



OPERATION MANUAL

PART C

AREA, ROUTES AND AERODROMES

Rev. No.: 05

APRIL 2021

PT. Smart Cakrawala Aviation

SCA/OPS/1-003



PT.SCA

OPERATION

PART C

MANUAL

01



**MINISTRY OF TRANSPORTATION
DIRECTORATE GENERAL OF CIVIL AVIATION**

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Tangerang, 12 August 2021

Our Ref : **AV 010 / 22 / 21 / DKPPU - 2021**

To : Mr. Pongky Majaya
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Subject : **REVIEW FOR THE APPROVAL OF OPERATION MANUAL PART C -
AREA, ROUTES AND AERODROMES REV. 05 DATED 12 AUGUST 2021**

Dear Mr. Pongky Majaya,

I refer to the submission of the above mentioned document for review and approval on 20 May 2021.

The Document submitted has been reviewed and found in compliance with the Civil Aviation Safety Regulation part 135 and **Approved**.

Sincerely Yours,



Capt. Anderson Adri P.
On Behalf of Director of DAAO
Act. Head of Section Surveillance of Aircraft Operation

cc. : Director of DAAO



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CONTROL PAGE

TITLE	PAGE	REV.	DATE
CONTROL PAGE	CP-1	05	12 August 2021
LEP-1	LEP-1	05	April 2021
LEP-2	LEP-2	05	April 2021

This Operation Manual (OM) Part C – Area, Routes and Aerodromes has been reviewed and found meet all applicable requirements set forth in the Aviation Act No. 1 Year 2009 and Civil Aviation Safety Regulations (CASR). This Operation Manual Part C is approved for use by PT Smart Cakrawala Aviation with the understanding that Director General of Civil Aviation (DGCA) may require further revisions to this Manual as regulatory requirements or airworthiness standard are amended.

Any change to these manuals shall be reported to the Director General of Civil Aviation (DGCA) for Approval.

Tangerang, 12 August 2021

On behalf of the Director of Airworthiness and Aircraft Operations



CAPT. ANDERSON ADRI P



Act. Head of Section Surveillance of Aircraft Operations

LIST OF EFFECTIVE PAGES

SECTION	DESCRIPTION	PAGE	REV.NO	EFFECTIVE DATE
	CONTROL PAGE	CP-1	04	August,2020
	List Of Effective Page	LEP-1	05	April, 2021
	List Of Effective Page	LEP-2	05	April, 2021
	Table Of Content	TOC-1	04	August,2020
	Table Of Content	TOC-2	03	June, 2020
	Manual Distribution List	DL-1	00	April, 2018
	Revisions of Record	ROR-1	04	August,2020
	Revisions of Record	ROR-2	00	April,2021
	Revision Highlight	RH-1	05	April,2021
1	ADMINISTRATION AND CONTROL	1-1	00	April, 2018
		1-2	00	April, 2018
		1-3	00	April, 2018
		1-4	00	April, 2018
		1-5	00	April, 2018
		1-6	00	April, 2018
		1-7	00	June,2019
		1-8	00	April, 2018
		1-9	00	April, 2018
		1-10	00	April, 2018
		1-11	00	February, 2018
		1-12	00	April, 2018
		1-13	00	February, 2018
		1-14	00	April, 2018
		1-15	00	April, 2018
		1-16	00	February, 2018
2	PT SMART CAKRAWALA AVIATION BASE INFORMATION	2-1	04	August,2020
		2-2	04	April, 2021
		2-3	03	June, 2020
		2-4	01	February, 2019
		2-5	06	May, 2021
		2-6	00	April, 2018
		2-7	00	April, 2018
		2-8	00	April, 2018
		2-9	00	April, 2018
		2-10	00	April, 2018

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SECTION	DESCRIPTION	PAGE	REV.NO	EFFECTIVE DATE
		2-11	00	April, 2018
		2-12	00	April, 2018
2	PT SMART CAKRAWALA AVIATION BASE INFORMATION (Cont'd)	2-13	00	April, 2018
		2-14	00	April, 2018
		2-15	00	April, 2018
		2-16	00	April, 2018
		2-17	00	April, 2018
		2-18	00	April, 2018
		2-19	00	April, 2018
		2-20	00	April, 2018
		2-21	00	April, 2018
		2-22	01	February, 2019
		2-23	01	February, 2019
		2-24	01	February, 2019
		2-25	01	February, 2019
		2-26	01	February, 2019
		2-27	01	February, 2019
		2-28	01	February, 2019
		2-29	01	February, 2019
Appendix A	AERODROME INFORMATION			
Appendix B	ROUTE INFORMATION			
Appendix C	PAPUA AIRPORT AND AIRSTRIIP INFORMATION			

PT. SMART CAKRAWALA AVIATION	D G C A
 <p>CAPT.A.JAHRON BURHANI OPERATION MANAGER</p>	 <p>CAPT RIZAL BAYU AZI CERTIFICATION PROJECT MANAGER</p>



OPERATION MANUAL

PART C
AREA, ROUTES AND AERODROMES

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REVISIONS OF RECORD

Revision Number	Pages Affected	SUBJECT	Effective Date	Inserted Date	Signature
01	1-7	1.3 BASE OPERATIONS	08 Mar 19		
01	1-11	1.5 ROUTES	08 Mar 19		
01	1-11	1.5.2 General Service Area and Route Map	08 Mar 19		
01	1-13	1.6 AERODROMES	08 Mar 19		
01	1-16	1.7 PAPUA FREQUAENCY CHART	08 Mar 19		
01	2-2	2.2 INFORMATION	08 Mar 19		
01	2-3	2.3 PT SMART CAKRAWALA AVIATION Aircraft Specification	08 Mar 19		
01	2-22	2.7.5 Timika/Mozes Kilangin-WAYY	08 Mar 19		
01	2-26	2.7.6 NABIRE / Douw Aturure-WABI	08 Mar 19		
01	APP A	AERODROME INFORMATION	08 Mar 19		
01	APP B	ROUTE INFORMATION	08 Mar 19		
01	APP C	PAPUA AIRPORT AND AIRSTRIIP INFORMATION	08 Mar 19		
02	APP B	ROUTE INFORMATION	08 May 19		
03	1-7	1.3 BASE OPERATIONS	12 Jun 19		
03	2-2	2.2.1 Base Location	12 Jun 19		
03	2-2	2.2.2 Base Contact number	12 Jun 19		
03	2-2	2.2.3 Base address	12 Jun 19		
03	2-3	2.3.1 PT SMART CAKRAWALA AVIATION Aircraft Specification	12 Jun 19		
03	2-4	2.4.1 Regulatory Requirements	12 Jun 19		
03	2-30	2.7.7 Cibubur/ LAPTERA-WIHC	12 Jun 19		
03	APPENDIX B	ROUTE INFORMATION	12 Jun 19		
04	2-1	2.1.1. Base Organization	5 Aug 2020		
04	2-2	2.2 INFORMATION	5 Aug 2020		



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04	2-3	2.3 PT Smart Cakrawala Aviation Aircraft Specification	5 Aug 2020		
05	2-2	2.2 INFORMATION	16 Apr 2021		
05	2-5	2.3.1 PT SMART CAKRAWALA AVIATION Aircraft Specification	16 Apr 2021		
04	APPENDIX B	ROUTE INFORMATION	20 May 2021		
06	2-5	2.3.1 PT SMART CAKRAWALA AVIATION Aircraft Specification	20 May 2021		



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PART C AREA, ROUTES AND AERODROMES

REVISIONS HIGHLIGHT

Revision Number	Revision Date	Chapter	Page	Description of Changed
03	12 June 2019	1.3 BASE OPERATIONS	1-7	Added Base Cibubur
03	12 June 2019	2.2.1 Base Location	2-2	Added Base Location
03	12 June 2019	2.2.2 Base Contact number	2-2	Added Base Contact Number
03	12 June 2019	2.2.3 Base address	2-2	Added Base address
03	12 June 2019	2.3.1 PT SMART CAKRAWALA AVIATION Aircraft Specification	2-3	Revision Aircraft specification Reference.
03	12 June 2019	2.4.1 Regulatory Requirements	2-4	Revision regulatory Requirement
03	12 June 2019	2.7.7 Cibubur/ LAPTERA-WIHC	2-30	Added Cibubur airstrip information
03	12 June 2019	Appendix B ROUTE INFORMATION	Appendix B-113 until 118	Added VFR Route for Bali, Java and Registered Helipad
04	5 Aug 2020	2.1.1 Base Organization	2-1	Added FOO as Base Manager
04	5 Aug 2020	2.2 INFORMATION	2-2	Revision of 2.2.1, 2.2.2, 2.2.3
04	5 Aug 2020	2.3 PT Smart Cakrawala Aviation Aircraft Specification	2-3	Ref to ACL A3 PT Smart Cakrawala Aviation
05	16 Apr 2021	2.2 INFORMATION	2-2	Added Tarakan as Satelite base
05	16 Apr 2021	2.3.1 PT SMART CAKRAWALA AVIATION Aircraft Specification	2-5	Added PK-SNW, PK-SNG, PK-SNB, PK-SNC
04	20 May 2021	Appendix B ROUTE INFORMATION	Appendix B-2 until 8	Revision VFR Route Kalimantan Area
06	20 May 2021	2.3.1 PT SMART CAKRAWALA AVIATION Aircraft Specification	2-5	Ref to ACL A-3 and D-85 PT Smart Cakrawala Aviation



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PART C AREA, ROUTES AND AERODROMES



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PART C AREA, ROUTES AND AERODROMES

1. ADMINISTRATION AND CONTROL

1.1. INTRODUCTION

This Operation Manual Part C is for the use and guidance of all Company operating staff, together with its servants and agents, who are to ensure that all commercial air transport flights are planned and executed in accordance with its policies and requirements.

The Area, Route and Aerodrome information depicted in this publication is complied and provided by aerodrome operators and it is intended for use by properly qualified pilots who are familiar with all local regulations pertaining to each airport.



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1.2. EDITING, PUBLICATION AND AMENDMENT RESPONSIBILITIES

1.2.1 Editing Manual

Annotation of Change

Amendments will be in the form of replacement pages. They will be accompanied by: Filing Instructions (for print copies), an updated List of Effective Pages (LEP), and a brief outline of the purpose and the nature of the changes. A solid vertical black bar will indicate all changes to text and diagrams, (change-bar) or in the margin closes to the page edge. Amended electronic copies shall be made available to all recipients.

Destruction and Disposal of Obsolete Operational Documents

On receipt of new documents either in hard copy, electronic or multimedia format, the previous version of the document shall be removed, destroyed and disposed off in an appropriate manner.

To maintain a “current” status of all the documents, any updated will distributed regularly updated through Company Mail issued with Flight Documents updated.

1.2.2 Publication of Manual

Publication Authority

Operation Manager shall be responsible for the publication of the amendments to the Operations Manual. And it will be distribute by an electronic copy, then paper copy of the amendment will be distribute respectively (see of distribution list).

Management and Control of Flight Operations Documents / Publications

Documents and Publications relating to Flight Operations are controlled and managed by Operation Manager. All publications / documents sourced from a vendor shall be Library. All publications / documents sourced from a vendor shall be documented and a record of subscription / purchase shall be a period of two years. The validity of subscription shall be monitored.

On receipt of updates / revision to the publications, records of such updates / revision shall be maintained. Library team shall be responsible for the documentation, control and updates. All obsolete documents in all forms shall be suitably destroyed and disposed off as per the airline operations practices and procedures in force.

Operation Manager shall ensure that all documents / publications:

- a. Are reviewed and approved for adequacy prior to issue.
- b. Are updated, reviewed and approved for re-issue as necessary.
- c. The current revision status is displayed.
- d. Are available at point of use.
- e. Are eligible, readily identify able and retrievable
- f. Documents of external origin are identified and their distribution suitably managed.



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That all obsolete are withdrawn to prevent unintended use by removing them from circulation and destroying / disposing per the procedure in force. Should any document be retained for any purpose with the Flight Operations, they shall be suitably identified and annotated as such, are stored in suitable electronic media in a designated computer.

A distribution list for all operational documents to manage its dissemination shall be maintained. All operational documents shall be duly signed by the issuing authority and these signed copies shall be deemed as original copy and shall be maintained at Library. Dissemination

shall essentially be via electronic means like email to establish that the individual user has received the correct document.

All documents shall be published in PDF format for electronic dissemination. A record of receipt of all documents sent by Library to individual users shall be maintained for a period of 6 (six) months.

Each users, shall, further under take that they have received, read relevant documentation update shall be reflected in the Company Mail issued every Monday (if applicable) and available with the Flight Plan shall be handed over to the Flight Crew. All Flight Crew while signing the Flight Release and understood all the operational information disseminated as detailed in the Company Mail.

Documents

The following publications are considered “ORIGINAL” documents:

- g. Any document prepared by Flight Operations and issued by Operation Manager with signature in ink is deemed an original document.
- h. Document NOT generated by Operation Manager but received from manufacturers of aircraft and associated vendors.
- i. All original documents shall be kept with Library. Library shall maintain controlled copies of documents / publications marked “Controlled Copy” in red. An updated list of ‘Controlled Copy’ issued shall be available with the Library.

A designated person shall crosscheck availability of all the issued ‘Controlled Copy’ at the intended location on a bi-annual basis and corrective action shall be taken in case of discrepancy as per company policy / procedure in force.

Controlled Copies are NOT photo copied. Controlled Copies of relevant documents shall be maintained in main libraries and onboard the aircraft. Library shall be responsible to update the controlled copies in case of revision / changes to the original. All copies when printed by individual user shall be deemed to be uncontrolled copies and need to be updated by the user as required.

*Uncontrolled copies shall be marked as **UNCONTROLLED COPY** in red stamp.*

The set of documents available at the main Library are detailed and updated regularly.



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1.2.3 Amending the Manual

General

Assurance activities or periodic review – A manual that fails to take account of changing circumstances is no longer relevant and loses credibility. All amendments to contents are to be subject to an internal approval changes to the Operations Manual may be required as a result of changes in the course of business, new operational requirements, quality and vetting process. Hand written amendments are NOT permitted, except in situations requiring immediate amendment in the interests of safety

Responsibility

Each copy of the Operations Manual remains the property of PT. Smart Cakrawala Aviation, who assumes the overall responsibility for updating the contents of the manual. However, each holder of the Operations Manual is personally responsible for the security, the condition and the amendment status of their copy. And for controlling and monitoring to keep current and update Operations Manual is responsibility Operation Manager.

Internal Responsibility for Initiating Amendments

Responsibility for the content of the various parts of this manual is vested as follows:

- a. Operation Manager shall be responsible for contents related to Flight Operations and Safety.
- b. Chief Pilot / Deputy shall be responsible for the contents related to Training and Standards.
- c. All holders of the Operations Manual are responsible to notify their superior without delay, in case they notice any error or discrepancy in the manual.

Revision Cycle

The Operations Manual shall be review and revise if necessary twice a year, in the third week of June and December, be effective on the first date of the next coming month (1st July and January), unless there is a reason to issue a non-scheduled revision.

Conflict

In case of a conflict of the dates in the application of a new procedure, then the new procedure shall be used.

In case there is a conflict between the contents of a paper copy and an electronic copy, then the electronic copy shall be deemed correct.

Approval

The contents of the Operations Manual have been approved in their entirety both internally and by the DGCA prior to initial issue. Further, the contents of all amendments or revisions to the Operations Manual must be acceptable to, or, where applicable, approved by, the DGCA. The following procedure shall apply:

1.2.4 Amendments Requiring DGCA Approval

When the amendment concerns any part of the Operations Manual which must be approve, this approval shall be obtained before the publication of the amendment.



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Exceptionally, if the amendment has an implication on safety, they it may be published and applied immediately provided that the approval required has been applies.

1.2.5 Distribution Confirmation Of Receipt

All Operations Manual copies will be electronically distributed by Operation Manager in format soft copies, save hard copies for offices (A4 format) and the airplane library (A5 format), for ease of in-flight use, and shall have a ring binder that permits easy use and amendment under flight standard responsibility, but for individuals or users have the option of obtaining a softcopy or printing a hard copy at their own expense and responsibility for accuracy and update.

1.2.6 Performance / Currency Manual

This Operations Manual will be reviewed for currency every 6 (six) month, the currency status of each page is given as follows:

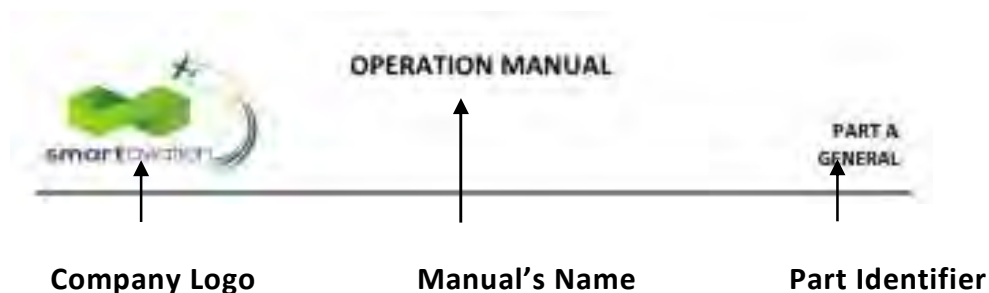
- Manual Identifier / Issue Number / Revision / Date of Issue.

1.2.7 NOMENCLATURE

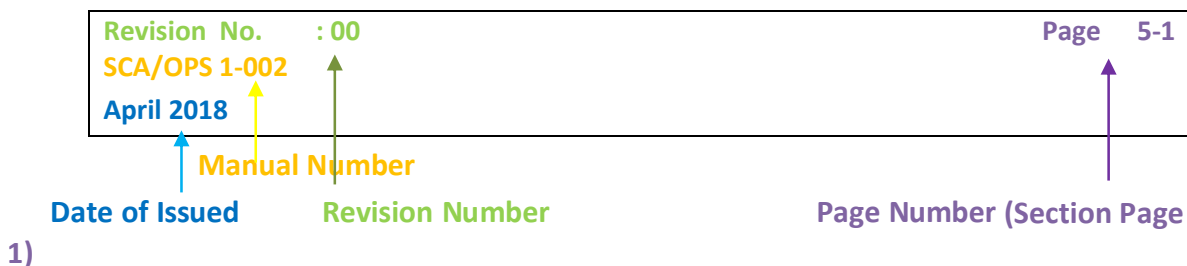
Chapter and Section Numbering

This Manual is subdivided into Chapters, Sections and Subsections.

1. Top of the Page



2. Bottom of the Page



- 1) A “decimal” nomenclature is used, as follows:
- Chapter
 - First Numerical Identifier;



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- Section - Second Numerical Identifier;
- Sub-section - Third Numerical Identifier, and as necessary a bracketed letter identifier.

Example: 1.5.1.is:

- Chapter 1 : International Standard.
- Section 5 : Amending the manual.
- Sub-section 1 : General.

1.2.8 MANUAL CONTROL NUMBER

This Operations Manual is pertains to the Regulations & Quality System application in the flight operations activities will be identified and control by Operation Manager as document number SCA/OPS-1-001. Shown below is a brief description of the manual control number

SCA : Stands for the Company Names of PT. Smart Cakrawala Aviation.

OPS : Stands for the department issued manual.

1 : Stands for level manual procedure to be observed and implemented within company, its need approval from DGCA.

01 : Stands for Manual Serial Number for Operations Manual approved by DGCA

1.2.9 SYSTEM OF AMENDMENT AND REVISION

Operation Manager is responsible for the overall control of this manual and will authorize both the content and issuance of amendments and revisions.

Revisions will be numbered in sequence and will contain the date of issue. All revisions will be recorded in Section 1.6 by the post holder for all departments.

However, it is the responsibility of each manual holder to ensure all relevant staff is made aware of any material change to this manual.



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1.3. BASE OPERATIONS.

No	LOCATION	REMARK
1	TIMIKA	MAIN BASE
2	TARAKAN	SATELITE BASE
3	NABIRE	SATELITE BASE
4	TANAH MERAH	SATELITE BASE
5	DAKAI	SATELITE BASE



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1.4. DEFINITIONS AND ABBREVIATIONS.

ABBREVIATION	DEFINITIONS/EXPLANATIONS
ADC	Air Defense Clearance
ADIZ	Air Defense Identification Zone
Aerodrome Traffic Zone (ATZ)	Airspace of specified dimensions established around an aerodrome for the protection of aerodrome traffic.
Aerodrome elevation	The elevation above sea level of the highest point on the landing surface.
AIP	Aeronautical Information Publication
ARA	Airborne Radar Approach
ATZ	Aerodrome Traffic Zone
PIC	Pilot in command
DGCA	Directorate General of Civil Aviation
D Value	In relation to a helicopter, the largest helicopter D Value Permitted on the deck.
Fpm	Feet per minute
FSI	Flying Staff Instruction
HLO	Helideck Landing Officer
hPa	hectoPascal. A unit of measurement for pressure. 1 hPa=1 Mb= 0.03 in Hg.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organisation
IFR	Instrument flight rules (IFR) is one of two sets of regulations governing all aspects of civil aviation aircraft operations, the other is visual flight rules (VFR). IFR specifically govern instrument flight
IMC	Instrument Meteorological Conditions, being conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for VMC.
In	Inch. The abbreviation " may also be used. A unit of measurement for length. 1 in= 2.2 cm. With regard to pressure, it refers to inches of mercury (hg). 29.92 In Hg=1013.2 mb= 1013.2 hPa.
IPSC	Integrated Petroleum Services and Consultancy
LAP	Local Administrative Procedures
LOS	Limited Obstacle Sector
LSI	Local Staff Instruction
m	Metre. A unit of measurement for length. 1 m= 3.28 ft.
MEA	Minimum en route altitude
MEL	Minimum Equipment List
Minimum enroute altitude (MEA)	The published altitude above sea level between specified Altitude fixes on a route which assures acceptable navigation signal coverage, which meets the IFR obstruction clearance requirements.
Minimum Equipment List	A document listing items of equipment that are allowed to be unserviceable under certain conditions for an aircraft of a particular type, yet still permit flight. The MEL is normally approved by the regulatory authority.
Minimum Equipment Requirement	A document similar to an MEL but listing particular items of equipment where the customer on a particular contract



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	has more stringent demands than the MEL. This document is controlled by the company and may not be more permissive than the MEL.
Minimum obstacle clearance altitude (MOCA)	The minimum altitude above sea level between specified fixes on a route which meet IFR obstruction clearance requirements for the route segment.
Minimum Sector Altitude (MSA)	The lowest altitude above sea level which will provide minimum clearance of 1000 feet above all objects located within a sector of a circle usually of 25 nm radius, centered on a specified navigational aid . For offshore, approaches the radius is 10 nm.
MOCA	Minimum obstacle clearance altitude
MSA	Minimum Sector Altitude
nm	Nautical mile. A unit of measurement for length. 1 nm = 1852 m.
OFS	Obstacle Free Sector
OMA	Operations Manual Part A
OMB	Operations Manual Part B
OMC	Operations Manual Part C
OMD	Operations Manual Part D
PA	Pressure Altitude
POC	Petronas Pipeline Operations Center
Pressure Altitude	Altimeter reading with standard pressure set. Used for flight above the transition altitude and for performance calculations.
QFE	Altimeter reading with standard pressure set.
QNE	Pressure Altitude of the reporting station
QNH	Altimeter setting to give altitude above sea level.
sm	Statute mile. A unit of measurement for length. 1 sm= 1.6 km
Standard Pressure	29.92 inches, or 1013.2 hPa.
RNAV	Area navigation. A method of navigation permitting aircraft Operation on any desired flight path within the coverage of suitable navigational aids.
SLLR	Southern Low Level Route
SAR	Search and Rescue
SART	Search and Rescue Transponder
SLA	In relation to a helideck, the Safe Landing Area
SMS Manual	Safety Management System Manual
t Value	In relation to a helideck, the maximum helicopter mass permitted on the deck. It is usually specified in metric tons to one decimal place for example 22.8 t.
UTC	Coordinated Universal Time. Equivalent to Greenwich Mean Time (UTC,Z).
VFR	Visual flight rules (VFR) are a set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. Specifically, the weather must be better than basic VFR weather minima, i.e. in visual meteorological conditions (VMC), as specified in the rules of the relevant aviation authority



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VMC	Visual meteorological conditions (or VMC) is an aviation flight category in which visual flight rules (VFR) flight is permitted—that is, conditions in which pilots have sufficient visibility to fly the aircraft maintaining visual separation from terrain and other aircraft.
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1.5. ROUTES.

