TWR - 118.1 / 118.4
DAY VFR
HELICOPTER
ROUTES
LEGEND
ARRIVAL
DEPARTURE
VFR REPORTING POINT
ALTITUDE (FEET)
SPECIAL ACTIVITY
AIRSPACE (FEET)
NATIONALITY LETTER IDENTIFICATION
UPPER LIMIT
LOWER LIMIT
5 NM ARP
SCALE 1: 150 000
NM
KM
N
121° 10'E
121° 00'E
14° 30'N
MERALCO
MANGGAHAN FLOODWAY
500
GUADALUPE
1500
MAGALLANES
STAR CITY
HK-SUN PLAZA
SM MOA
SOLAIRE
OKADA
SOFITEL
NORTH HARBOR
SOUTH HARBOR
500
COVELANDIA
BINAKAYAN
500
AGUINALDO SHRINE
500
SOUTH LANDING/ TAKE-OFF AREAS
RPLL
RP-R74
2000
SFC
RP-R75
1600
SFC
RP-D29
300
SFC
RP-P1
5500
SFC
RP-T15
5000
SFC
RP-T15A
8000
SFC

RPLL AD 2.23 ADDITIONAL INFORMATION

1. Bird Concentrations in the Vicinity of the Airports

1.1 Pond areas and salt beds along RWY 06 final approach area - presence of passerines and waterbirds. Increase in concentration during the months of August to October and February to April due to the southward and northward bird migrations, respectively, along the East Asia - Australasian Flyway.

1.2 Grass areas adjacent to the runways/taxiways - occasional feeding ground for passerines and pigeons. Increase in concentration after grass cutting operations.

1.3 Approach area along Manila Bay (NW of the airport) and Laguna Bay (SE of the airport) - feeding/ staging area for migratory birds. Increase in concentration during low tide.

1.4 Collecting pond area near RWY 13/31 - feeding area for waterbirds, as well as migratory shorebirds.

Note: There is an existing bird control procedure that prevents bird congregation within the airport area and implements immediate Wildlife Hazard Management Plan (WHMP) dispersal operations if such occur.

1.5 Airfield grass cutting maintenance activity is conducted every 0000 - 0900 and 1730 - 1930 daily. Pilots are advise to exercise caution when passing RWY 06/24, RWY 13/31, TWY C, TWY D and General Aviation areas during the activity due to presence of men and equipment.

2. Lightning Alert Procedure

2.1 NAIA Emergency Plan for severe and extreme weather disturbances.

2.2 Coordinating instructions during thunderstorm conditions.

2.3 Upon receipt of the Lightning Advisory from PAGASA, Apron Management Service of each terminal shall disseminate the information to concerned offices and advise all ramp users to adopt procedures.

2.4 Yellow Lightning Alert

2.4.1 Between five (5) KM to ten (10) KM expected thunderstorm within the aerodrome.

2.4.2 Real time text blast shall be sent to all operation centers and critical personnel with redundancy advisory from the NAIA Command Center.

2.4.3 For information and monitoring purposes.

2.4.4 Continue performing all ground activities with caution.

2.5 Red Lightning Alert

2.5.1 Five (5) KM and below expected thunderstorm within the aerodrome.

2.5.2 Real time text blast shall be sent to all operation centers and critical personnel.

2.5.3 One 15-seconds long horn blast and strobe light shall be heard and seen by all personnel at the ramp area. Horn blast shall be repeated every 5 minutes until alert is lifted.

2.5.4 Cease all ground servicing including refueling activities, towing of aircraft, cargo and baggage.

2.5.5 Remove all Ground Servicing Equipment (GSE) except air step, Ground Power Unit (GPU) and Air Conditioning Unit (ACU).

2.5.6 Evacuate all personnel at the ramp and seek shelter at the terminal, building or vehicles.

2.5.7 If aircraft is at the remote parking bay, personnel shall seek shelter inside the aircraft passenger cabin or lightning shelter until alert is lifted.

2.5.8 Cease embarkation and/or disembarkation of passengers except for those using Passenger Boarding Bridges (PBB).

2.5.9 Continue to operate GPU/ACU if passengers are on board to maintain cabin temperature. Ground equipment operator shall endeavor to visually monitor the GPU/ACU.

2.6 Three 5-seconds short horn blast and strobe light deactivated when lightning alert is clear. Horn blast will be repeated once after 30 SEC. All ramp activities allowed to commence/resume.

RPLL AD 2.24 CHARTS RELATED TO AN AERODROME

RPLL AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

PROCEDURE	OCA/OCH (FT)	OBSTACLE DESCRIPTION	OBSTACLE ELEVATION (FT)	PENETRATION (FT)	COORDINATES	DESCRIPTION
VOR RWY 24	870/796	Telephone Poles	135	10	143053.14N 1210202.73E	0.29 NM before THR RWY 24, left of approach center line.
			139	14	143051.65N 1210203.30E	
VOR RWY 13	770/755	Building	273	128	143141.09N 1205938.58E	0.68 NM before displaced THR RWY 13, right of approach center line.
		Signage	79	19	143127.52N 1210001.77E	0.26 NM before displaced THR RWY 13, right of approach center line.
RNP RWY 24 (LNAV)	770/696	Telephone Pole	135	10	143053.14N 1210202.73E	0.29 NM before THR RWY 24, left of approach center line.
RNP RWY 24 (LNAV/VNAV)	680/606	Telephone Pole	135	10	143053.14N 1210202.73E	0.29 NM before THR RWY 24, left of approach center line.