PT. Smart Cakrawala Aviation has developed a standard and preferred routing system to provide pilots with additional information and guidance to aid in the planning and preparation of each flight. While there is no requirement in the CASR's to follow a specific route while operating VFR in uncontrolled airspace, PT. Smart Cakrawala Aviation recommends each pilot to use and follow the standard VFR routing to the extent possible while maintaining proper VFR minimum requirements and enroute altitude minimums as appropriate to the class of airspace in which they are operating. Whenever a PT. Smart Cakrawala Aviation approved VFR standard route has not been established between the departure and destination aerodromes each pilot may fly via the most direct route or on a route of the pilots choosing provided proper terrain and obstacle clearance is maintained, the minimum VFR operating minimums appropriate to the airspace are maintained, the minimum enroute altitudes as laid down in PT. Smart Cakrawala Aviation OM part A chapter 8.2 are met and, adequate areas which would permit a safe forced landing should the engine fail are maintained.

1.5.1. Route Selection

Each PT. Smart Cakrawala Aviation approved VFR standard route has been designed:

1. To allow for adequate areas of surfaces which would permit a safe forced landing should the engine fail (for single engine operations)
2. To allow for sufficient numbers of adequately equipped airport along the route of flight.

The list of adequate alternate airports is found on the aerodrome information chart for the departure and destination aerodromes.

For the purposes of this section an adequately equipped airport means an airport that:

- a. Has a runway length and surface to allow for a full gross landing and takeoff
- b. Obstructions on the approach and departure end of runways must not adversely affect the safe operation of the aircraft being used, and appropriate hazard markings and lighting are serviceable and functioning when in use,
- c. Has facilities for the safe and proper movement of passengers to and from the aircraft,
- d. Airport marking and lighting as appropriate,
- e. Emergency and firefighting equipment and personnel as appropriate,
- f. Published at least one instrument and night maneuvering approach (not required for a DAY/VFR flight)g. Any other facility, equipment or service deemed necessary for the intended operation.

1.5.2. General Service Area and Route Map

PT. Smart Cakrawala Aviation services over dozens aerodromes located throughout Sumatra, Java, Kalimantan, Sulawesi, Papua, and Ambon. The following is the sample of map depicts the general service area of each of PT. Smart Cakrawala Aviation bases

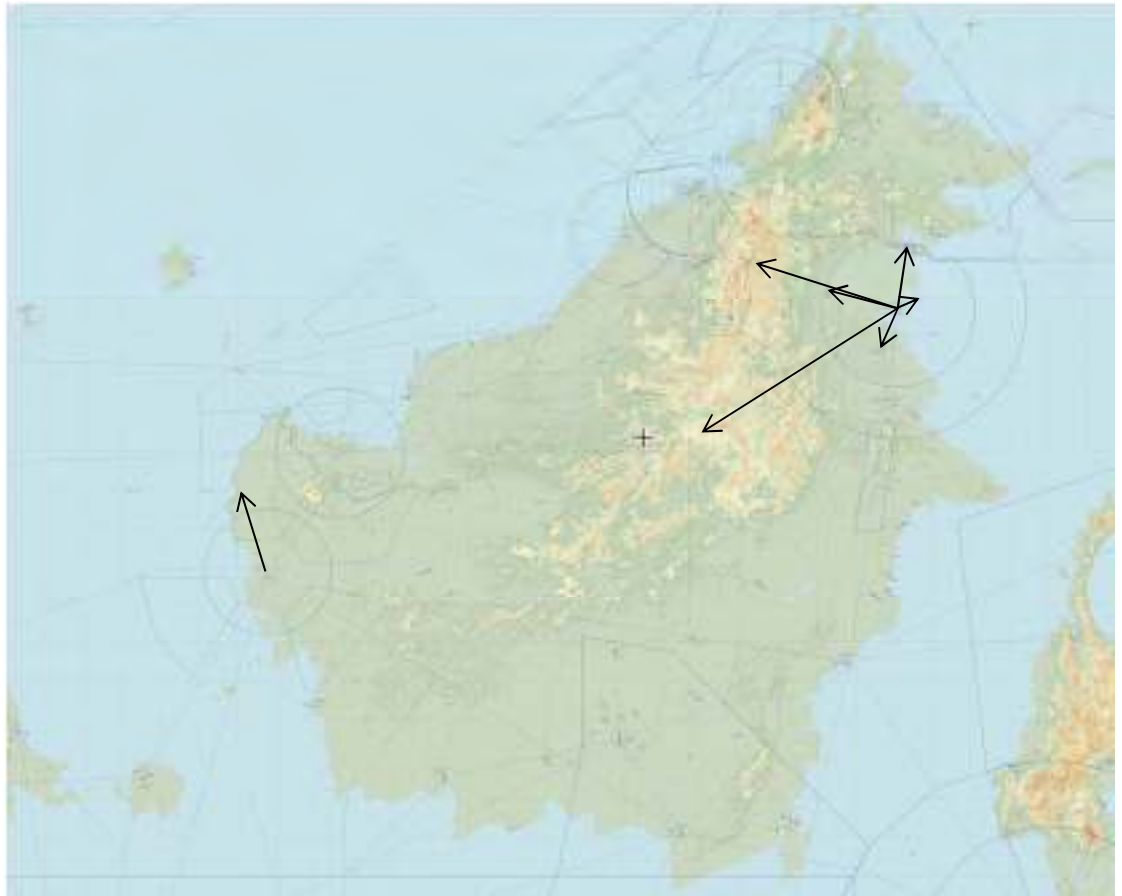


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of operation in Papua and Kalimantan. For detailed information and actual routes to be flown refer to Appendix B of this OM part C.







1.6. AERODROMES.

PT. Smart Cakrawala Aviation serves over dozens of aerodromes throughout Papua. The majority of these aerodromes are considered “unimproved”. Appendix C of this OM Part C contains detailed information on the procedures to be used while operating at these unimproved aerodromes located in uncontrolled airspace. Appendix B contains all of the route information required to operate to these aerodromes.

1.6.1. ICAO Airport Categories

Aerodromes will be categorized A, B or C in ascending order of difficulty. The ICAO categories are:

Category A

An aerodrome that satisfies all of the following requirements:

1. An approved instrument approach procedure
2. At least one runway with no performance limited procedure for take-off and/or landing
3. Published circling minima not higher than 1000 feet above aerodrome level
4. A night operations capability

No additional briefing or training is required prior operating to Category A airport

Category B

An aerodrome that does not satisfy the Category A requirements or which requires extra considerations such as:

1. Nonstandard approach aids and/or patterns
2. Unusual local weather conditions
3. Unusual characteristics or performance limitations
4. Any other relevant considerations including obstructions, physical layout, lighting etc.

Prior to operating to a Category B airport, the PIC should be briefed, or self-briefed by means of the special approach plates in The Manual of Route and Airport Instruction and Information, on the Category B airport(s) concerned. The Company will only schedule PICs to Category B airports who have been briefed.

Category C

An aerodrome requiring additional training or considerations to a category B airport and is considered to pose certain problems for the approach and / or landing and / or take off.

Prior to operating to a Category C aerodrome, each pilot shall have completed a specific checkout and received Chief Pilot approval to operate from that specific aerodrome. Most of the Category C airports operated by PT. Smart Cakrawala Aviation are located in Papua.

1.6.2. Aerodrome Categorization

The following criteria for aerodrome categorization shall be used. In addition to the



ICAO airport category as listed above, PT. Smart Cakrawala Aviation places an additional qualifier to all category C airports/aerodromes.

The nature of PT. Smart Cakrawala Aviation's flight operation results in virtually all of its regularly used aerodromes to fall in category "C". Since many of these aerodromes Present specific additional hazards such as: unimproved surfaces, slope, sun hazards etc. it is not sufficient to simply categorize them all as "C".

PT. Smart Cakrawala Aviation will therefore provide an additional classification on all category "C" aerodromes that more clearly defines the level of hazard. This additional classification will be Mountain Level 1, Mountain Level 2 or Mountain Level 3.

1.6.3. PT. Smart Cakrawala Aviation Aerodrome Risk Classification

ICAO category C aerodromes are further classified by PT. Smart Cakrawala Aviation. The Chief Pilot determines the category and risk class associated with each aerodrome of intended use.

Each Category C aerodrome shall be classified by adding the PT. Smart Cakrawala Aviation risk class modifier after the category "C" i.e. Each category C aerodrome becomes Mountain Level 1, Mountain Level 2 or Mountain Level 3.

Mountain Level 1:

Class 1 is the lowest of the category C airstrips but still represents a medium to high level of risk. Mountain Level 1 airstrips may have some or all of the following hazards: Slope, softness, slipperiness, undulations, wind issues (crosswind, tailwind and/or turbulence), crown, and/or shorter lengths. Most class 1 airstrips are one-way strips with a key point and abort point beyond which a go-around is not possible. Mountain Level 1 airstrips usually have weight restrictions for takeoff and may have higher field elevations.

Mountain Level 2:

Class 2 airstrips have all of the hazards and associated risks of Mountain Level 1 airstrips plus may have: higher touchdown slope, changes in slope along the runway length, side slope, visual illusions, short or modified approaches, even shorter runway Lengths, and are more susceptible to wind issues including updrafts and downdrafts on final. The weather may change rapidly causing the airstrip to close down quickly. Mountain Level 2 airstrips are considered high risk.

Mountain Level 3:

Class 3 airstrips are the highest risk airstrip. They may have all of the hazards and associated risks of Mountain Level 1 and Mountain Level 2 and additionally may have some or all of the following risks: sun / shadow, unseen hazards such as strong updrafts or downdrafts on short final, problems with wind requiring a wind restriction, strong visual illusions, reduced margin, very steep touchdown slope, many or large changes in runway slope, be very rough or soft, have changes in runway heading (doglegs), limited visual reference to the runway on approach or during takeoff, short, steep or angled approaches, quickly changing wind or weather conditions, be in very tight valleys where the abort point is quite far out and the go-around options are very limited and require precise aircraft control.



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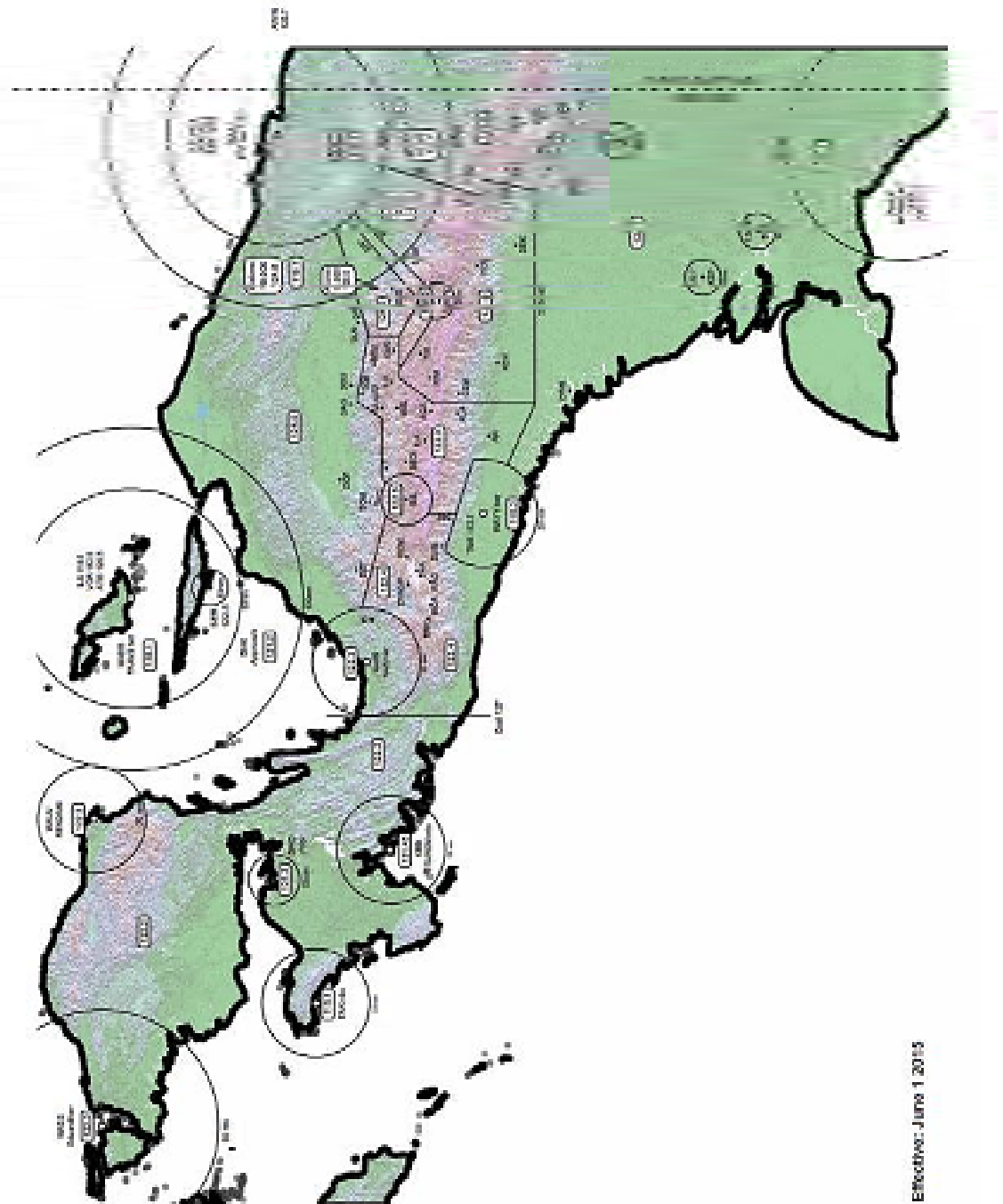
PART C AREA, ROUTES AND AERODROMES

Mountain Level 3 airstrips are considered very technical airstrips that represent the highest level of risk acceptable to PT. Smart Cakrawala Aviation's operations. As with all aviation operations each pilot must be constantly assessing the current risk level during the entire operation and maintain the very highest level of vigilance and safety, being prepared at anytime to reject the operation for any reason.

1.6.4. Increase in Aerodrome Operating Minima in Case of Degradation of Approach or Aerodrome Facilities

1. Unimproved Aerodromes in Uncontrolled Airspace (Class G) under VFR
Uncontrolled Aerodromes (Class G Airspace) are operated under Visual Flight Rules in VMC. All aircraft are required to remain visual with at least the minimum ceiling and visibility requirements for that airspace. As such there is no increase in operating minima at VFR aerodromes. All pilots are required to remain visual if the pilot cannot maintain proper VFR minimums the pilot should proceed to an alternate aerodrome.
2. Aerodromes with at least one instrument approach
For flights operated under Instrument Flight Rules to aerodromes with approved approach procedures and a component of the approach system or aerodrome facilities becomes unserviceable, the following increase in operating minima applies:
 - a. Follow the instructions contained in the AIP, approach plate or other approved data to determine the increase in MDA, visibility requirements (RVR) or other restrictions.
 - b. For serious degradation such as a required navigational aid out of service or a required component of an instrument landing system. The pilot shall not attempt an approach and the minimum VFR requirements for the class of airspace in which the flight is operating applies.

1.7. PAPUA FREQUAENCY CHART.





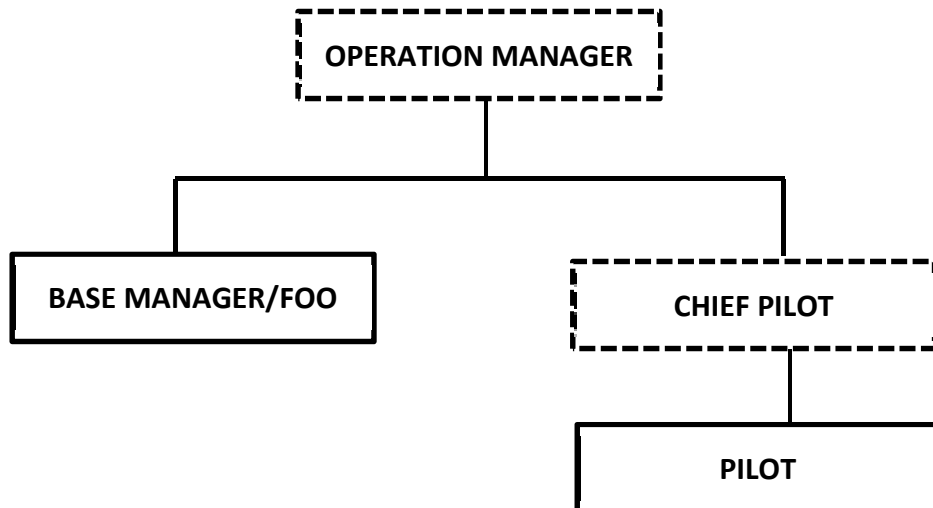
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PART C AREA, ROUTES AND AERODROMES

2. PT SMART CAKRAWALA AVIATION BASE INFORMATION

2.1. ADMINISTRATION

2.1.1. Base Organization





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PART C AREA, ROUTES AND AERODROMES

2.2. INFORMATION

2.2.1. Base Location

Aerodrome location indicator and name :

No	LOCATION	Location Indicator	REMARK
1	NABIRE	WABI/NBX	MAIN BASE
2	TIMIKA	WAYY/TIM	SATELITE BASE
3	TANAH MERAH	WAKT/TMH	SATELITE BASE
4	SINGKAWANG	WISA/SKW	MAINTENANCE BASE
5	TARAKAN	WAQQ/TRK	SATELITE BASE

2.2.2. Base Contact number

No	LOCATION	CONTACT PERSON	PHONE NUMBER
1	NABIRE	SHALEH/DIDIK	081240839945/ 082399073993
2	TIMIKA	IVAN REVANI/JEFRI	08125032154/ 081231665614
3	TANAH MERAH	MUHAMAD YASIN/SYARIT	082198390396/ 081247399760
4	SINGKAWANG	OKI NURHADI	085211117401
5	TARAKAN	ASWINTO/JEFRI	081253935282/081231665614

2.2.3. Base Address

No	LOCATION	ADDRESS
1	NABIRE	Nabire Airport Jl. Sisingamangaraja, Nabire 98801
2	TIMIKA	Jl Airport Timika, Timika , 99910
3	TANAH MERAH	Jl Taman Makam Pahlawan, Kab. Boven digoel, distrik Mandobo, desa Sokanggo, Papua 99663
4	SINGKAWANG	Kecamatan Singkawang Utara, Singkawang, Kalimantan Barat
5	TARAKAN	Karang Anyar Pantai, Kota Tarakan, Kalimantan Utara



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2.2.4. PT SMART CAKRAWALA AVIATION OFFICE

SMART DEAL Building 4th Floor, JL Cideng Timur Dalam No.16 A Jakarta Pusat, 10130
– Indonesia Phone : +6221 630 5210 Fax, +621 632 4873



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2.2.5. Base Library

The following documents will be at this base:

1. OM Part A
2. OM Part B
3. OM Part C
4. OM Part D
5. CMM
6. MEL
7. Cargo Manual
8. SMS
9. AOSP
10. IATA DG Manual
11. AIP VOLUME IV INDONESIA and Indoavis ONC VFR Chart



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PART C AREA, ROUTES AND AERODROMES

2.3. AIRCRAFT SPECIFICATION

2.3.1. PT SMART CAKRAWALA AVIATION Aircraft Specification.

Refer to ACL A-03 and D-85.

2.3.2. Aircrew Life Jackets

Aircrew life jackets shall be kept in the aircraft. Life jackets are to be worn for all over water flights.

2.3.3. Passenger Life Jackets and life raft.

Passenger life jackets and life raft shall be kept in the aircraft and are maintained by the Base Safety Equipment Section. Life jackets are to be worn on all over water flights. During flight any excess life jackets and ear defenders are to be kept in dedicated bag inside the baggage compartment.



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2.3.4. Basic Indoctrination Program

Please see in OM Part D.



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.4. LOCAL LEGISLATION

2.4.1. Regulatory Requirements

All aircraft from PT Smart cakrawala Aviation Pontianak, Tarakan Base Operations must be operated by pilots and holding a valid Indonesian License or appropriate Validation or Approval Certificate.

2.4.2. Custom, Immigration and Quarantine Requirements

The above facilities are limited in Pontianak and Tarakan Base. Should the requirement arise, prior arrangement must be made.



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2.5. EMERGENCY RESPONSE PROCEDURES

Refer to PT Smart cakrawala Aviation SMS Manual.



2.6. FLIGHT OPERATIONS PROCEDURES

2.6.1. General Operations

2.6.1.1. Daily Program

A daily program is produced by the Flight Operations, and copies are posted in the Operations Room one day before. The program is subject to changes, in routes, times and payloads.

2.6.1.2. Notifications

Crews are notified by SMS a day before the flights. However pilots are responsible to check the daily program prepared by Chief Pilot or designated the day before for the efficient execution of normal flying duties or any other duties which may be delegated to them.

2.6.1.3. Reporting

Crew shall report 1 hour before planned ETD.

2.6.1.4. Recording of Flying Hours

Crew shall update their own flying hours into:

- a) Base office
- b) Individual Pilot Logbook

2.6.1.5. Revenue and Non-Revenue

Flying Hours All revenue and non-revenue flying hours recorded should tally with the technical log book entry. Total air time timings shall be rounded up to the nearest 5 minutes.

2.6.1.6. Block Flying Hours

Block flying hours shall be recorded from start-up to complete aircraft shutdown. As a general guideline, 10 minutes before flight and 5 minutes after flight are added to the flying hours to form a block time.

2.6.2. Ramp/Ground Handling Operations and Procedures

2.6.2.1. Apron Marking and Maneuvering

[Reserve]

2.6.2.2. Offloading Point

All arriving aircraft would normally be directed by the ATC to approach to the runway. The aircraft is to ground taxi via respected taxiway. Aircraft will continue taxi towards the bay to the apron facing the hangar following the marshaller.

2.6.2.3. Radio Procedures

All aircraft movements along the apron and taxiways are under positive control of ATC. Pilots are to exercise airmanship when positioning for pick-up and taxiing in /out along the taxiways.



2.6.3. Test Flight

The following procedures are to be adhered before carrying out any test flight.

- (1) Aircraft commander must be briefed by the engineering shift supervisor or engineer-in-charge on the rectification that has been carried out, the purpose of the test flight, and procedures required during the test flight.
- (2) Aircraft commander then briefs his First Officer and Flight engineer on the following:
 - a. Area of operation
 - b. Responsibilities
 - c. Exercise or maneuvers to be done
- (3) On completion of the air test, a full debrief must be given to the engineering shift supervisor or any engineer-in-charge.
- (4) All air tests or Certificate of Airworthiness air test is to be within the Pontianak And Tarakan control zone.

For Certificate of Airworthiness (C of A) flight test, the presence of an observer in the right hand seat is encouraged to monitor and record the required parameters. For flight test involving single engine flight, reduction of single engine should not be done below 1000 feet.



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2.7. FLIGHT AND NAVIGATION PROCEDURES

2.7.1. Pontianak

Aerodrome Geographical And Administrative Data

WIOO AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

ARP Coordinates and Site at AD.....	000853S 1092415E
Direction and Distance From (City).....	15.74 km SE ←
Elevation / Reference Temperature.....	10 ft / 32°C
MAG VAR / Annual Change.....	0°35'E (2016)
AD Administration.....	Airport : PT Angkasa Pura II (Persero) ANSP : Aimav Indonesia District Pontianak
Address.....	Airport : Jl. Adi Sucipto km. 17, Pontianak ANSP : Jl. Adi Sucipto km. 15, Pontianak
Telephone.....	Airport : (0561) 7215602, 721002, 721003 ANSP : (0561) 6729210, 721560 ext 121, 147
Telefax.....	Airport : (0561) 721212 ANSP : (0561) 722259, 6727320
Telex.....	NIL
E-mail.....	ANSP : supadio@airnavindonesia.co.id ais.supadio@airnavindonesia.co.id
AFTN.....	WIOOZQZW, WIOOYOYW, WIOOZTZW, WIOOYFYW, WIOOZAZW, WIOOYSYW, WIOOYMYW
Type of Traffic Permitted.....	IFR and VFR
Remarks.....	NIL

Operational Hours

AD Administration.....	Airport : MON - FRI : 0000 - 0930 ANSP : MON - THU : 0100 - 1000 FRI : 0030 - 1000
Customs and Immigration.....	2300 - 1700
Health and Sanitation.....	2300 - 1700
AIS Briefing Office.....	2300 - 1700
ATS Reporting Office.....	2300 - 1700
MET Briefing Office.....	2300 - 1700
ATS.....	2300 - 1700
Fueling.....	2300 - 1700
Handling.....	2300 - 1700
Security.....	H - 24
De-Icing.....	NIL
Remarks.....	Operating Hours on Request 24 Hours Prior Notice

Flight Plans

Flight plan are to be submitted for all flights.

For operations within the Supadio airport, standard flight plans have been submitted.

ATS Communication Facilities

1	2	3	4	5
Service Designator	Call Sign	Frequency	Hours of Operation	Remarks
APP	Pontianak Approach	119.0, 123.0* MHz	2300 - 1700	* Secondary
TWR	Supadio Tower	118.3, 122.35* MHz	2300 - 1700	* Secondary
ATIS	NIL	127.4 MHz	2300 - 1700	NIL

Cruising Level

In order to ensure a safe vertical separation and to be able to have a better radio signal reception, aircraft operating outbound from and inbound into Pontianak airfield are to follow the published procedure in the AIP.

TRACK**											
From (000) degrees to 179 degrees***						From 180 degrees to 359 degrees***					
IFR Flights Altitude			VFR Flights Altitude			IFR Flights Altitude			VFR Flights Altitude		
FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet
-90	-	-	-	0	-	-	-	-	-	-	-
10	300	1000	-	-	-	20	600	2000	-	-	-
30	900	3000	35	1050	3500	40	1200	4000	45	1350	4500
50	1500	5000	55	1700	5500	60	1850	6000	65	2000	6500
70	2150	7000	75	2300	7500	80	2450	8000	85	2600	8500
90	2750	9000	95	2900	9500	100	3050	10000	105	3200	10500
110	3350	11000	115	3500	11500	120	3650	12000	125	3800	12500
130	3950	13000	135	4100	13500	140	4250	14000	145	4400	14500
150	4550	15000	155	4700	15500	160	4900	16000	165	5050	16500
170	5200	17000	175	5350	17500	180	5500	18000	185	5650	18500
190	5800	19000	195	5950	19500	200	6100	20000	205	6250	20500
210	6400	21000	215	6550	21500	220	6700	22000	225	6850	22500
230	7000	23000	235	7150	23500	240	7300	24000	245	7450	24500
250	7600	25000	255	7750	25500	260	7900	26000	265	8100	26500
270	8250	27000	275	8400	27500	280	8550	28000	285	8700	28500
290	8850	29000				300	9150	30000			
310	9450	31000				320	9750	32000			
330	10050	33000				340	10350	34000			
350	10650	35000				360	10950	36000			
370	11300	37000				380	11600	38000			
390	11900	39000				400	12200	40000			
410	12500	41000				430	13100	43000			
450	13700	45000				470	14350	47000			
490	14950	49000				510	15550	51000			
etc.	etc.	etc.				etc.	etc.	etc.			



The cruising levels to be observed when so required by this Annex are as follows:

- a. in areas where, on the basis of regional air navigation and in accordance with conditions specified therein, a vertical separation minimum (VSM) of 300 m (1000ft) is applied between FL290 and FL410 (inclusive):"
 - Except when, on the basis of regional air navigation agreements, a modified table of cruising levels based on a nominal vertical separation minimum of 300 m (1000 ft)
 - is prescribed for use, under specific conditions, by aircraft operating above FL 410 within designated portions of the airspace.
 - Magnetic track, or in polar areas at latitudes higher than 70 degrees and within such extensions to those areas as may be prescribed by the appropriate ATS authorities, grid tracks as determined by a network of lines parallel to the Greenwich Meridian superimposed on a polar stereographic chart in which the direction toward the North Pole is employed as the Grid North.
 - Except where, on the basis of regional air navigation agreements, from 090 to 269 degrees and from 270 to 089 degrees is prescribed to accommodate predominant traffic directions and appropriate transition procedures to be associated therewith are specified.

General Rules – Flight Procedure

RESPONSIBILITY of ATS

1. Responsibility of ATS

- a. Pontianak Approach Control Units (APP) is responsible for the provision of Air Traffic Control Service to all controlled flight within Pontianak TMA / CTR.
- b. Supadio Aerodrome Control Tower (TWR) is responsible for the provision of Air Traffic Control Service to all controlled flight within Supadio ATZ and on the maneuvering area.

ALTIMETER SETTING PROCEDURES

- a. This ICAO altimeter-setting procedure shall be used by all aircraft operating within Pontianak TMA and CTR, QNH provided in milli-bars, in inches available on request.
- b. Transition Altitudes 11,000 feet and Transition Level FL 130.

COMMUNICATION PROCEDURES

All aircraft within Pontianak TMA and CTR shall be equipped with radio capable of conducting and maintaining two ways communication.

VFR Flight

- a. Flight information and alerting service will only be provided to VFR Flight operating within Pontianak TMA and or CTR on request. VFR flight requesting the above service shall report intended action and comply with the position or as required by ATC.
- b. No aircraft shall be operated under VFR within Pontianak TMA and or CTR and prior authorization has been obtained from Approach.



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CHARTS RELATED TO THE AERODROME

Please see APPENDIX A

2.7.2. Tarakan.

Aerodromegeographical And Administrative Data

ARP Coordinates and Site at AD.....	031936N 1173410E
Direction and Distance From (City).....	3 km
Elevation / Reference Temperature.....	40 ft / 32°
MAG VAR / Annual Change.....	0°E(2015)
AD Administration.....	Airport UPBU (Unit Penyelenggara Bandar Udara) Juwata ANSP AirNav Indonesia Cabang Pratama Tarakan
Address.....	Airport Juwata Airport Jl. Mulawarman Tarakan 77111 ANSP KPNP Tarakan Jl. Mulawarman Tarakan 77111
Telephone.....	Airport (0551) 2026202, 2026111 ANSP (0551) 3801085 (Admin AirNav) (0551) 2026018 (APP Tarakan) (0551) 3802595 (AD AIS Unit)
Telefax.....	
Telex.....	NIL
E-mail.....	ANSP juwata@aimavindonesia.co.id ais.juwata@aimavindonesia.co.id
AFTN.....	WAQQYFYE, WAQQZTZE, WAQQYOYE, WAQQZAZE
Type of Traffic Permitted.....	IFR / VFR
Remarks.....	NIL

Operational Hours

AD Administration.....	MON - THU : 0000 - 0800 FRI : 0000 - 0300
Customs and Immigration.....	On Request
Health and Sanitation.....	MON - SUN 0000 - 1100
AIS Briefing Office.....	MON - SUN 2200 - 1200
ATS Reporting Office.....	MON - SUN 2200 - 1200
MET Briefing Office.....	MON - SUN 2200 - 1200
ATS.....	MON - SUN 2200 - 1200
Fueling.....	MON - SUN 2200 - 1000 ←
Handling.....	On Request
Security.....	H-24
De-Icing.....	NIL
Remarks.....	NIL

Flight Plans

Flight plan are to be submitted for all flights.

For operations within the Juana airport, standard flight plans have been submitted.



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ATS Communication Facilities

1	2	3	4	5
Service Designator	Call Sign	Frequency	Hours of Operation	Remarks
TWR	Juwata Tower	118.1, 122.2* MHz	2200 - 1200	* Secondary Frequency
APP	Tarakan Approach	125.5, 119.5*	2200 - 1200	

General Rules – Flight Procedure

ALTIMETER SETTING PROCEDURES

1. This ICAO altimeter setting procedures shall be used by all aircraft operating within Tarakan TMA and CTR, QNH provided in millibars, in inches available on request.
2. Transition Altitudes 11000 ft, Transition Level FL130.

COMMUNICATION PROCEDURES

All aircraft operating within Tarakan TMA and CTR shall be equipped with radio capable of conducting and maintaining two way communication with Tarakan Approach.

VFR Flight

1. Flight information and alerting service will only provided to VFR flight operating within Tarakan TMA and or CTR on request. VFR flight requesting the above service shall report intended action and comply with the position or as required by ATC.
2. No aircraft shall be operated under VFR within

Aerodrome Traffic Circuit Procedures

1. Take Off and Landing:
 - a. Runway 06 take off and landing normal circuit or as instructed by ATC.
 - b. Runway 24 take off and landing right hand circuit or as instructed by ATC.
2. Position Reporting procedures
Aircraft operating within or about to enter Tarakan TMA and or CTR shall report position:
 - a. Over TMA boundary.
 - b. Over any other point or time as instructed by ATC

CHARTS RELATED TO THE AERODROME

Please see APPENDIX B



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.7.3. LONG BAWAN/YUVAI SEMARING (WAQJ)

Runway			
Runway #1			
Dimension	: 1.600 m x 30 m	Total Area	: 48.000 m ²
Surface	: Aspal Kolakan		
Azimuth	: 04-22		
PCN	: 5 F/D/Z/U		
Taxiway			
Taxiway #1			
Dimension	: 71 m x 15 m	Total Area	: 1.065 m ²
Surface	: Aspal Kolakan		
PCN	:		
Taxiway #2			
Dimension	: 75 m x 15 m	Total Area	: 1.125 m ²
Surface	: Aspal Kolakan		
PCN	: 5 F/D/Z/U		
Landas Parkir / Apron			
Apron #1			
Dimension	: 170 m x 40 m	Total Area	: 6.800 m ²
Surface	: Aspal Kolakan		
PCN	: 5 F/D/Z/U		
Capacity	: 5 Pesawat Type Ground Caravan		
Turning Area			
Turning Area #1			
Dimension	: 453 m x 4 m	Total Area	: 1.811 m ²
Surface	: Aspal Kolakan		
PCN	: 5 F/D/Z/U		
Stop Way			
Stop Way #1			
Dimension	: 0 m x 0 m	Total Area	: 0 m ²
Surface	: Tidak Terdefinisi		
PCN	:		
RESA			
RESA #1			
Dimension	: 90 m x 60 m	Total Area	: 5.400 m ²
Konstruksi / Surface	: Tanah Padat		
Runway Strip			
Strip #1			
Dimension	: 1.810 m x 150 m	Total Area	: 271.500 m ²
Surface	: Rumput		
Hanggar			
Hanggar #1			
Dimension	: 0 m x 0 m	Total Area	: 0 m ²



Terminal			
Passenger Terminal #1			
Category	:	Domestik	
Ukuran / Dimension	:	0 m x 0 m	Total Area : 250 m ²
Capacity	:	0 People(s)	
Departure Lounge	:	0 m x 0 m	Departure Lounge Total Area : 125 m ²
Arrival Lounge	:	0 m x 0 m	Arrival Lounge Total Area : 125 m ²



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

Closest Airports

1. Bandara / Airport	:	<u>BINUANG, Kab. Nunukan, Kalimantan Utara</u>	Distance	:	30,13 km
2. Bandara / Airport	:	<u>KOL. RA. BESSING / SELUWING, Kab. Malinau, Kalimantan Utara</u>	Distance	:	107,67 km
3. Bandara / Airport	:	<u>JUWATA, Kota Tarakan, Kalimantan Utara</u>	Distance	:	216,24 km
4. Bandara / Airport	:	<u>TANJUNG HARAPAN, Kab. Bulungan (Bulungan), Kalimantan Utara</u>	Distance	:	219,43 km
5. Bandara / Airport	:	<u>NUNUKAN, Kab. Nunukan, Kalimantan Utara</u>	Distance	:	220,04 km



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.7.4. MALINAU / Seluwing-WAQM

AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

ARP Coordinates and Site at AD.....	033426N 1163700E
Direction and Distance From (City).....	±2 km
Elevation / Reference Temperature.....	80 ft / 32°C
MAG VAR / Annual Change.....	0°E (2016) ←
AD Administration.....	Airport UPBU (Unit Penyelenggara Bandar Udara) Seluwing ANSP : Airmav Indonesia Kantor Cabang Pembantu Malinau
Address.....	Airport Seluwing Airport Jl.Raja Pandita, Seluwing, Malinau, North Kalimantan ANSP : Kantor Cabang Pembantu Malinau Jl.Raja Pandita, Seluwing, Malinau, North Kalimantan
Telephone.....	Airport (0553) 21416
Telefax.....	Airport (0553) 21416
Telex.....	NIL
E-mail.....	Airport bandaramalinau@yahoo.com ANSP seluwingmalinau@airnavindonesia.co.id ais.seluwingmalinau@airnavindonesia.c o.id
AFTN.....	NIL
Type of Traffic Permitted.....	VFR
Remarks.....	NIL

OPERATIONAL HOURS

AD Administration.....	Airport MON - FRI : 0000 - 0800 ANSP DAILY : 0000 - 0900
Customs and Immigration.....	NIL
Health and Sanitation.....	NIL
ATS Briefing Office.....	0000 - 0900
ATS Reporting Office.....	0000 - 0900
MET Briefing Office.....	NIL
ATS.....	0000 - 0900
Fueling.....	NIL
Handling.....	NIL
Security.....	H24
De-Icing.....	NIL

HANDLING SERVICE AND FACILITIES

Cargo Handling Facilities.....	NIL
Fuel / Oil / Type.....	NIL
Fueling Facilities / Capacity.....	NIL
De-Icing Facilities.....	NIL
Hangar Space for Visiting Aircraft.....	NIL
Repair Facilities for Visiting Aircraft.....	NIL
Remarks.....	NIL



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

PASSENGER FACILITIES

Hotels.....	In The City
Restaurant.....	In The City
Transportation.....	Taxi and Rent Car
Medical Facilities.....	Hospital in city
Bank and Post Office.....	In The City
Tourist Office.....	NIL
Remarks.....	NIL

RESCUE AND FIRE FIGHTING

AD Category for Fire Fighting.....	Category 4
Rescue Equipment.....	- 1 Unit Foam Tender Type IV - 1 Unit Rescue Car - 1 Unit Ambulance - 2 Personnels
Capability For Removal of Disabled Aircraft..	NIL
Remarks.....	NIL

SEASONAL AVAILABILITY CLEARING

Type of Clearing Equipment.....	Not Applicable
Clearance.....	NIL
Remarks.....	NIL

APRONS, TAXIWAYS AND CHECK LOCATION DATA

APRON SURFACE AND STRENGTH

APRON	
Surface	= Asphalt
Strength	= PCN 15/F/C/Y/T
Dimension	= 190 x 40 m

TAXIWAY WIDTH, SURFACE, AND STRENGTH

TAXIWAY A	
Surface	= Asphalt
Strength	= PCN 15/F/C/Y/T
Dimension	= 71.5 x 15 m
TAXIWAY B	
Surface	= Asphalt
Strength	= PCN 15/F/C/Y/T
Dimension	= 71.5 x 15 m
TAXIWAY C	
Surface	= Asphalt
Strength	= PCN 15/F/C/Y/T
Dimension	= 71.5 x 15 m

Altimeter Checkpoint Location and Elevation..	NIL
VOR checkpoints.....	NIL
INS checkpoints.....	NIL
Remarks.....	NIL

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKING

Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands.....	NIL
RWY and TWY markings and LGT.....	RWY Marking : Designation, THR, Aiming Point, Center Line.
Stop bars.....	NIL
Remarks.....	NIL

AERODROME OBSTACLE

In Approach and Take-off Areas

No.	RWY/Area Affected	Obstacle type	Coordinate	Elevation	Markings/LGT	Remarks
1	APCH RWY 04/22	Building	NIL	15.7 m	NIL	Take Off Area Rwy 04

In the Circling Area and at the Aerodrome

No.	RWY/Area Affected	Obstacle type	Coordinate	Elevation	Markings/LGT	Remarks
	NIL	NIL	NIL	NIL	NIL	NIL

METEOROLOGICAL INFORMATION PROVIDED

Associated MET Office.....	NIL
Hours of service MET Office outside hours....	NIL
Office responsible for TAF preparation, Periods of validity.....	NIL
Trend forecast & Interval of issuance.....	NIL
Briefing/ consultation provided.....	NIL
Flight documentation - Language(s) used.....	NIL
Charts and other information available for briefing or consultation.....	NIL
Supplementary equipment available for providing information.....	NIL
ATS units provided with information.....	NIL
Additional information (limitation of service, etc.).....	NIL

RUNWAY PHYSICAL CHARACTERISTICS

1	2	3	4	5	6
Designators RWY - NR	True BRG	Dimension of RWY	Strength (PCN) and Surface of RWY and SWY	THR Coordinates	THR Elevation and Highest Elevation of TDZ of Precision APP RWY
04	NIL	1450 x 30 m	15/F/C/Y/T, Asphalt	NIL	NIL
22	NIL	1450 x 30 m	15/F/C/Y/T, Asphalt	NIL	NIL

7	8	9	10	11	12
Slope of RWY - NR	SWY Dimension	CWY Dimension	Strip Dimension	OFZ	Remarks
NIL	60 x 30 m	NIL	1600 x 90 m	NIL	NIL
NIL	60 x 30 m	NIL	1600 x 90 m	NIL	NIL

DECLARED DISTANCES

1	2	3	4	5
RWY Designator	TORA	TODA	ASDA	LDA
04	1450 m	1450 m	1510 m	1450 m
22	1450 m	1450 m	1510 m	1450 m

APPROACH AND RUNWAY LIGHTING

1	2	3	4	5
RWY Designator	APCH LIGHT Type LEN	THR LGT Colour WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN
04	NIL	NIL	NIL	NIL
22	NIL	NIL	NIL	NIL

6	7	8	9	10
RWY Centerline LGT Length Spacing Colour	RWY Edge LGT LEN Spacing Colour	RWY End LGT Colour WBAR	SWY LGT LEN (m) Colour	Remarks
NIL	NIL	NIL	NIL	NIL
NIL	NIL	NIL	NIL	NIL

ATS AIRSPACE

1.	Designation and lateral limits	Malinau Aerodrome Traffic Zone (ATZ): A Circle with Radius of 10 NM Centered at ARP
2.	Vertical limits (ft)	SFC up to 3000 ft MSL
3.	Airspace classification	C
4.	ATS unit callsign	Seluwing Tower
	Language	English
5.	Transition	11,000 ft / FL130
6.	Remarks	NIL

ATS COMMUNICATION FACILITIES

1	2	3	4	5
Service Designator	Call Sign	Frequency	Hours of Operation	Remarks
TWR	Seluwing Tower	122.9 MHz	000-0900	NIL
AFS	Seluwing Radio	5340 kHz	000-0900	NIL

FLIGHT PROCEDURES

RESPONSIBILITY of ATS

Seluwing Aerodrome Control Tower (TWR) is responsible for provision of Air Traffic Control Service to all controlled flight within Malinau ATZ.

ALTIMETER SETTING PROCEDURES

This ICAO altimeter setting procedure shall be used by all aircraft operating within ATZ, QNH provided in mili-bars, ininchies available on request.

Transition Altitudes 11.000 ft and Transition Level FL 130.

COMMUNICATION PROCEDURES

All aircraft within TMA and CTR shall be equipped with radio capable of conducting and maintaining two ways communication.



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

VFR Flight

Flight information and alerting service will only be provided to VFR Flight operating within Malinau ATZ on request. VFR flight requesting the above service shall report intended action and comply with the position or as required by ATC.

No aircraft shall be operated under VFR within ATZ and prior authorization has been obtained from Approach.

DEPARTURE PROCEDURE

take off or as instructed by ATC, Departure Aircraft will transfer after the aircraft has passed 15 NM or 3000 feet

ARRIVAL PROCEDURE

RWY 22 landing or as instructed by ATC, All Circuit is available for arriving aircraft

COMMUNICATION FAILURE PROCEDURES

Aircraft radio communication failure procedures shall be in accordance with ICAO Standard and recommended practices, or:

In Visual Meteorological Condition (VMC)

- a. Continue Fly in VMC
- b. Fly full circuit over the Aerodrome, pilot shall endeavor to transmit blindly his position, intention, etc. so as to be monitored by Approach or any other traffic over ATZ.

In instrument Meteorological (IMC)

- a. Proceed according to current Flight Plan to the appropriate designated navigation and serving Approach and when required to ensure compliance with (b) below, hold over this aid until commencement of descent.
- b. Commence descent from the navigation aid specified in (a) or as close as possible to ETA as indicated in the filled flight plan and revised in accordance with current flight plan.
- c. Land if possible within thirty minutes after the estimated time of arrival (ETA)

POSITION REPORTING PROCEDURE

Aircraft operating within or about to enter Malinau ATZ shall report position:

- a. Over ATZ Boundary,
- b. Over any other point or time as instructed by ATC.



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

Closest Airports

1. Airport	: <u>BINUANG, Kab. Nunukan, Kalimantan Utara</u>	Distance	: 102,27 km
2. Airport	: <u>YUVAI SEMARING, Kab. Nunukan, Kalimantan Utara</u>	Distance	: 107,67 km
3. Airport	: <u>JUWATA, Kota Tarakan, Kalimantan Utara</u>	Distance	: 108,70 km
4. Airport	: <u>TANJUNG HARAPAN, Kab. Bulungan (Bulungan), Kalimantan Utara</u>	Distance	: 117,30 km
5. Airport	: <u>NUNUKAN, Kab. Nunukan, Kalimantan Utara</u>	Distance	: 131,83 km

2.7.5. Tanjung Harapan/Tanjung Selor-WAQD

Aerodromegeographical And Administrative Data

ARP coordinates and site at AD	025028N 1172244E ←
Direction and distance from (City)	NIL
Elevation/Reference temperature & Mean low temperature	9,84 ft / 28,5°
Geoid undulation at AD ELEV PSN	NIL
MAG VAR/Annual change	NIL
AD Operator, address, telephone, telefax, e-mail, AFS & website	DGCA – Tanjung Harapan Jl. Ulin No. 118 Tanjung Selor Bulungan Tel : (+62552) 21194 Telefax : (+62552) 22470 E-mail : NIL AFS : NIL Website : NIL
Type of traffic permitted (IFR/VFR)	NIL
Remarks	NIL

OPERATIONAL HOURS

Aerodrome Operator	2300-0630 ←
Customs and immigration	NIL
Health and sanitation	NIL
AIS Briefing Office	NIL
ATS Reporting Office (ARO)	NIL
MET Briefing Office	NIL
ATS	NIL
Fuelling	NIL
Handling	NIL
Security	H24
De-icing	Not Applicable
Remarks	- AIS Available at AIS Balikpapan Regional Office - Local Time : UTC +8 HR

HANDLING SERVICE AND FACILITIES

Cargo - Handling facilities	NIL
Fuel/oil types	NIL
Fuelling facilities/Capacity	NIL
De-icing facilities	Not Applicable
Hangar space for visiting aircraft	NIL
Repair facilities for visiting aircraft	NIL
Remarks	NIL



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

PASSENGER FACILITIES

Hotels	In the city ←
Restaurants	NIL
Transportation	NIL
Medical facilities	In the city
Bank and Post Office	In the city
Tourist Office	NIL
Remarks	NIL

RESCUE AND FIRE FIGHTING

AD category for fire fighting	Category 2
Rescue equipment	1 Unit Foam Tender Type III
	1 Unit Ambulance
Capability for removal of disabled aircraft	NIL
Remarks	1 Unit Rescue Car
	1 Unit Water Tank Car

APRONS, TAXIWAYS AND CHECK LOCATION DATA

APRON SURFACE AND STRENGTH	
Designation	= Apron
Surface	= Asphalt
Strength	= PCN 19/F/C/Y/T
TAXIWAY WIDTH, SURFACE AND STRENGTH	
Designation	= Taxiway A
Width	= 15 m
Surface	= Asphalt
Strength	= PCN 19/F/C/Y/T
Designation	= Taxiway B
Width	= 15 m
Surface	= Asphalt
Strength	= PCN 19/F/C/Y/T
Altimeter checkpoint location and elevation	NIL
VOR checkpoints	NIL
INS checkpoints	NIL
Remarks	Dimension of Apron : 105m x 85m ←

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKING

Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	NIL
RWY and TWY markings and LGT	Marking
	RWY : THR, Centre Line
	TWY : NIL
	LIGHT
	RWY : NIL
	TWY : NIL
Stop bars and Runway guard lights	NIL
Other runway protection measures	NIL
Remarks	NIL

AERODROME OBSTACLE

In Area 2					
OBST ID/ Designation	OBST type	OBST position	ELEV/HGT	Markings/Type, colour	Remarks
a	b	c	d	e	f
NIL	NIL	NIL	NIL	NIL	NIL

In Area 3					
OBST ID/ Designation	OBST type	OBST position	ELEV/HGT	Markings/Type, colour	Remarks
a	b	c	d	e	f
NIL	NIL	NIL	NIL	NIL	NIL

METEOROLOGICAL INFORMATION PROVIDED

Associated MET Office	NIL
Hours of service	NIL
MET Office outside hours	NIL
Office responsible for TAF preparation	NIL
Periods of validity	NIL
Trend forecast	NIL
Interval of issuance	NIL
Briefing/consultation provided	NIL
Flight documentation	NIL
Language(s) used	NIL
Charts and other information available for briefing or consultation	NIL
Supplementary equipment available for providing information	NIL
ATS units provided with information	NIL
Additional information (limitation of service, etc.)	NIL

RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY and coordinates THR geoid undulation
1	2	3	4	5
03	NIL	1200 x 30	19/F/C/Y/T Asphalt	NIL
21	NIL	1200 x 30	19/F/C/Y/T Asphalt	NIL

THR elevation and highest elevation of TDZ of precision APP RWY	Slope of RWY - SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)
6	7	8	9	10
NIL	NIL	80 x 23	NIL	NIL
NIL	NIL	60 x 23	NIL	NIL

RESA dimensions (M)	Location and description of arresting system	OFZ	Remarks
11	12	13	14
NIL	NIL	NIL	Shoulder : 900m x 28.5m
NIL	NIL	NIL	

DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
03	NIL	NIL	NIL	NIL	NIL
21	NIL	NIL	NIL	NIL	NIL

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
03	NIL	NIL	APAPI, Left / 3 rd	NIL
21	NIL	NIL	APAPI, Left / 3 rd	NIL
RWY Centre Line LGT LEN, spacing, colour, INTST	RWY Edge LGT LEN, spacing, colour INTST	RWY End LGT colour WBAR	SWY LGT LEN (M) Colour	Remarks
6	7	8	9	10
NIL	NIL	NIL	NIL	NIL
NIL	NIL	NIL	NIL	NIL



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

Closest Airports

1. Airport	: BINUANG, Kab. Nunukan, Kalimantan Utara	Distance	: 102,27 km
2. Airport	: YUVAI SEMARING, Kab. Nunukan, Kalimantan Utara	Distance	: 107,67 km
3. Airport	: JUWATA, Kota Tarakan, Kalimantan Utara	Distance	: 108,70 km
4. Airport	: NUNUKAN, Kab. Nunukan, Kalimantan Utara	Distance	: 131,83 km

FLIGHT PROCEDURES

RESPONSIBILITY of ATS

Tanjung Harapan Aerodrome Control Tower (TWR) is responsible for provision of Air Traffic Control Service to all controlled flight within Malinau ATZ.

ALTIMETER SETTING PROCEDURES

This ICAO altimeter setting procedure shall be used by all aircraft operating within ATZ, QNH provided in mili-bars, ininchies available on request.
Transition Altitudes 11.000 ft and Transition Level FL 130.

COMMUNICATION PROCEDURES

All aircraft within TMA and CTR shall be equipped with radio capable of conducting and maintaining two ways communication.

VFR Flight

Flight information and alerting service will only be provided to VFR Flight operating within Malinau ATZ on request. VFR flight requesting the above service shall report intended action and comply with the position or as required by ATC.
No aircraft shall be operated under VFR within ATZ and prior authorization has been obtained from Approach.

DEPARTURE PROCEDURE

take off or as instructed by ATC, Departure Aircraft will transfer after the aircraft has passed 15 NM or 3000 feet

ARRIVAL PROCEDURE

RWY 02 and 21 landing or as instructed by ATC, All Circuit is available for arriving aircraft



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.7.6. Timika/Mozes Kilangin-WAYY

Aerodromegeographical And Administrative Data

ARP Coordinates and Site at AD.....	043153S 1365318E
Direction and Distance From (City).....	360° / 2 km
Elevation / Reference Temperature.....	103 ft / 31° - 33° C
MAG VAR / Annual Change.....	2°58' E (2015)
AD Administration.....	AVCO INC.
Address.....	Mozes Kilangin Airport, Timika
Telephone.....	(0901) 442001 (Airport Manager) (0901) 442007 (Aerodrome AIS unit) (0901) 321475, 462735 (Tower) (0901) 424001
Telefax.....	(0901) 424010
Email.....	DG-GRS-mozeskilangin-airport@tmi.com
Telex.....	NIL
AFTN.....	NIL
Type of Traffic Permitted.....	IFR and VFR
Remarks.....	NIL

OPERATIONAL HOURS

AD Administration.....	2030 – 0700
Customs and Immigration.....	On Request
Health and Sanitation.....	H – 24
AIS Briefing Office.....	2030 – 0700
ATS Reporting Office (ARO).....	2030 – 0700
MET Briefing Office.....	H -24
ATS.....	2030 – 0700
Fuelling.....	On Request
Handling.....	2030 – 0700
Security.....	H – 24
De-icing.....	NIL
Remarks.....	NIL

HANDLING SERVICE AND FACILITIES

Cargo Handling Facilities.....	Available
Fuel/Oil/Type.....	AVTUR
Fuelling Facilities/Capacity.....	1 Tanker Truck 30,000 L 2 units Hose Car 8 Tank @ 40,000 L TOTAL 320,000 L
De-icing Facilities.....	NIL
Hangar Space For Visiting Aircraft.....	Available (limited)
Repair Facilities For Visiting Aircraft.....	Available (limited)
Remarks.....	NIL

PASSENGER FACILITIES

Hotels.....	Available Near of The Airport
Restaurant.....	Available
Transportation.....	Available
Medical Facilities.....	Available
Bank And Post Office.....	Available in the City
Tourist Office.....	Available

RESCUE AND FIRE FIGHTING



OPERATION MANUAL

PART C

AREA, ROUTES AND AERODROMES

AD Category For Fire Fighting.....	Category 6
Rescue Equipment.....	2 (two) unit Foam Tender Type 1 Oshkosh, each have capacity 12.200 L 1708 L Foam and 2509 L Dry Powder 1 Western Star 9.500 L / 1260 L Foam 1 Unit Rapid Intervention Vehicle Toyota land cruiser capacity 250kgs Dry Chemical Powder 1 Ambulance
Capability For Removal of Disabled Aircraft..	Available
Remarks.....	Trained Personnel 21

APRONS, TAXIWAYS AND CHECK LOCATION DATA

APRON SURFACE AND STRENGTH

Surface	= Asphalt
Strength	= PCN 45 F/B/X/T
Dimension	= 150 x 150 m

TAXIWAY WIDTH, SURFACE AND STRENGTH

Surface	= Asphalt
Strength	= PCN 45 F/B/X/T
Dimension	= 150 x 23 m

ACL Location and Elevation.....	Station Meteorological Timika – 103 ft
VOR / INS Checkpoints.....	NIL
Remarks.....	NIL

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKING

Use of Aircraft ID Sign, TWY Guide Lines and Visual Docking / Parking Guidance	
System of Aircraft Stands.....	Available
RWY and TWY marking and LGT.....	Available
Stop Bars.....	Available
Remarks.....	- Parking Guided by Marshaller - All medium / heavy aircraft advised to minimum power when enter apron due to light aircraft behind main apron

AERODROME OBSTACLE

NIL

METEOROLOGICAL INFORMATION PROVIDED

Associated Met Office.....	Aerodrome Meteorological and Geophysical Timika
Hours of Service Met Office Outside Hours.	H - 24

Office Responsible For TAF Preparation	Station Meteorological Timika
Period of Validity.....	QAM 1 Hour
Trend Forecasts and Interval of Issuance.....	Available
Briefing / Consultation Provided.....	Available - English
Flight Documentation - Language Used.....	Available
Charts and Other Information Available For Briefing or Consultation.....	NIL
Supplementary Equipment Available For Providing Information.....	Meteorological Report For Take Off and Landing
ATS Units Provided With Information.....	TAFOR / ROFOR
Additional Information (Limitation of Service Etc.).....	

RUNWAY PHYSICAL CHARACTERISTICS

1	2	3	4	5	6
Designations RWY NR	True BRG	Dimension of RWY	Strength (PCN) and Surface of RWY and SWY	THR Coordinates	THR Elevation and Highest Elevation of TDZ of Precision APP RWY
12	122.36°	2390 x 45 m	45 F/B/X/T Asphalt	043128.58S 1365241.76E	
30	302.36°			043207.60S 1365346.70E	

7	8	9	10	11	12
Slope of RWY - NR	SWY dimension	CWY dimension	Strip dimension	OFZ	Remarks
Longitudinal Slope 0.6% Up FM RWY 12 to RWY 30	NIL	NIL	2570 x 150 m		RESA : 90 x 90 m (Both Of RWY)
Transverse Slope 1.5%	NIL	NIL			

DECLARED DISTANCES

1	2	3	4	5
RWY Designator	TORA	TODA	ASDA	LDA
12	2390 m	2390 m	2390 m	2390 m
30	2390 m	2390 m	2390 m	2390 m



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

FLIGHT PROCEDURES

1. Aerodrome Traffic Circuit Procedures
 - a) Take off and Landing
Runway 12 Right Turn or Instructed by ATC (Right Hand Circuit);
Runway 30 Standard Turn or Instructed by ATC (Left Hand Circuit).
 - b) Altimeter Setting Procedures:
Transition Altitude : 18,000 ft
2. Position Report Procedures
Aircraft operating within MOZES KILANGIN ATZ shall report position as:
 - a) 10 NM DME
 - b) Over any point or any time, as required by KILANGIN Tower
3. Communication failure procedures :
 - a) All aircraft operating within MOZES KILANGIN ATZ shall be equipped with radio capable of conducting and maintaining two way radio communications.
 - b) Aircraft in emergency or experiencing a radio communication failure, shall comply with the procedures in according with the ICAO standard and recommended practices.

CHARTS RELATED TO THE AERODROME

Please see APPENDIX A

2.7.7. NABIRE / Douw Aturure-WABI

Aerodromegeographical And Administrative Data

ARP Coordinates and site at AD	03° 22' 04.53" S 135° 29' 49.55" E ←
Direction and Distance From (City)	1 NM SW
Elevation / Reference Temperature.....	40 ft msl / 33.2°C ←
MAG VAR / Annual Change	3° EAST
AD Administration.....	D.G.C.A
Address	Nabire Airport Jl. Sisingamangaraja, Nabire 98801
Telephone	(0984) 21210, 21211
Facsimile	(0984) 22076
Telex	Nil
E-mail	bandaranabire@yahoo.com
AFTN	Nil
Type of Traffic Permitted.....	IFR and VFR
Remarks	Nil

OPERATIONAL HOURS



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

AD Administration.....	MON – SAT : 2130 – 0800
Customs and Immigration	Nil
Health and Sanitation	Nil
AIS Briefing Office.....	Nil
ATS Reporting Office	2130 – 0800
MET Briefing Office.....	2130 – 0800
ATS	2130 – 0800
Fuelling.....	2130 – 0800
Handling	2130 – 0800
Security	H – 24
De-Icing	Nil
Remarks.....	Nil

HANDLING SERVICE AND FACILITIES

Cargo Handling Facilities	Available
Fuel / Oil / Type	Avtur (Jet A – 1)
Fuelling Facilities / Capacity.....	1 Truck Capacity 7000 L
De-Icing Facilities.....	Nil
Hangar Space For Visiting Aircraft.....	Nil
Repair Facilities For Visiting Aircraft.....	Nil
Remarks.....	Nil

PASSENGER FACILITIES

Hotel.....	Available In Town
Restaurant.....	Available In Town
Transportation	Taxi
Medical Facilities.....	First Aid Available, Hospital In Town
Bank and Post Office.....	Available In Town
Tourist Office	Available
Remarks.....	Nil

RESCUE AND FIRE FIGHTING

AD Category For Fire Fighting...	CAT IV with 1 Fire Station Serving 1 RWY
Rescue Equipment.....	Available 1 Unit Rosenbrouwer Type III, 1 Unit Ambulance, 1 Unit Foam Tender Type IV, 1 Unit Foam Tender Type V, 10 Personnel ARFFS License Holder, 1800L Foam Supply.
Capability For Removal of Disabled ACFT.....	NILL
Remarks.....	-AD Does not have the Facilities for RWY Foaming -For Removal of Disabled ACFT, can contact AD OPR Manager In 0812 4080 2360



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

APRONS, TAXIWAYS AND CHECK LOCATION DATA

APRON SURFACE AND STRENGTH	
Surface	= Asphalt Concrete
Strength	= PCN 10 FCXT
Dimension	= 269 x 74 m ←
TAXIWAY SURFACE AND STRENGTH	
Surface	= Asphalt Concrete
Strength	= PCN 10 FCXT
Dimension	= 95 x 20 m ←
ACL Location and Elevation	Nil
VOR / INS Checkpoints	Nil
Remarks	Nil

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKING

Use of Aircraft ID Sign, TWY Guide and Visual Docking / Parking Guidance	
System of Aircraft Stands	Available
RWY and TWY Marking and LGT	RWY and TWY Marking Available
Stop Bars	Available
Remarks	Nil

AERODROME OBSTACLE

Obstacles	- Hill 900 ft At APCH RWY 34 - Hill At Left Downwind RWY 16
-----------------	--

METEOROLOGICAL INFORMATION PROVIDED

Associated MET Office	AD MET Station Nabire Airport
Hours of Service / MET Office Outside	2130 – 0800
Office Responsible For TAF Preparation	
Period of Validity	Nabire 8 Hour
Trend Forecasts & Interval of Issuance	QAM / 1 Hour
Briefing / Consultation Provided	Nil
Flight Documentation–Language Used	Chart – PL (Plain Language)
Charts and Other Information Available	
For Briefing or Consultation	Nil
Supplementary Equipment Available	
For Providing Information	Nil
ATS Units Provided With Information	TWR, COM
Additional Information (Limitation of Service, etc.)	Nil

RUNWAY PHYSICAL CHARACTERISTICS

1	2	3	4	5	6
Designations RWY NR	True & MAG BRG	Dimension of RWY	Strenght (PCN) and Surface of RWY and SWY	THR Coordinates	THR Elevation and Highest Elevation of TDZ of Precision APP RWY
16	156°	1399 x 29 m ↑	81,000 lbs Asphalt Concrete	03° 21' 41.74" S 135° 29' 39.55" E	17.03 ft
34	336°			03° 22' 27.85" S	32.81 ft

				135° 29' 55.56" E	
--	--	--	--	-------------------	--

7	8	9	10	11	12
Slope of RWY – NR	SWY Dimension	CWY Dimension	Strip Dimension	OFZ	Remarks
Nil	Nil	40 x 29 m	1520 x 130 m (Grass)	Nil	Nil
Nil	Nil	60 x 29 m			

DECLARED DISTANCES

1	2	3	4	5
RWY Designator	TORA	TODA	ASDA	LDA
16	1399	1439	1399	1399
34	1399	1459	1399	1399

FLIGHT PROCEDURES

- Aerodrome Traffic Circuit Procedures Take off and landing
 - Runway 16 take off and landing right hand circuit or as instructed by ATC.
 - Runway 34 take off and landing left hand circuit or as instructed by ATC.
- Altimeter Setting Procedures
This ICAO altimeter setting procedures shall be used by all aircraft operating within NABIRE ATZ, QNH provided in mille bars and in inches available on request.
Transition Altitudes 11,000 ft, Transition Level FL130.
- Communication Procedures
All aircraft within NABIRE ATZ shall be equipped with radio capable of conducting and maintaining two way communications with NABIRE TOWER.
- Communication Failure Procedures
In Visual Meteorological Condition (VMC)



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

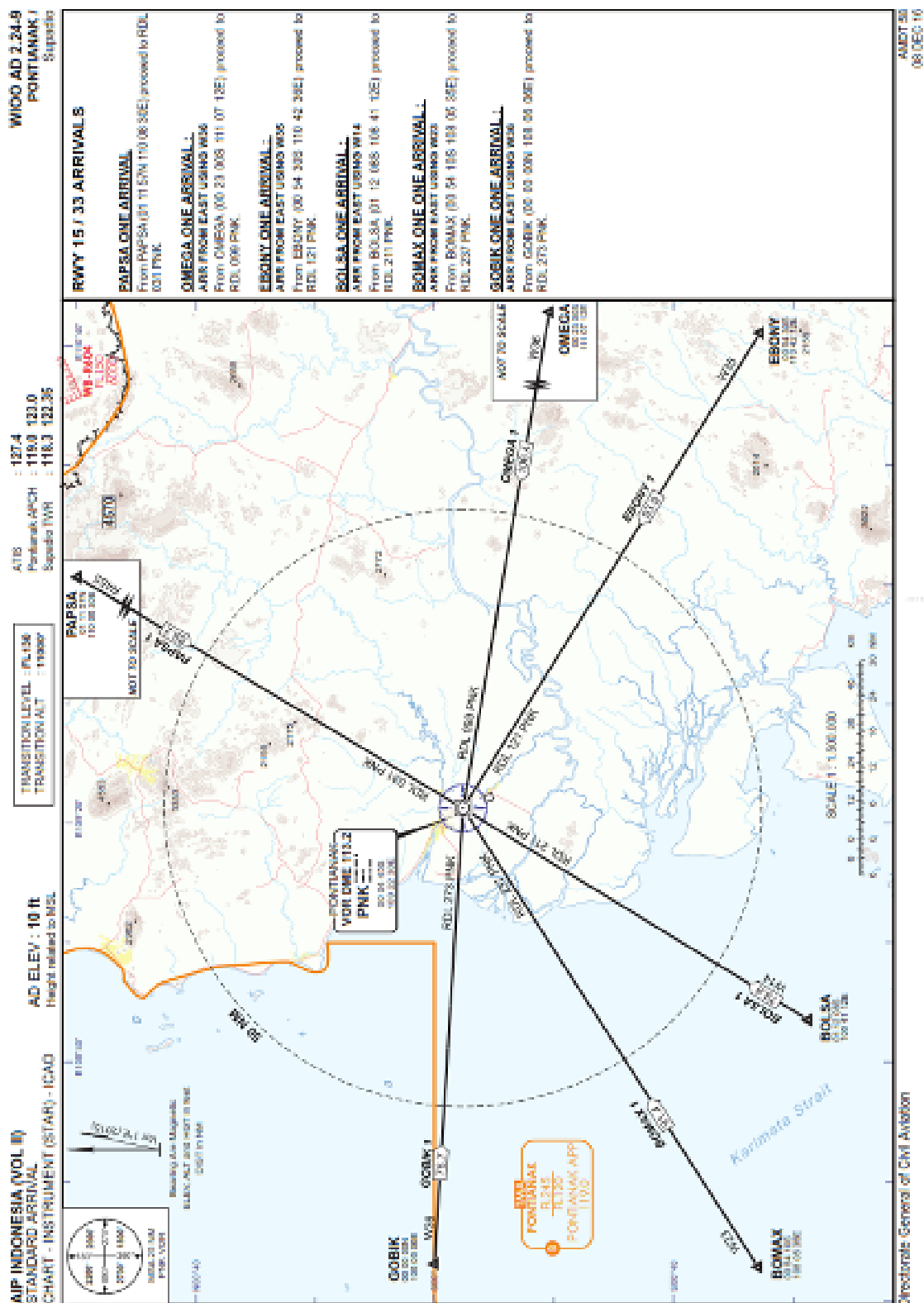
- a) Continue to fly in VMC.
- b) Fly full circuit over the Aerodrome, pilot shall endeavor to transmit blindly his position, intention etc, so as to be monitored by Tower or any other traffic within NABIRE ATZ.

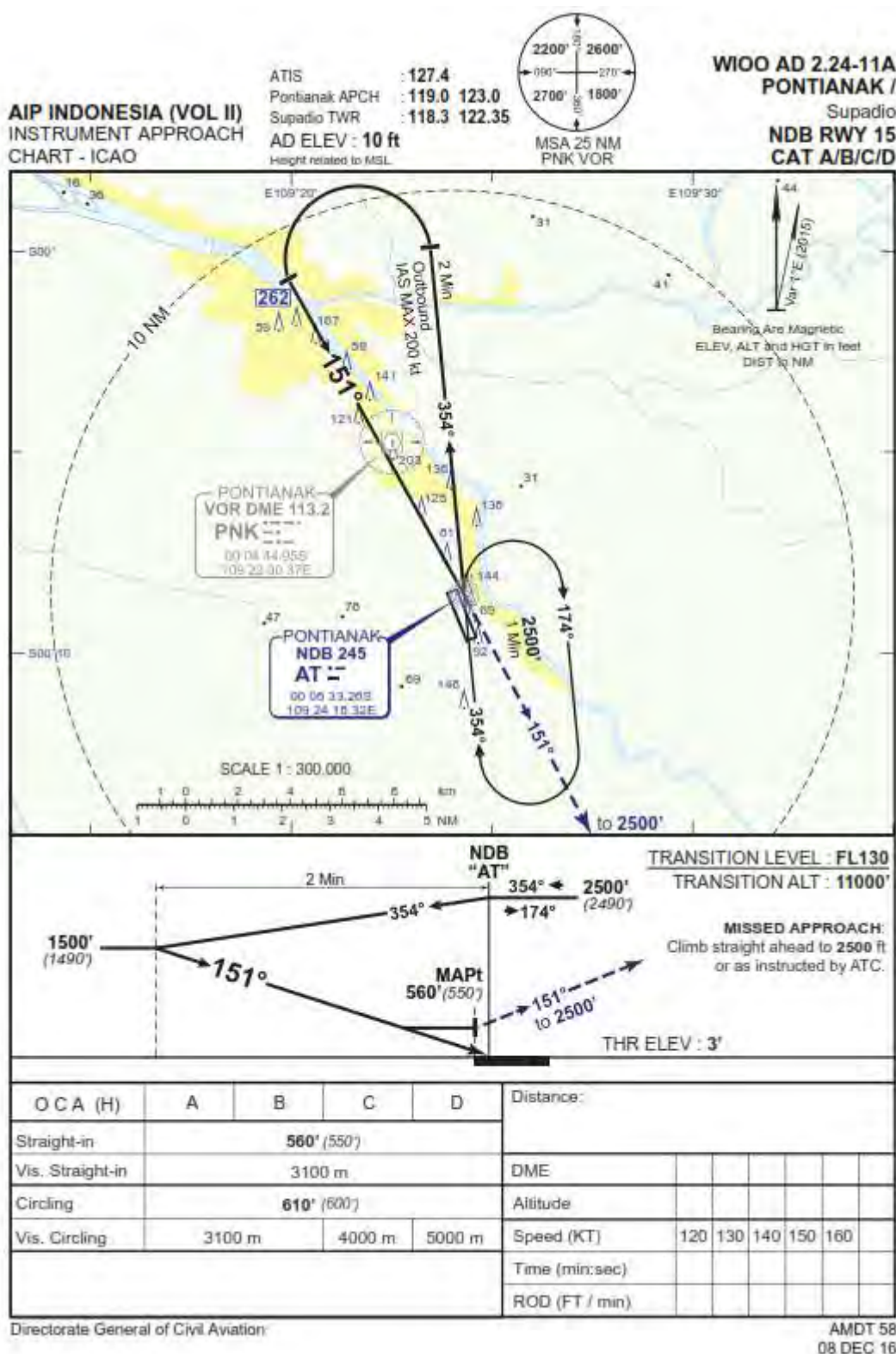
In Instrument Meteorological Condition (IMC)

- a) Proceed according to current Flight Plan to the appropriate designated navigation and serving NABIRE Aerodrome and when required to ensure compliance with (b) below, hold over this aid until commencement of descent.
- b) Commence descent from the navigation aid specified in (a) or as close as possible to ETA as indicated in the filled flight plan and revised in accordance with the current flight plan.
- c) Land if possible within thirty minutes after the estimated time of arrival (ETA).

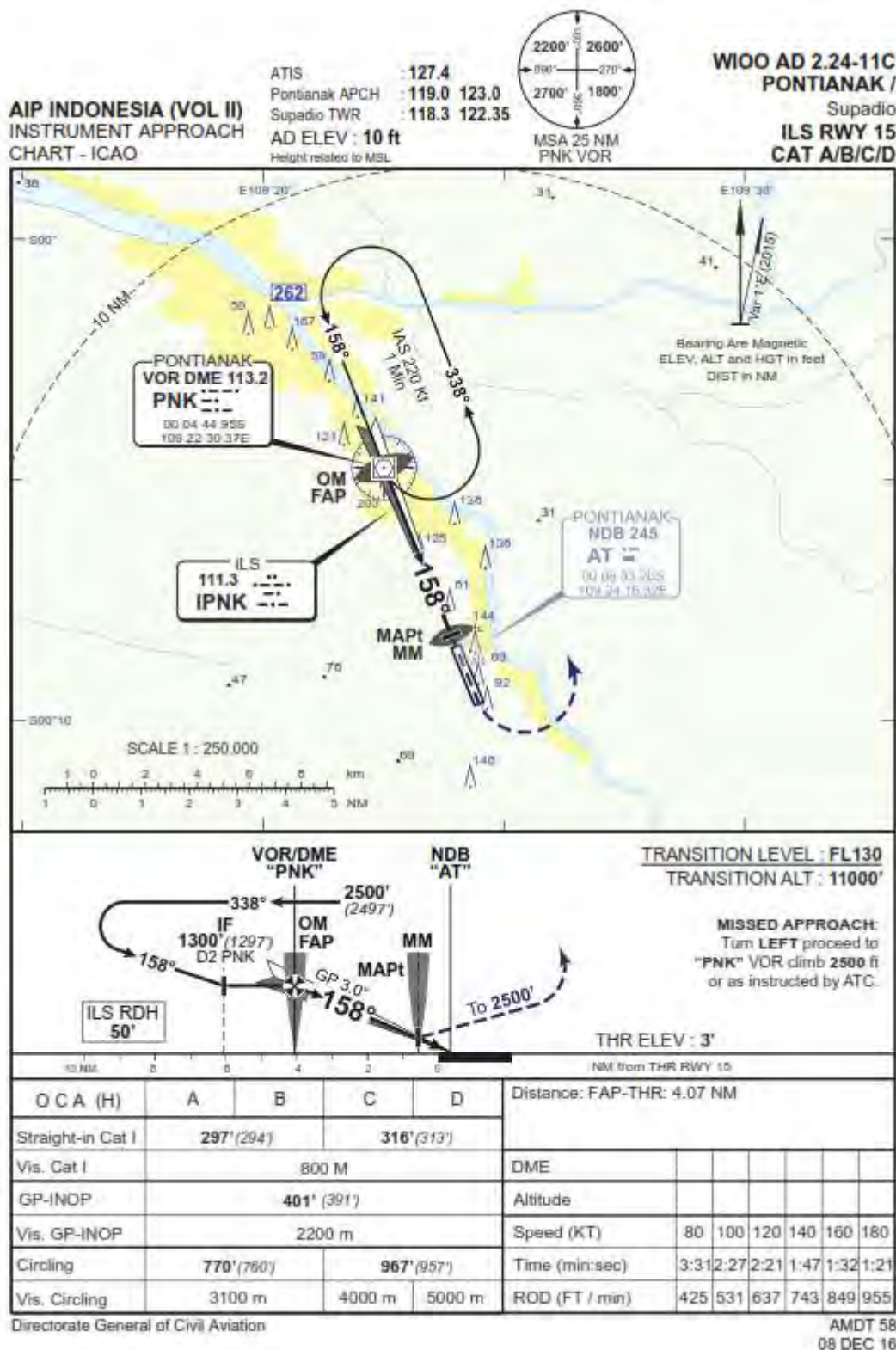
CHARTS RELATED TO THE AERODROME

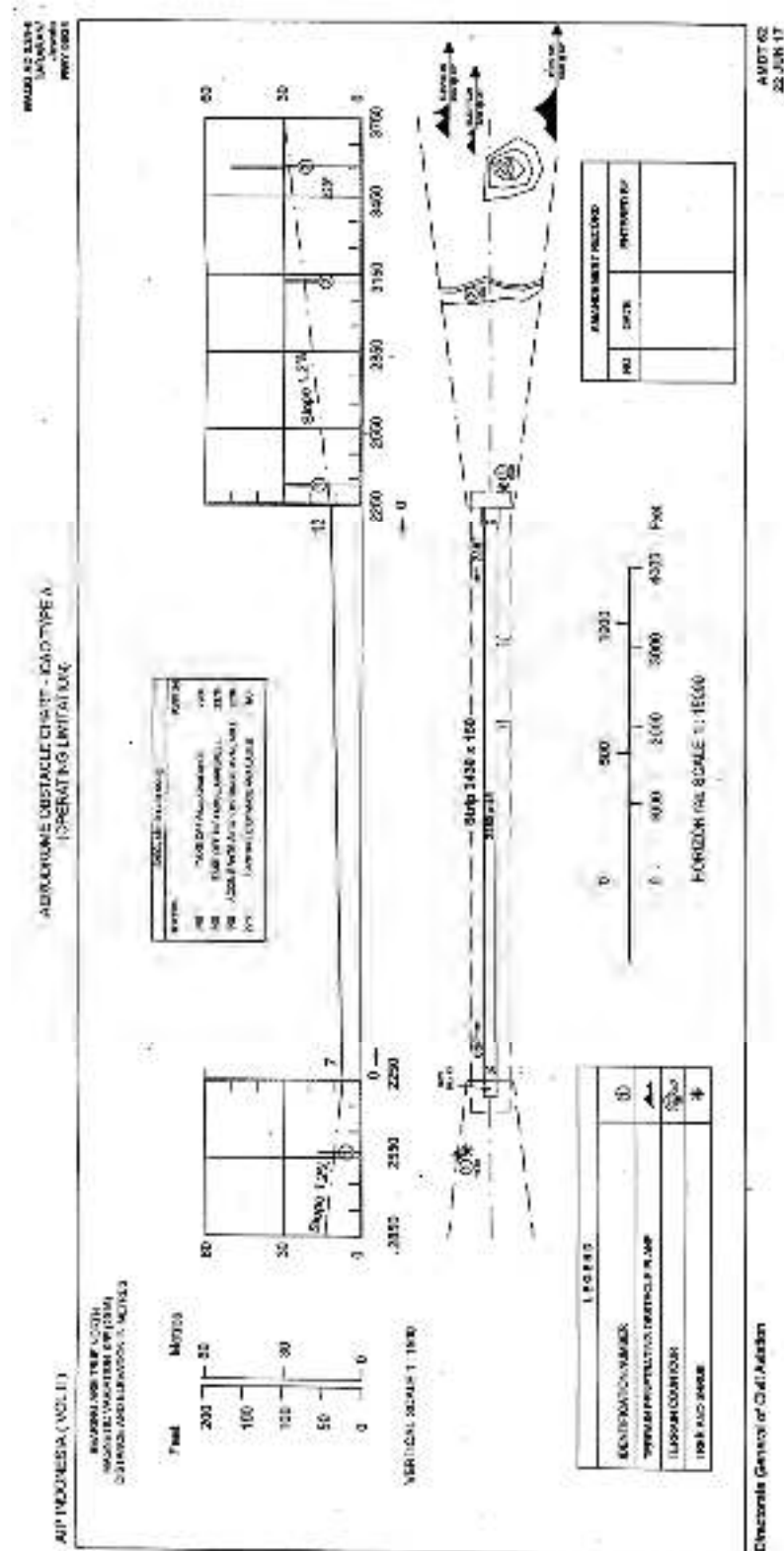
Please see APPENDIX A

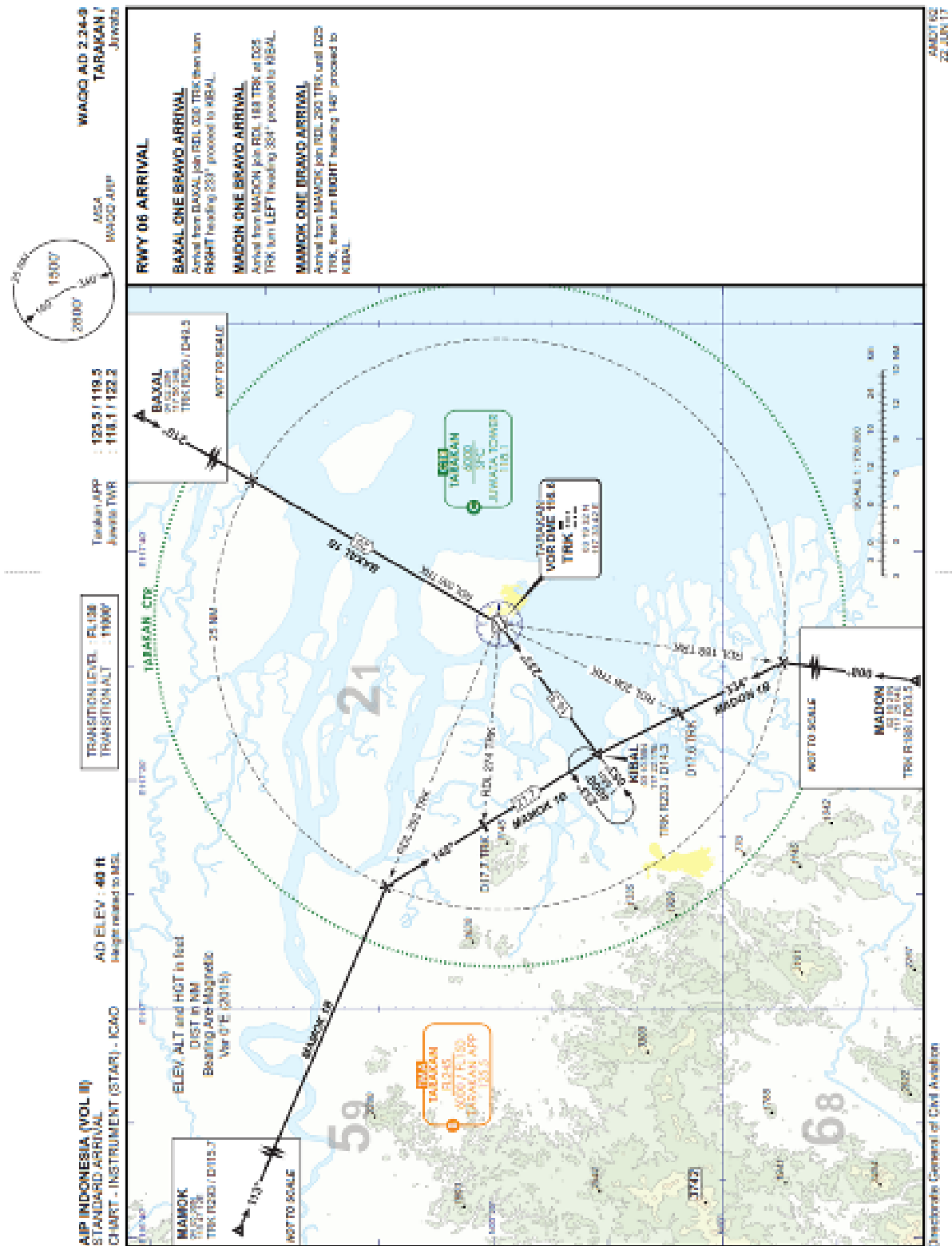


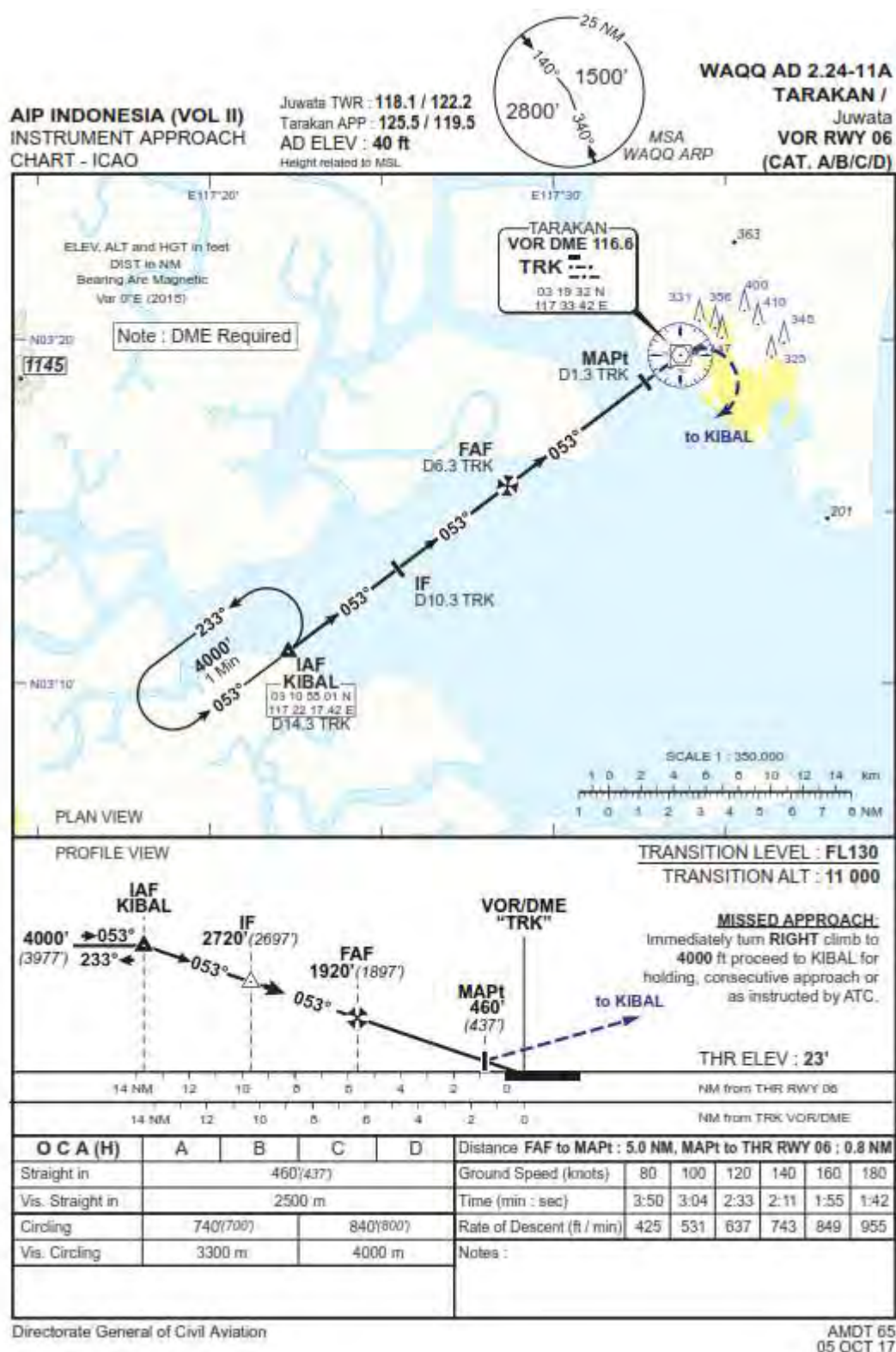






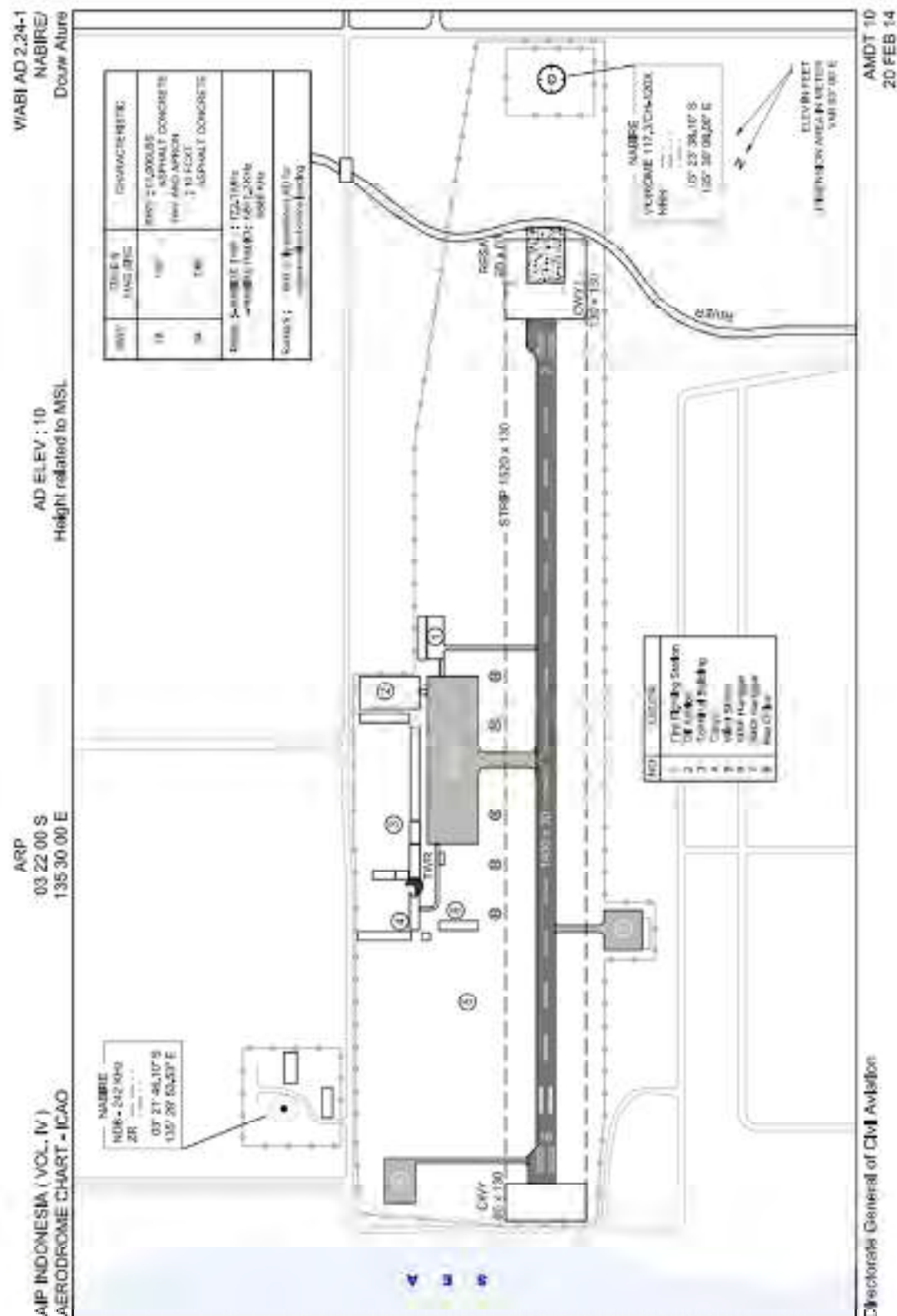


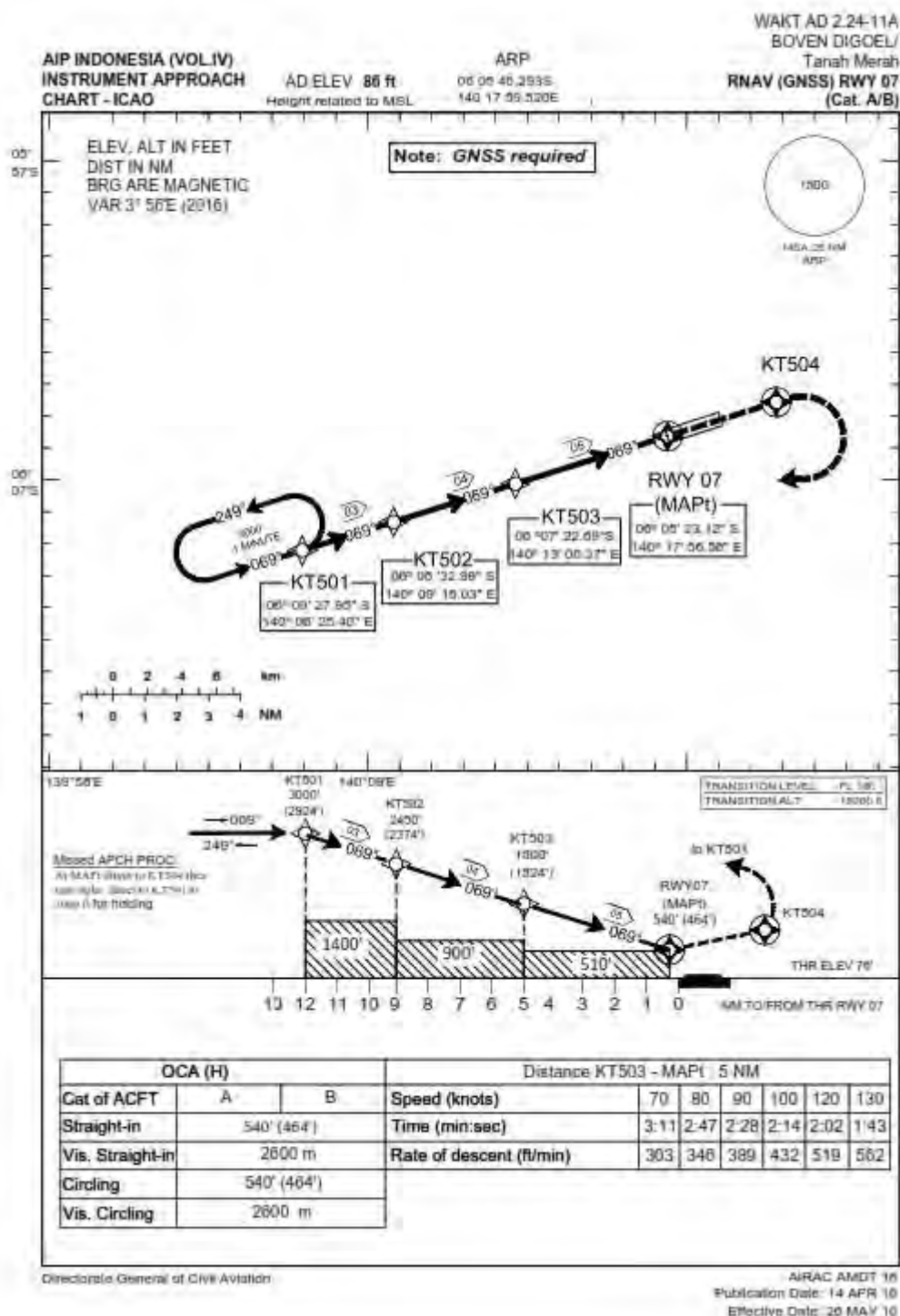


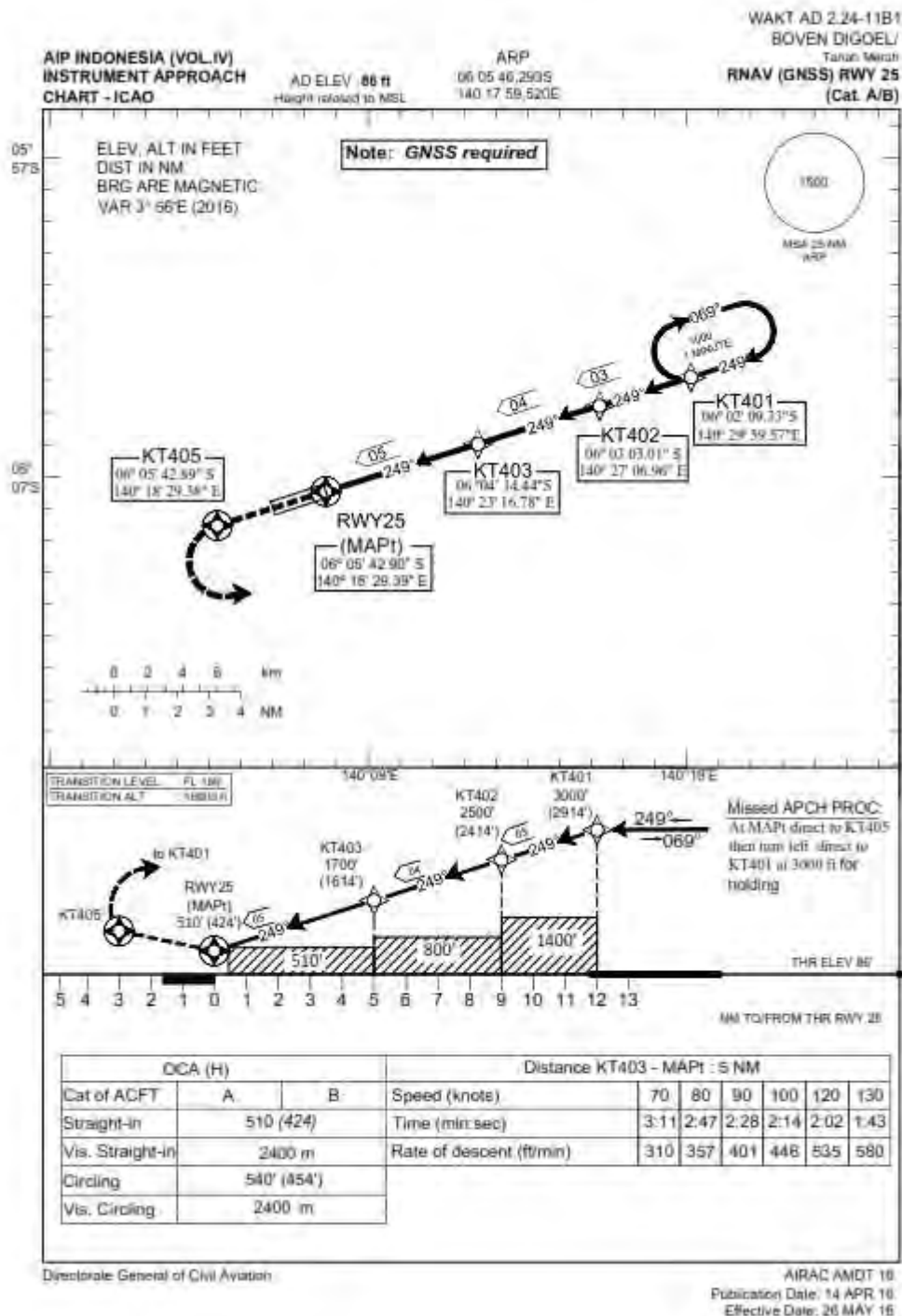




3. NABIRE AIRPORT









OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

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Appendix B ROUTES INFORMATION

PT. Smart Cakrawala Aviation has developed a standard and preferred routing system to provide pilots with additional information and guidance to aid in the planning and preparation of each flight. While there is no requirement in the CASR's to follow a specific route while operating VFR Operating in uncontrolled airspace, PT. Smart Cakrawala Aviation recommends each pilot to use and follow the standard VFR routing to the extend possible while maintaining proper VFR minimum requirements and enroute altitude minimums as appropriate to the class of airspace in which they are operating.

Whenever PT. Smart Cakrawala Aviation approved VFR standard route has not been established between the departure and destination aerodromes each pilot may fly via the most direct route or on a route of the pilots choosing provided proper terrain and obstacle clearance is maintained, the minimum VFR and/or operating minimums appropriate to the airspace are maintained, the minimum enroute altitudes as laid down in PT. Smart Cakrawala Aviation OM part A and adequate areas which would permit a safe forced landing should the engine fail are maintained.

Route Selection

Each PT. Smart Cakrawala Aviation approved VFR standard route has been designed :

1. To allow for adequate areas surfaces which would permit a safe forced landing should the engine fail (for single engine operations)
2. To allow for sufficient numbers of adequately equipped airport along the route of flight. The list of adequate alternate airports is found on the aerodrome information chart for the departure and destination aerodromes.

Note : VFR Operation



1. KALIMANTAN AREA

1.1. PONTIANAK AREA

1.1.1 PONTIANAK (WIOO) - SMART SEMELAGI (WISA)



Pontianak – Smart Semelagi

- Flight time (approximate): 0.7 hrs
- Suggested cruise altitude: 8500 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

SUPADIO↔↔ S 0°8.73' E 109°24.22'	50PNK↔↔ N 00°43.36' E 109°07.96'	SMART SEMELAGI N 01°00.01' E 109°02.51'
--	--	---

Description	Remark
Approach Procedure	1. 50PNK <ul style="list-style-type: none"> • Report Point 2. Direct to Final runway 29 if runway 29 not insight, join right down wind 11, maintain runway heading, and continue approach Runway 11
Departure Procedure	Runway 29 <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft left turn direct to 50PNK • Continue climb to 9500ft Runway 11 <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft right turn direct to 50PNK • Continue climb to 9500ft

1.2. TARAKAN (TRK) AREA

1.2.1 TARAKAN (WAQQ) – LONG BAWAN (WAQJ)



Tarakan-Long Bawan

- Flight time (approximate): 0.8 hrs
- Suggested cruise altitude: 10500 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TARAKAN↔ N 3° 19.6' E 117° 34.17'	ABQM1↔ N 03°39.21' E 116°38.48'	QJ1↔ N 03°52.66' E 116°02.53'	QJ2↔ N 03°59.84' E 116°49.00'	QJ3↔ N 03°59.81' E 116°47.20'
QJ4↔ N 03°56.89' E 116°43.67'	LONG BAWAN N 03°53.00' E 115°42.00'			

Description	Remark
Approach Procedure	<ol style="list-style-type: none"> 1. ABQM1 <ul style="list-style-type: none"> • Report Point 2. Start approach from QJ 1 at 6500 ft <ul style="list-style-type: none"> • ROD 700 fpm • Prop max (full forward) 3. QJ 2 at 5800 ft <ul style="list-style-type: none"> • continue descent • Heading 299° 4. QJ 3 at 5300 ft <ul style="list-style-type: none"> • continue descent • Heading 269° • flap to/app 5. QJ 4 at 4000 ft <ul style="list-style-type: none"> • continue descent • Heading 231°

	<ul style="list-style-type: none"> flap full (land) all checks completed 80-85 kts <p>6. Long Final 22 at 3600 ft</p> <ul style="list-style-type: none"> Heading 218° if runway 22 not insight, join right down wind 04 at 4100 ft, maintain runway heading 22, and continue approach 04
Departure Procedure	<p>Runway 22</p> <ul style="list-style-type: none"> above 92 kts and clear obstacle, flaps UP 500 ft direct to QJ 5 left turn direct QJ 6 Continue climb to 7500 <p>Runway 04</p> <ul style="list-style-type: none"> above 92 kts and clear obstacle, flaps UP 500 ft right turn direct QJ 4 right turn direct QJ 3 right turn direct QJ 2 right turn direct QJ 1 Continue climb to 7500

1.2.2 TARAKAN (WAQQ) – MALINAU (WAQM)



Tarakan - Malinau

- Flight time (approximate): 0.5 hrs
- Suggested cruise altitude: 4500 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TARAKAN↔	30TRK↔	10LNU↔	MALINAU
N 3° 19.6'	N 03°27.63' E	N 03°32.43'	N 3° 34.62'
E 117° 34.17'	117°04.91'	E 116°46.67'	E 116° 37.05'

Description	Remark
Approach Procedure	1. 30TRK <ul style="list-style-type: none"> • Report Point 2. 10LNU <ul style="list-style-type: none"> • continue descent • all checks completed. 3. Final 22 <ul style="list-style-type: none"> • Direct to Final runway 21 • if runway 22 not insight, join right down wind 04, maintain runway heading 22, and continue approach Runway 04
Departure Procedure	Runway 22 <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft left turn direct to 10LNU • Continue climb to 7500 Runway 04 <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft right turn direct 10LNU • Continue climb to 7500

1.2.3 TARAkan (WAQQ) – TANJUNG SELOR (WAQD)



Tarakan – Tanjung Selor

- Flight time (approximate): 0.3 hrs
- Suggested cruise altitude: 2000 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TARAKAN↔ N 3° 19.6' E 117° 34.17'	DCT↔	TANJUNG SELOR N 2 50.47 E 117 22.73
---	------	---

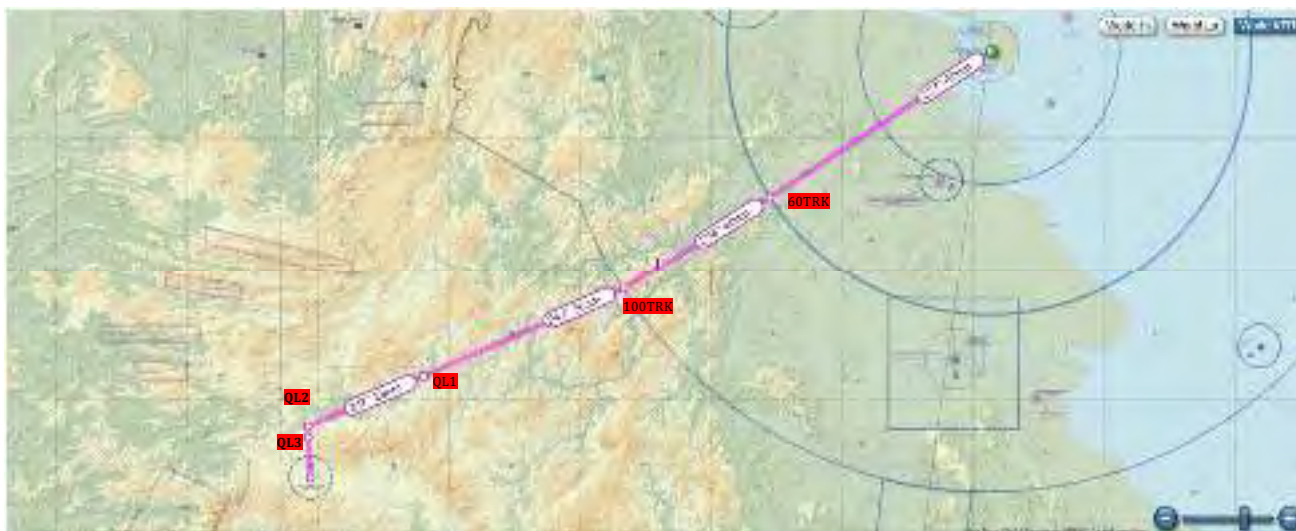


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Description	Remark
Approach Procedure	1. Final 21 at 2000 ft <ul style="list-style-type: none"> • Direct to Final runway 21 • if runway 21 not insight, join right down wind 03, maintain runway heading 21, and continue approach 03
Departure Procedure	Runway 21 <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft direct to TRK • Continue climb to 3000 Runway 03 <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft direct to TRK • Continue climb to 3000

1.2.4 TARAKAN (WAQQ) – LONG APUNG (WAQL)



Tarakan – Long Apung

- Flight time (approximate): 1.1 hrs
- Suggested cruise altitude: 10000 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TARAKAN↔ N 3° 19.6' E 117° 34.17'	60TRK↔ N 02°50.77' E 116°41.49'	100TRK↔ N 02°29.04' E 116°06.44'	QJ1↔ N 02°07.79' E 115°24.87'	QJ2↔ N 01°55.95' E 114°58.04'
QJ3↔ N 01°52.38' E 114°58.14'	LONG APUNG N 01°42.33' E 114°58.28'			

Description	Remark
Approach Procedure	1. 60TRK <ul style="list-style-type: none"> • Report Point

	<ol style="list-style-type: none"> 2. 100TRK <ul style="list-style-type: none"> • Report Point 3. QL 1 <ul style="list-style-type: none"> • continue descent • Heading 253° 4. QL 2 at 5000 ft <ul style="list-style-type: none"> • continue descent • Heading 170° • flap to/app 5. QL 3 at 3000 ft <ul style="list-style-type: none"> • continue descent • Heading 170° • flap full (land) • all checks completed • 80-85 kts • if runway 17 not insight, right turn climb to 3000ft direct to QL3, and continue approach 17
Departure Procedure	<ol style="list-style-type: none"> 1. Normal departure 2. Speed 92: Flaps – UP 3. Follow track reversal back to Tarakan

1.2.5 MALINAU (WAQM) – LONG BAWAN (WAQJ)



Malinau -Long Bawan

- Flight time (approximate): 0.5 hrs
- Suggested cruise altitude: 8500 ft
- Suggested inbound track (track reversal maybe used for outbound flight):



OPERATION MANUAL

PART C

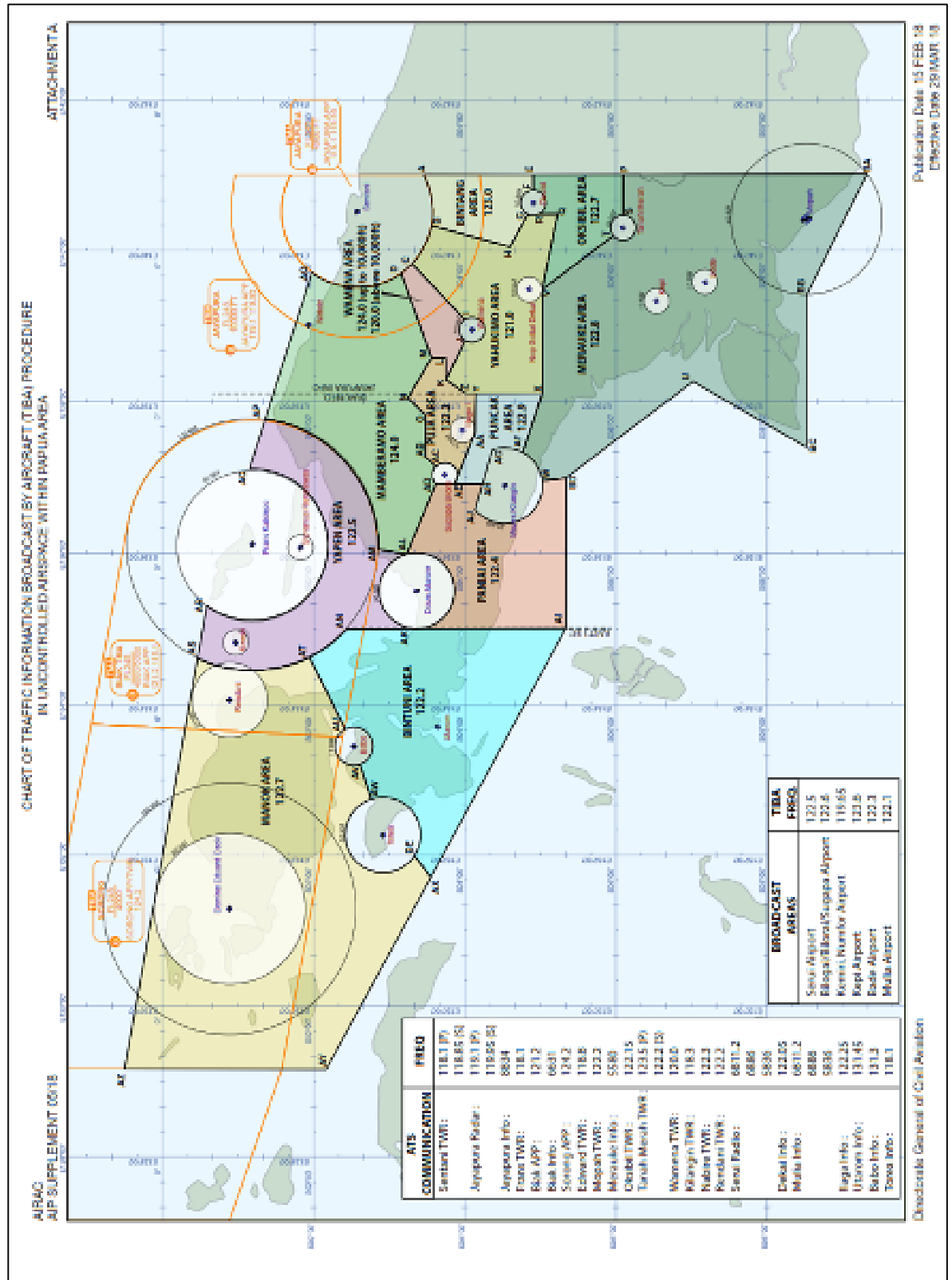
AREA, ROUTES AND AERODROMES

MALINAU↔↔ N 3° 34.62' E 116° 37.05'	QJ1↔↔ N 03°52.66' E 116°02.53'	QJ2↔↔ N 03°59.84' E 116°49.00'	QJ3↔↔ N 03°59.81' E 116°47.20'	QJ4↔↔ N 03°56.89' E 116°43.67'
LONG BAWAN N 03°53.00' E 115°42.00'				

Description	Remark
Approach Procedure	<ol style="list-style-type: none"> Start approach from QJ 1 at 6500 ft <ul style="list-style-type: none"> • ROD 700 fpm • Prop max (full forward) QJ 2 at 5800 ft <ul style="list-style-type: none"> • continue descent • Heading 299° QJ 3 at 5300 ft <ul style="list-style-type: none"> • continue descent • Heading 269° • flap to/app QJ 4 at 4000 ft <ul style="list-style-type: none"> • continue descent • Heading 231° • flap full (land) • all checks completed • 80-85 kts Long Final 22 at 3600 ft <ul style="list-style-type: none"> • Heading 218° • if runway 22 not insight, join right down wind 04 at 4100 ft, maintain runway heading 22, and continue approach 04
Departure Procedure	<p>Runway 22</p> <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft right turn direct QJ 1 • Continue climb to 6500 <p>Runway 04</p> <ul style="list-style-type: none"> • above 92 kts and clear obstacle, flaps UP • 500 ft lefr turn direct QJ 1 • Continue climb to 6500

2. PAPUA AREA

TIBA procedure is about designated frequencies and procedures for pilots to communicate their position and intentions to each other while flying in designated broadcast area within uncontrolled airspace in Papua Area.



AIRAC AIP SUPPLEMENT 05 / 18

ATTACHMENT B1

TABLE OF BROADCAST AREAS COORDINATES

BROADCAST AREAS TIBA FREQ.	POINT	COORDINATES	
		LATITUDE	LONGITUDE
BINTANG AREA 123.0 MHz	Within area of following coordinate;		
	A	03 27 26.66S	141 00 05.08E
	E	04 54 24.71S	140 59 56.65E
	F	04 54 27.54S	140 47 51.00E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAJO"		
	G	04 50 03.97S	140 28 47.42E
	H	04 35 59.21S	140 02 50.58E
	B	03 33 52.16S	140 19 43.60E
	Thence along the arc of circle counter clockwise with radius of 60 NM centered at "ARP WAJJ"		
	Below 10,000ft within area of 60nm to 100nm from JPA		
OKSIBIL AREA 122.7 MHz	Within area of following coordinate;		
	E	04 54 24.71S	140 59 56.65E
	P	06 05 42.74S	141 00 05.46E
	S	06 05 46.33S	140 28 12.58E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAKT"		
	T	05 58 04.72S	140 11 43.95E
	V	05 01 30.25S	139 29 03.89E
	Q	05 13 52.87S	140 29 00.74E
	R	04 59 06.79S	140 28 50.87E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAJO"		
YAHUKIMO AREA 121.0 MHz	F	04 54 27.54S	140 47 51.00E
	Within area of following coordinate;		
	B	03 33 52.16S	140 19 43.60E
	H	04 35 59.21S	140 02 50.58E
	G	04 50 03.97S	140 28 47.42E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAJO"		

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ATTACHMENT B2

	R	04 59 06.79S	140 28 50.87E
	Q	05 13 52.87S	140 29 00.74E
	V	05 01 30.25S	139 29 03.89E
	X	05 01 37.67S	138 06 30.61E
	Y	04 08 52.66S	138 06 27.27E
	Z	04 00 57.11S	138 06 27.97E
	K	03 45 12.05S	138 17 15.02E
	J	04 00 35.29S	138 48 29.96E
	I	03 59 58.35S	139 05 21.08E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAVV"		
WAMENA AREA 124.0 MHz (up to 10,000ft) 120.0 MHz (above 10,000ft)	C	03 18 22.46S	139 49 26.12E
	Below 10,000ft within area of 60nm to 100nm from JPA		
	Within area of following coordinate;		
	C	03 18 22.46S	139 49 26.12E
	I	03 59 58.35S	139 05 21.08E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAVV"		
	J	04 00 35.29S	138 48 29.96E
	K	03 45 12.05S	138 17 15.02E
	L	03 45 08.58S	138 34 53.55E
	M	03 33 47.40S	138 34 45.21E
MAMBERAMO AREA 124.0 MHz	D	03 09 41.11S	139 41 52.81E
	M	03 33 47.40S	138 34 45.21E
	N	03 15 02.16S	138 02 53.62E
	O	03 29 02.55S	137 49 16.47E
	AB	03 29 00.24S	137 16 09.00E
	AC	03 37 08.21S	137 08 44.79E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAYB"		
	AD	03 37 15.55S	136 54 36.79E
	AL	03 14 03.75S	135 58 52.90E
	AM	02 51 59.76S	136 02 54.11E

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AIRAC AIP SUPPLEMENT 05 / 18		ATTACHMENT B3	
	Thence along the arc of circle counter clockwise with radius of 100 NM centered at "ARP WABB"		
	AP	01 21 57.59S	137 46 11.29E
	AO	01 58 44.73S	139 42 29.98E
	Thence along the arc of circle counter clockwise with radius of 60 NM centered at "ARP WAJJ"		
	Below 10,000ft within area of 60nm to 100nm from JPA		
PUJA AREA 122.2 MHz	Within area of following coordinate;		
	M	03 33 47.40S	138 34 45.21E
	L	03 45 08.58S	138 34 53.55E
	K	03 45 12.05S	138 17 15.02E
	Z	04 00 57.11S	138 06 27.97E
	Y	04 08 52.66S	138 06 27.27E
	AA	04 08 16.61S	137 35 21.27E
	AE	03 52 09.03S	136 54 39.20E
	Thence along the arc of circle counter clockwise with radius of 10 NM centered at "ARP WAYB"		
	AC	03 37 08.21S	137 08 44.79E
	AB	03 29 00.24S	137 16 09.00E
	O	03 29 02.55S	137 49 16.47E
	N	03 15 02.16S	138 02 53.62E
PUNCAK AREA 122.9 MHz	Within area of following coordinate;		
	Y	04 08 52.66S	138 06 27.27E
	X	05 01 37.67S	138 06 30.61E
	AF	04 46 04.27S	137 19 41.76E
	Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WAYY"		
	AG	04 21 49.95S	137 21 41.52E
	AH	04 14 14.16S	136 54 42.38E
	AE	03 52 09.03S	136 54 39.20E
	AA	04 08 16.61S	137 35 21.27E
	PANIAI AREA 122.4 MHz	Within area of following coordinate;	
W		05 01 31.52S	136 57 01.12E
BD		05 20 22.97S	136 59 25.34E
AI		05 20 16.05S	134 59 58.46E
AK		03 22 07.59S	134 59 37.47E
Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WABI"			
AL		03 14 03.75S	135 58 52.90E
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AIRAC AIP SUPPLEMENT 05 / 18		ATTACHMENT B4		
	AD	03 37 15.55S	136 54 36.79E	
	AH	04 14 14.16S	136 54 42.38E	
	AJ	04 08 24.58S	136 34 09.84E	
	Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WAYY"			
YAPEN AREA 122.5 MHz	Within area of following coordinate;			
	AQ	01 09 22.35S	137 06 40.98E	
	AP	01 21 57.59S	137 46 11.29E	
	Thence along the arc of circle clockwise with radius of 100 NM centered at "ARP WABB"			
	AM	02 51 59.76S	136 02 54.11E	
	AL	03 14 03.75S	135 58 52.90E	
	Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WABI"			
	AK	03 22 07.59S	134 59 37.47E	
	AN	02 26 30.37S	134 59 32.75E	
	Thence along the arc of circle clockwise with radius of 100 NM centered at "ARP WABB"			
	AS	00 28 07.58S	134 36 18.66E	
	AR	00 35 32.06S	135 18 06.72E	
	Thence along the arc of circle counter clockwise with radius of 60 NM centered at "ARP WABB"			
	BINTUNI AREA 122.2 MHz	Within area of following coordinate;		
AN		02 26 30.37"S	134 59 32.75E	
AI		05 20 16.05S	134 59 58.46E	
AX		03 33 15.21S	131 42 15.47E	
BE		03 20 13.16S	131 59 20.79E	
Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WASF"				
AW		02 45 53.99S	132 44 21.12E	
AV		02 36 45.87S	133 12 07.80E	
Thence along the arc of circle counter clockwise with radius of 15 NM centered at "ARP WASO"				
AU		02 25 16.41S	133 39 49.40E	
AT		01 56 47.78S	134 36 54.82E	
Thence along the arc of circle counter clockwise with radius of 100 NM centered at "ARP WABB"				
Directorate General of Civil Aviation		Publication Date 15 FEB 18 Effective Date 29 MAR 18		

AIRAC AIP SUPPLEMENT 05 / 18

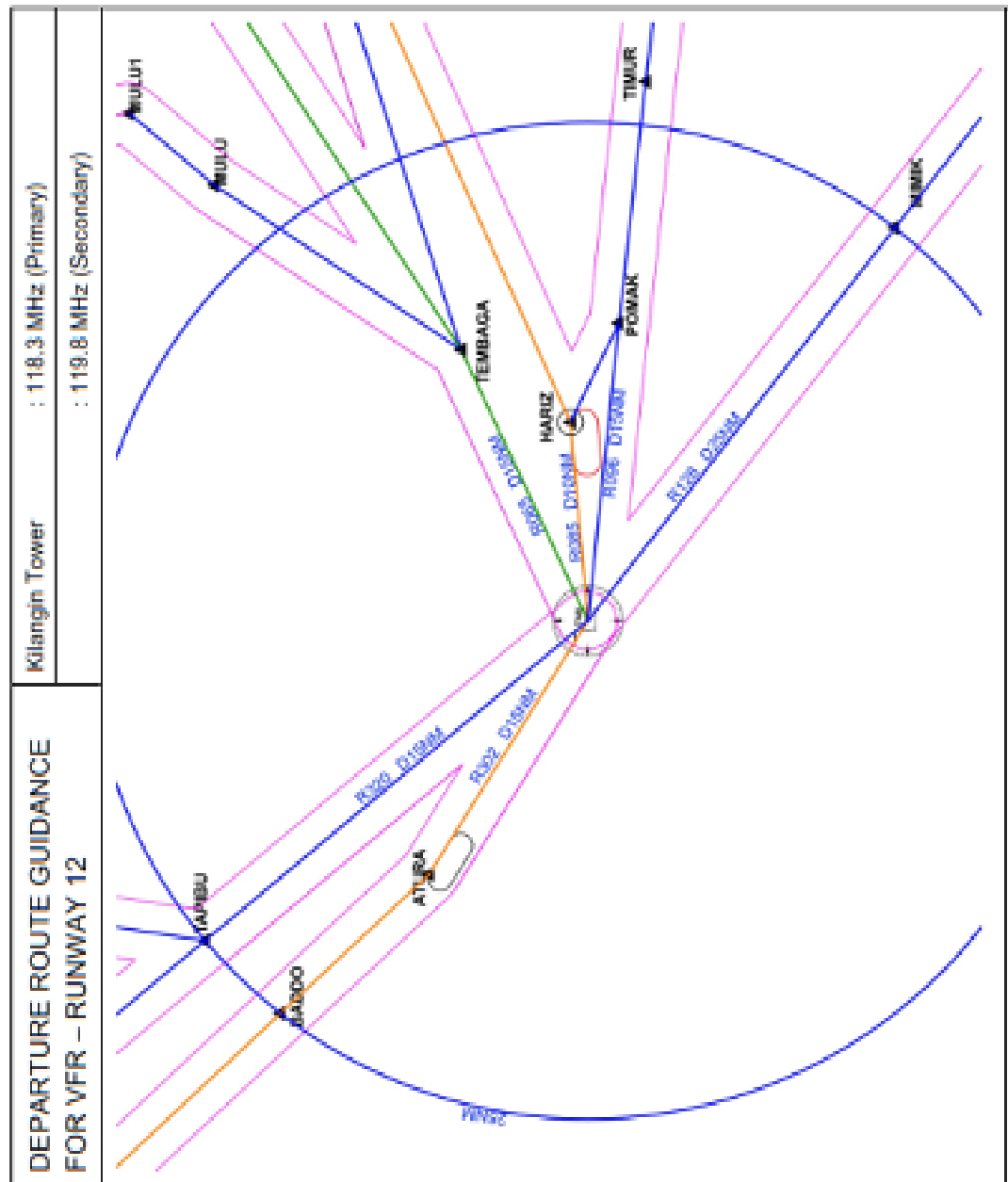
ATTACHMENT B5

MANOK AREA 122.7 MHz	Within area of following coordinate;	
	AS	00 28 07.58S 134 36 18.66E
	Thence along the arc of circle counter clockwise with radius of 100 NM centered at "ARP WABB"	
	AT	01 56 47.78S 134 36 54.82E
	AU	02 25 16.41S 133 39 49.40E
	Thence along the arc of circle counter clockwise with radius of 15 NM centered at "ARP WASO"	
	AV	02 25 16.41S 133 39 49.40E
	AW	02 45 53.99S 132 44 21.12E
	Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WASF"	
	BE	03 20 13.16S 131 59 20.79E
	AX	03 33 15.21S 131 42 15.47E
	AY	02 10 04.53S 129 09 43.16E
	AZ	00 29 53.37N 129 09 57.86E
MERAUKE AREA 122.8 MHz	Within area of following coordinate;	
	S	06 05 46.33S 140 28 12.58E
	P	06 05 42.74S 141 00 05.46E
	BA	09 19 15.04S 141 00 43.62E
	BB	08 31 30.42S 139 24 35.88E
	BC	08 31 26.45S 137 23 44.22E
	U	07 01 11.17S 138 15 54.95E
	BD	05 20 22.97S 136 59 25.34E
	W	05 01 31.52S 136 57 01.12E
	Thence along the arc of circle counter clockwise with radius of 30 NM centered at "ARP WAYY"	
	AF	04 46 04.27S 137 19 41.76E
	X	05 01 37.67S 138 06 30.61E
	V	05 01 30.25S 139 29 03.89E
	T	05 58 04.72S 140 11 43.95E
	Thence along the arc of circle clockwise with radius of 10 NM centered at "ARP WAKT"	

Directorate General of Civil Aviation

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2.1 FROM TIMIKA





OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

TEMBAGA ALPHA DEPARTURE

After take off turn right via overhead to join published VFR route via point TEMBAGA and MULU, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

TEMBAGA BRAVO DEPARTURE

After take off turn right via overhead to join published VFR route via point TEMBAGA and point UPASS, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

TEMBAGA CHARLIE DEPARTURE

After take off turn right via overhead to join published VFR route via point TEMBAGA and JILA, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

NOTE:

- Pilot may after take off turn left proceed to point TEMBAGA subject to aircraft performance and ATC clearance;
- TEMBAGA CHARLIE DEPARTURE shall be used when the weather condition unable the pilot to maintain VMC along the VFR route to UPASS;

POMAK ALPHA DEPARTURE

After take off climb and maintain 2500 feet proceed to join published VFR route via point POMAK, and then continue climb to intended level subject to ATC clearance.

MIMIK ALPHA DEPARTURE

After take off proceed to join published VFR route via point MIMIK, climb to intended level subject to ATC clearance.

TAPIBU ALPHA DEPARTURE

After take off turn right via overhead to join published VFR route via point TAPIBU, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

TAPIBU BRAVO DEPARTURE

After take off turn left proceed to join published VFR route via point TAPIBU, and then climb to intended level subject to ATC clearance.

BADDO ALPHA DEPARTURE

After take off turn right proceed to join published VFR route via point ATURA and point BADDO maintain 4000 feet, climb above 4000 feet after point ATURA subject to ATC clearance.

NOTE:

- TAPIBU BRAVO DEPARTURE and BADDO ALPHA DEPARTURE subject to traffic condition and ATC clearance;
- Departure VFR flight via overhead shall be instructed to cross 4000 feet at or before overhead to maintain standard minimum vertical separation with IFR flight, provided when IFR flight leaving holding point to initial approach fix.



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

TEMBAGA DELTA DEPARTURE

After take off turn left via overhead to join published VFR route via point TEMBAGA and MULU, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

TEMBAGA ECHO DEPARTURE

After take off turn left via overhead to join published VFR route via point TEMBAGA and point UPASS, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

TEMBAGA FOXTROT DEPARTURE

After take off turn left via overhead to join published VFR route via point TEMBAGA and JILA, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

NOTE:

- Pilot may after take off turn right proceed to point TEMBAGA subject to aircraft performance and ATC clearance;
- TEMBAGA FOXTROT DEPARTURE shall only be used when the weather condition unable the pilot to maintain VMC along the VFR route to UPASS.

POMAK BRAVO DEPARTURE

After take off turn left via overhead to join published VFR route via point POMAK, climb to intended level subject to ATC clearance.

MIMIK BRAVO DEPARTURE

After take off turn left proceed to join published VFR route via point MIMIK, climb to intended level subject to ATC clearance.

TAPIBU CHARLIE DEPARTURE

After take off turn left via overhead to join published VFR route via point TAPIBU, cross 3000 feet at or before overhead and then continue climb to intended level subject to ATC clearance.

TAPIBU DELTA DEPARTURE

After take off turn right proceed to join published VFR route via point TAPIBU, climb to intended level or as instructed by ATC.

BADDO BRAVO DEPARTURE

After take off proceed to join published VFR route via point ATURA and point BADDO maintain 4000 feet, climb above 4000 feet after point ATURA subject to ATC clearance.

NOTE:

- BADDO BRAVO DEPARTURE subject to traffic condition;
- Departure VFR flight via overhead shall be instructed to cross 4000 feet at or before overhead to maintain standard minimum vertical separation with IFR flight, provided when IFR flight leaving initial approach fix to intermediate fix.



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

MULU ARRIVAL

Arriving via MULU proceed to point HARIZ via point TEMBAGA to join circuit pattern or holding as instructed by ATC. Descend level subject to ATC clearance

JILA ARRIVAL

Arriving via JILA proceed to point HARIZ to join circuit pattern or holding as instructed by ATC. Descend level subject to ATC clearance

POMAK ARRIVAL

Arriving via point POMAK proceed to point HARIZ to join circuit pattern or holding as instructed by ATC. Descend level subject to ATC clearance

MIMIK ARRIVAL

Arriving via point MIMIK proceed to point HARIZ to join circuit pattern or holding as instructed by ATC. Descend level subject to ATC clearance

TAPIBU ARRIVAL

Arriving via point DUMA PASS proceed to point ATURA via TAPIBU to join circuit pattern or holding as instructed by ATC. Descend level subject to ATC clearance

BADDO ARRIVAL

Arriving via point BADDO proceed to point ATURA to join circuit pattern or holding as instructed by ATC. Descend level subject to ATC clearance.

NOTE:

- Minimum holding altitude over HARIS 3500 feet;
- Minimum holding altitude over HARIS 5000 feet.

COORDINATE TABLE

No.	Points	Coordinate	
		Latitude	Longitude
1.	HARIZ	04 30 07.06 S	137 01 59.33 E
2.	POMAK	04 33 10.44 S	137 06 48.24 E
3.	TEMBAGA	04 24 36.87 S	137 05 36.58 E
4.	ATURA	04 23 03.68 S	136 39 15.65 E
5.	TAPIBU	04 11 47.12 S	136 35 55.06 E
6.	BADDO	04 15 35.84 S	136 32 16.03 E
7.	MIMIK	04 46 25.56 S	137 11 47.24 E
8.	TIMUR	04 33 51.89 S	137 19 04.25 E

2.1.1 TIMIKA – BEOGA (VIA ILAGA) – VFR ONLY



- Flight time (approximate): **0.7** hrs
- Suggested cruise altitude: **13,000** ft
- Suggested inbound track (track reversal maybe used for outbound flight):

Description	Remark
Approach Procedure (Refer to figure BEO.1 and BEO.2)	<ol style="list-style-type: none"> 1. Begin descent from “ILANRV” to “ILANRPZ” to 10,000ft: <ul style="list-style-type: none"> • Continue on the track, descend down to 8,000ft upon reaching “BEOEGP” 2. Follow along the river and descend down to 6,500ft: <ul style="list-style-type: none"> • Propeller – MAX (FULL FORWARD) • Flaps – 20° (TO/APP) • All checks – Completed 3. Abeam the airstrip: <ul style="list-style-type: none"> • Continue on towards high terrain • Watch for the high trees • Speed – 90kts • Flaps – 30° (LAND) 4. After high terrain by the river: <ul style="list-style-type: none"> • Right descending turn drop down to 5,800ft • WATCH THE STEEP BANK and SPEED 5. At 5800ft: <ul style="list-style-type: none"> • Target KP (Key Point) before houses on the hill at 5800ft • COMMITTED to land at KP • Speed – 90kts <p>• Watch out for up-slope illusion</p>
Departure Procedure (Reverse the suggested inbound track)	<ol style="list-style-type: none"> 1. Right turn after take off 2. Above 92kts: <ul style="list-style-type: none"> • FLAPS – UP 3. Follow track reversal 4. Climb up to minimum 10,000ft before “ILANRPZ”

	<p>5. Minimum altitude 12000ft to avoid traffic</p> <p>6. Follow the reversal of the suggested inbound track stated above, proceed to Timika</p>
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Figure BE0.1 – Beoga Approach Path

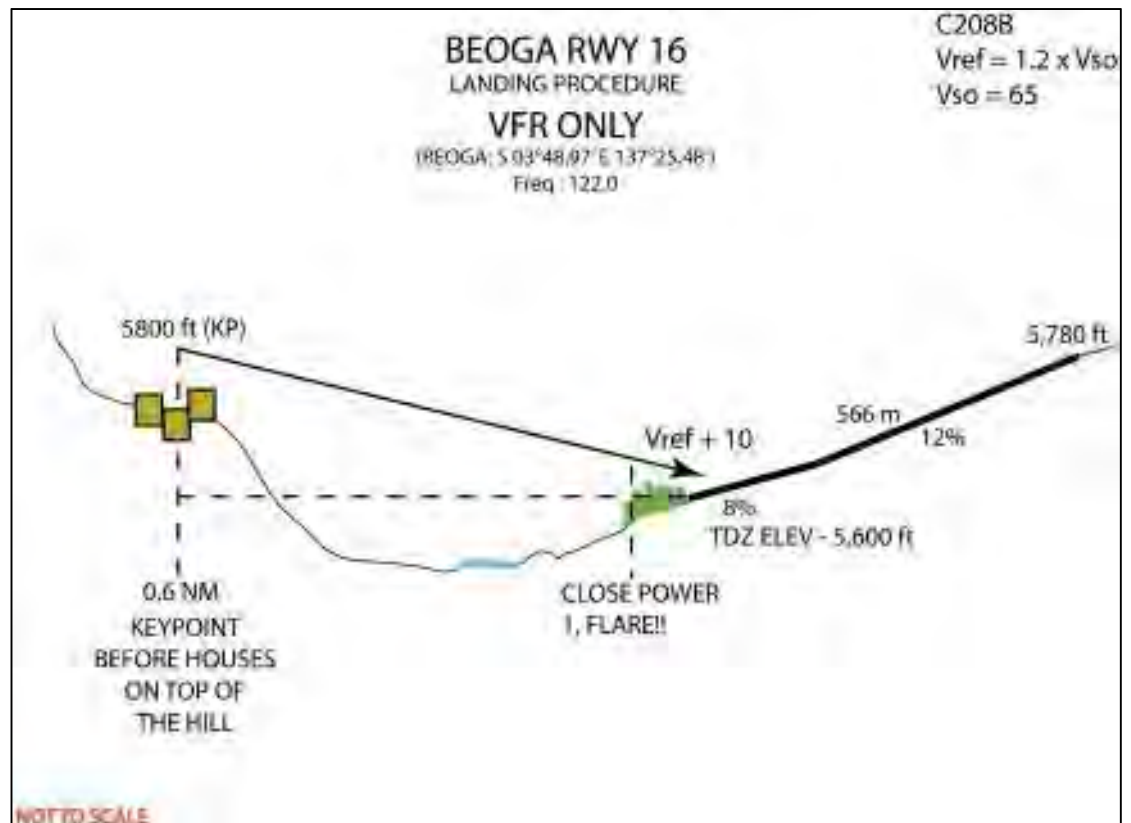


Figure BE0.2 – Beoga Landing Procedure

2.1.2 TIMIKA – ILAGA (VFR ONLY)



- Flight time (approximate): **0.5 Hrs**
- Suggested cruise altitude: **13,000 ft**
- Suggested inbound track (track reversal maybe used for outbound flight):

TIMIKA↔↔	906030↔↔	ILACUW↔↔	ILAGPZ↔↔	ILAGA
----------	----------	----------	----------	-------

Approach Procedure (Refer to figure ILA.1 and ILA.2)	<ol style="list-style-type: none"> 1. Start approach from "ILAGPZ" at 12,000 ft: <ul style="list-style-type: none"> • Power – IDLE • ROD – 1500 fpm • Propeller – MAX (FULL FORWARD) • Flaps – 20° (TO/APP) 2. After heading 050°: <ul style="list-style-type: none"> • Reduce ROD – 1000 fpm 3. At 8500 ft: <ul style="list-style-type: none"> • Turn base prior to SMALL PEAK 4. At 7900 ft: <ul style="list-style-type: none"> • Flaps – 30° (LAND) • All checks completed • 400---500 fpm rate of descent 5. At 7760 ft: <ul style="list-style-type: none"> • Target KP (Key Point) and Helipad at 7760 ft • Speed – 80 kts • Watch out for up---slope illusion <p>• COMMITTED below KP</p>
Departure Procedure <i>(Reverse the suggested inbound track and refer to figure ILA.3)</i>	<ol style="list-style-type: none"> 1. Slant slightly left after take off 2. Above 92 kts: <ul style="list-style-type: none"> • FLAPS – UP 3. Climb to 9000 ft to avoid landing traffic 4. When cleared, right turn out to "ILAGPZ" 5. Minimum altitude 12000 ft to avoid traffic 6. Follow the reversal of the suggested inbound track stated

7. above, proceed to Timika



Figure ILA.1 – Ilaga Approach Path

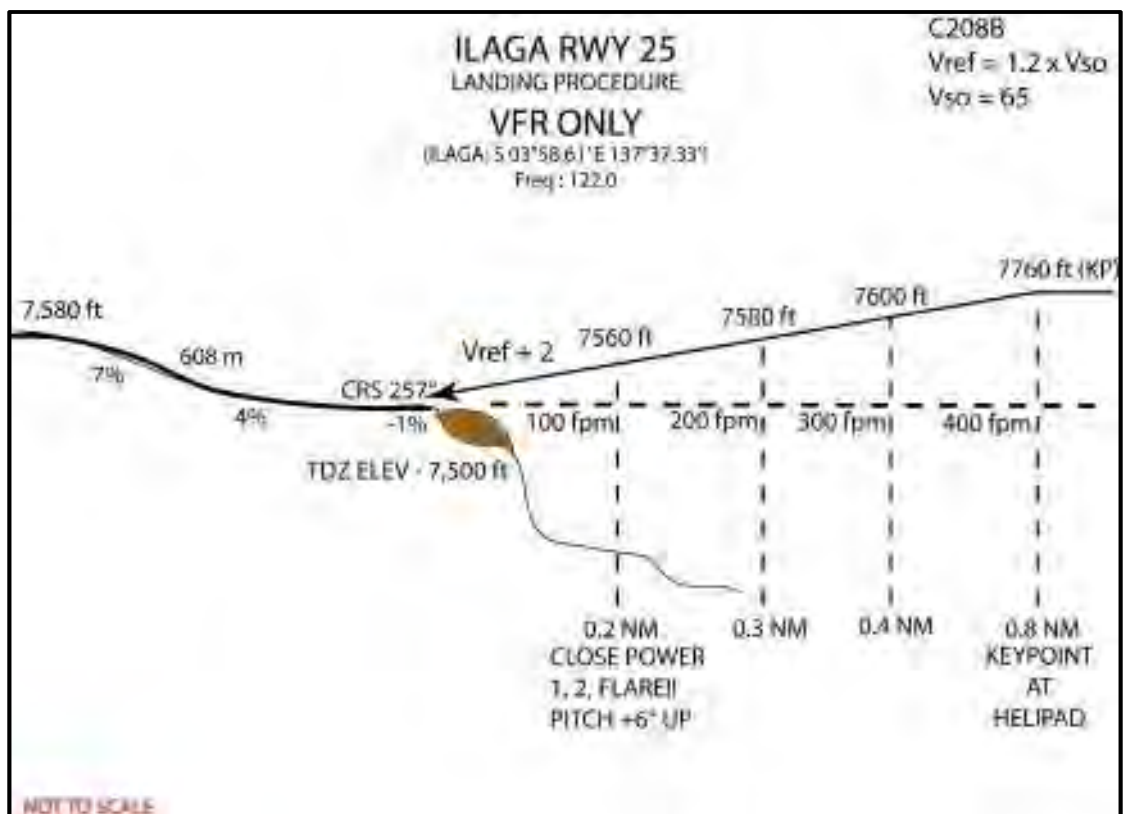


Figure ILA.2 – Ilaga Landing Procedure



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.1.3 TIMIKA – SINAK (VFR ONLY).



- Flight time (approximate): 0.7 hrs
- Suggested cruise altitude: 13,000 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TIMIKA↔	906030↔	ILACUW↔	ILAGPZ↔	ILANRV↔
HLAKPZ↔	HILAKE↔	SNSIN↔	SINAK	

Description	Remark
Approach Procedure R/W 35 (Refer to figure SIN.1 and SIN.3)	1. Begin approach from “HILAKE” from 12,000 2. At “SNSIN”: <ul style="list-style-type: none"> • Propeller – MAX (FULL FORWARD) • Power – IDLE • ROD – 1500 fpm • Plan to reach over head at 8,500 ft 3. Overhead at 8,500 ft: <ul style="list-style-type: none"> • Continue down to 8,000 ft • Join east downwind • Speed – 90 kts 4. Continue towards final r/w 35: <ul style="list-style-type: none"> • Flaps – 30° (LAND) • Pass over trees on short final at 7,200 ft (KP) • Vref – 85 kts 5. COMMITTED ONCE TOUCHDOWN: <ul style="list-style-type: none"> • If required, initiate go around at final
Approach Procedure R/W 17 (Refer to figure SIN.2 and SIN.3)	1. Begin approach from “HILAKE” from 12,000 ft 2. At “SNSIN”: <ul style="list-style-type: none"> • Propeller – MAX (FULL FORWARD) • Power – IDLE • ROD – 1500 fpm



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PART C AREA, ROUTES AND AERODROMES

	<ul style="list-style-type: none"> Plan to reach over head at 8,000 ft <ol style="list-style-type: none"> At 8,500 ft: <ul style="list-style-type: none"> Join east downwind (a left circuit/traffic pattern r/w 17) Flaps – 20° (TO/APP) Speed – 90 kts Abeam KP: <ul style="list-style-type: none"> Landing configuration <ul style="list-style-type: none"> ➢ Flaps – 30° (LAND) ➢ Speed – 90 kts At KP – 7,150 ft : <ul style="list-style-type: none"> Vref – 80 kts
Departure Procedure (Reverse the suggested inbound track)	Runway 35 <ol style="list-style-type: none"> Use east downwind departure Climb with 93 kts toward “SNSIN” or “HILAKE”: <ul style="list-style-type: none"> Aim 12,000 ft OR 12,500 ft over “HILAKE” Upslope terrain creates illusion, so keep climbing with 93 kts. At 93 kts : FLAPS – UP Keep climbing until at least 12,000ft Follow on track back to Timika



Figure SIN.1 – Sinak R/W 35 Approach Path



Figure SIN.2 – Sinak R/W 17 Approach Path

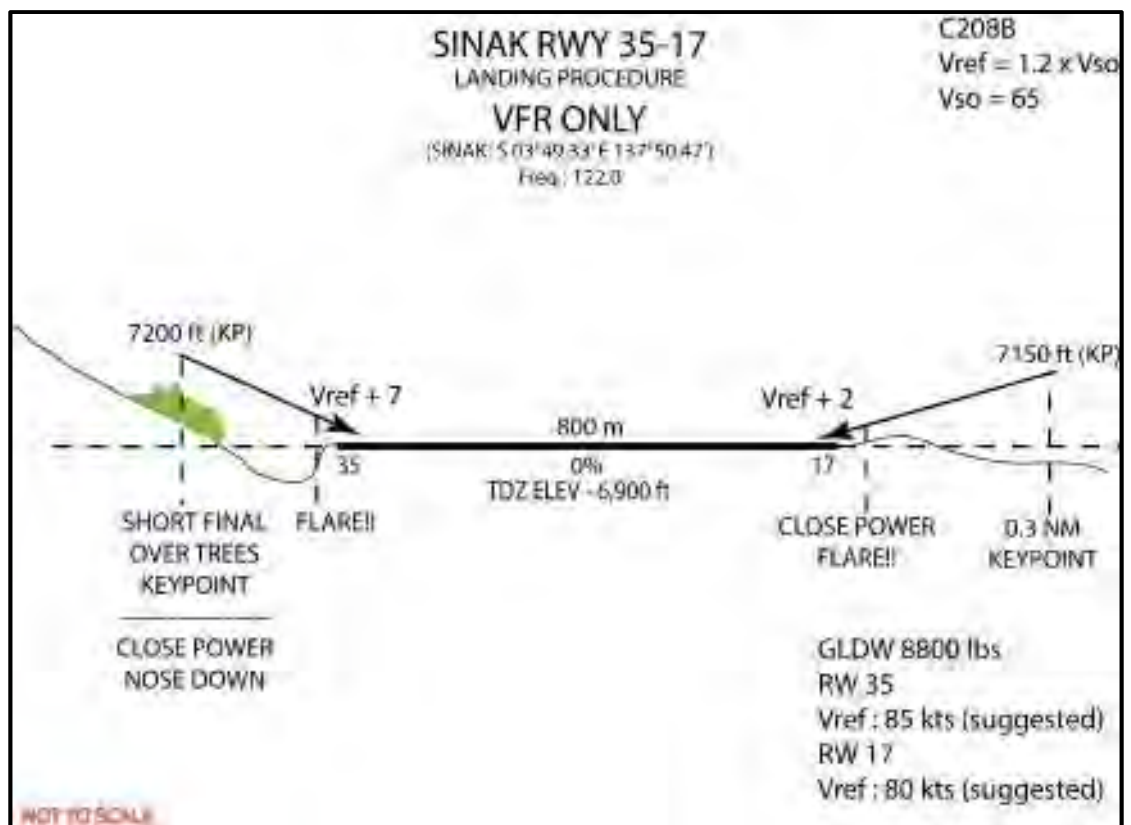


Figure SIN.3 – Sinak Landing Procedure



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.1.4 TIMIKA – ILU (VFR ONLY)



- Flight time (approximate): 0.9 hrs
- Suggested cruise altitude: 13,000 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TIMIKA↔↔	906030↔↔	ILACUW↔↔	ILAGPZ↔↔	ILANRV↔↔
HLAKPZ↔↔	HILAKE↔↔	SNSIN↔↔	SNNRPZ↔↔	SIN2↔↔
SIN1↔↔	ILU4↔↔	ILU3↔↔	ILU2↔↔	ILU

Description	Remark
Approach Procedure <i>(Refer to figure ILU.1 and ILU.2)</i>	<ol style="list-style-type: none"> 1. Begin approach and descent at "SNNRPZ": <ul style="list-style-type: none"> • Follow the track • ROD – 500 fpm • Maintain 9,500 ft 2. After "ILU2": <ul style="list-style-type: none"> • Check 7nm to ILU • Descend to 7,200 ft to join overhead ILU • ROD – 600 fpm • Propeller – MAX (FULL FORWARD) • FLAPS --- 20° (TO/APP) • All checks completed 3. Overhead ILU at 7,200 ft: <ul style="list-style-type: none"> • Observe airstrip condition • Make right turn 2 nm from ILU • Stay on the lower side of the terrain 4. After 2 nm from ILU: <ul style="list-style-type: none"> • Right descending turn to 6,300 ft • Join right base 35 • Watch the BANK and SPEED 5. On right base at 6,300 ft:

	<ul style="list-style-type: none"> • Target KP (Key Point) above the landslide • FLAPS --- FULL • Speed – 90 kts • Watch out for up---slope illusion • COMMITTED below KP
Departure Procedure <i>(Reverse the suggested inbound track)</i>	<ol style="list-style-type: none"> 1. Left turn after take off 2. Above 92 kts: <ul style="list-style-type: none"> • FLAPS – UP 3. Follow track reversal



Figure ILU.1 – Ilu Approach Path

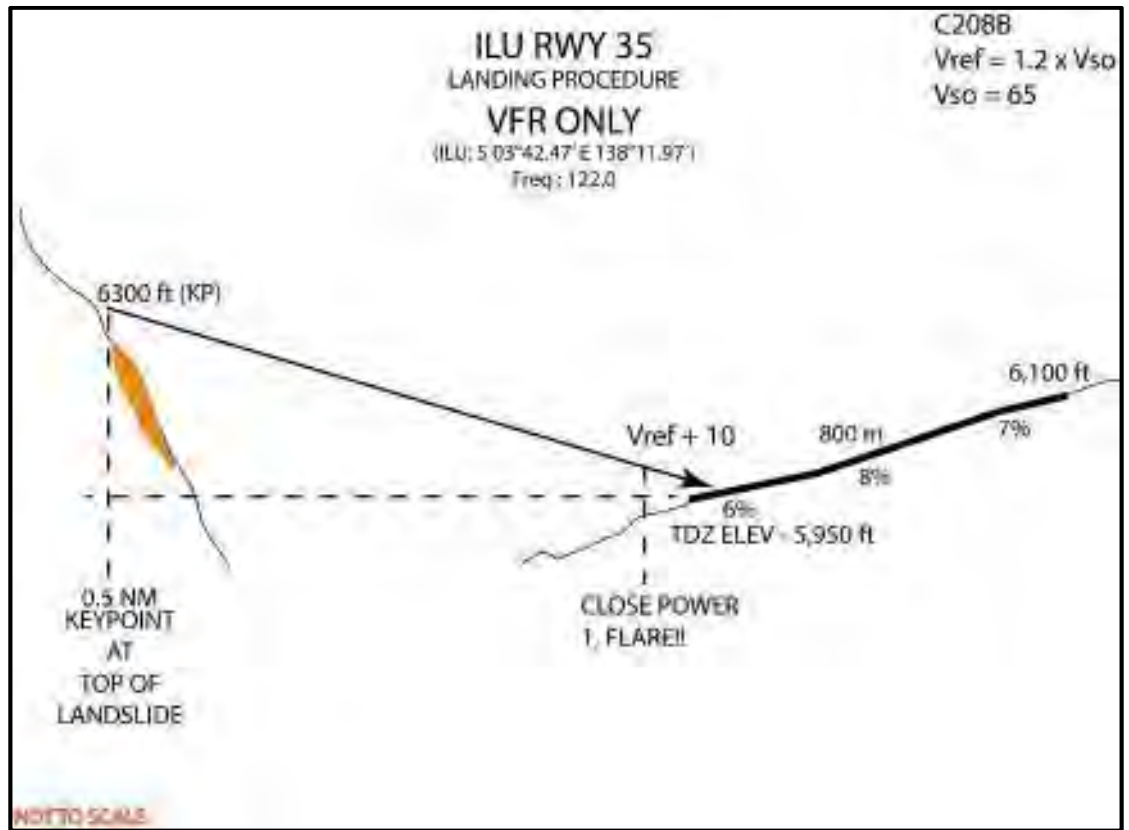
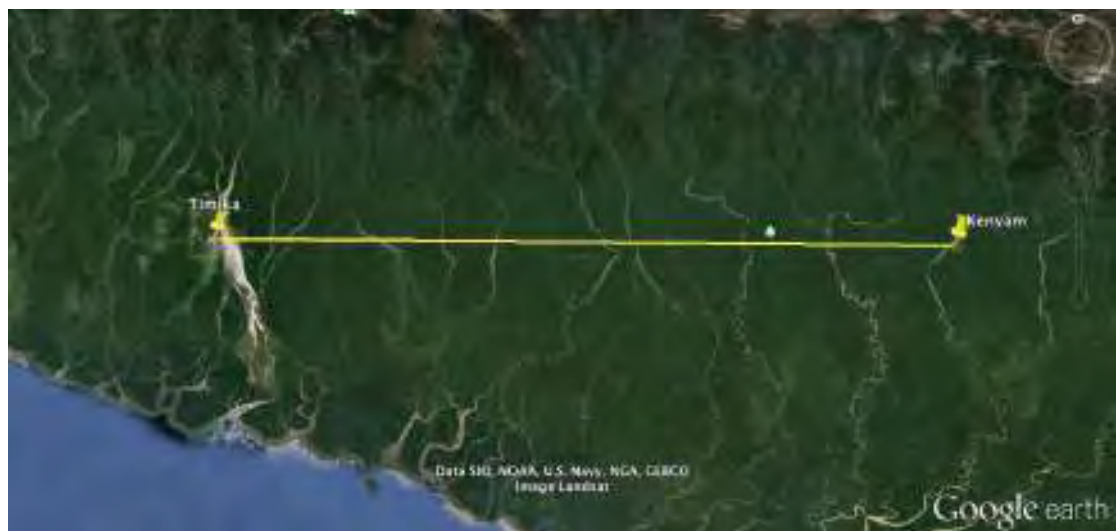


Figure ILU.2 – Ilu Landing Procedure

2.1.5 TIMIKA – KENYAM (VFR ONLY)



Timika-Kenyam

- Flight time (approximate): 0.7 hrs
- Suggested inbound cruise altitude: 7,500 ft
- Suggested inbound track:

TIMIKA →

KENYAM

Description	Remark
Approach Procedure (Refer to figure KEN.1)	<ol style="list-style-type: none"> 1. Begin descent as per appropriate TOD from 7,500 ft 2. Over view the field: <ul style="list-style-type: none"> • Make a wide east downwind if landing runway 22 • Speed – 100 kts or below • Propeller – MAX (FULL FORWARD) • FLAPS --- 20° (TO/APP) • All checks completed 3. Abeam TDZ <ul style="list-style-type: none"> • FLAPS – FULL • Vref – as appropriate depending on the LDW, consider the short and gravel (unimproved) strip • KP at 1 nm final at 800 ft
Departure Procedure (Reverse the suggested inbound track)	<ol style="list-style-type: none"> 1. Straight out departure 2. Watch for trees on either side of runway ends 3. Follow track reversal

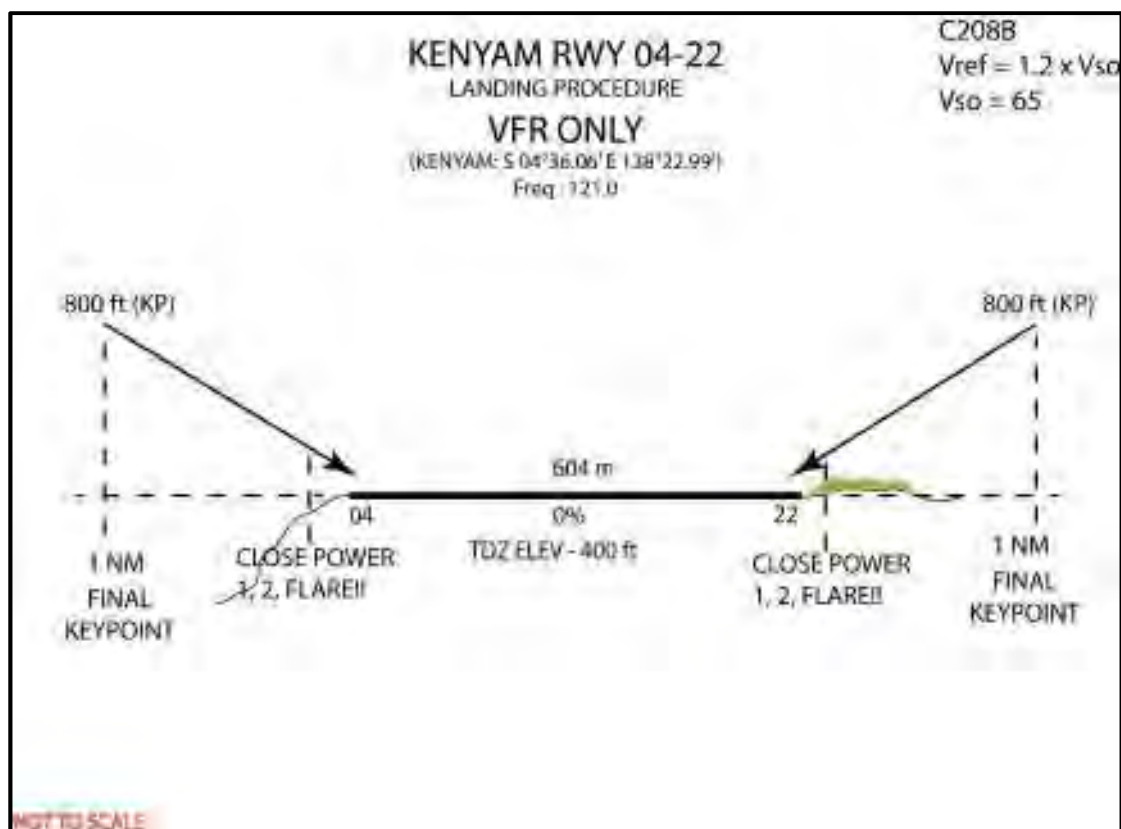


Figure KEN.1 – Kenyam Landing Procedure

2.1.6 TIMIKA – MULIA (VFR ONLY)



Timika-Mulia

- Flight time (approximate): 0.8 hrs
- Suggested cruise altitude: 13,000 ft
- Suggested inbound track (track reversal maybe used for outbound flight):

TIMIKA↔↔	906030↔↔	ILACUW↔↔	ILAGPZ↔↔	ILANRV↔↔
HLAKPZ↔↔	HILAKE↔↔	SNSIN↔↔	SINAK↔↔	MLSNGP↔↔
MUL9RB↔↔	MULIA			

Description	Remark
Approach Procedure <i>(Refer to figure MUL.1 and MUL.2)</i>	<ol style="list-style-type: none"> 1. Begin approach and descent at “HILAKE” at 12,300 ft: <ul style="list-style-type: none"> • ROD – 1000 fpm • Power – ¼ or less • Aim for SINAK at 9,500 ft 2. After SINAK at 9,500 ft: <ul style="list-style-type: none"> • Descent for 7,000 ft at “MLSNGP” • Speed – 100 kts or below • Propeller – MAX (FULL FORWARD) • FLAPS --- 20° (TO/APP) • All checks completed 3. Continue descent for 6,000 ft at Spine Ridgeline(KP): <ul style="list-style-type: none"> • FLAPS --- FULL • COMMITTED at the bowl • Speed – Vref + 10 • Watch out for up---slope illusion
Departure Procedure <i>(Reverse the suggested inbound track)</i>	<ul style="list-style-type: none"> • Left turn after take off • Above 92 kts : FLAPS – UP • Follow track reversal



Figure MUL.1 - Mulia Approach Path

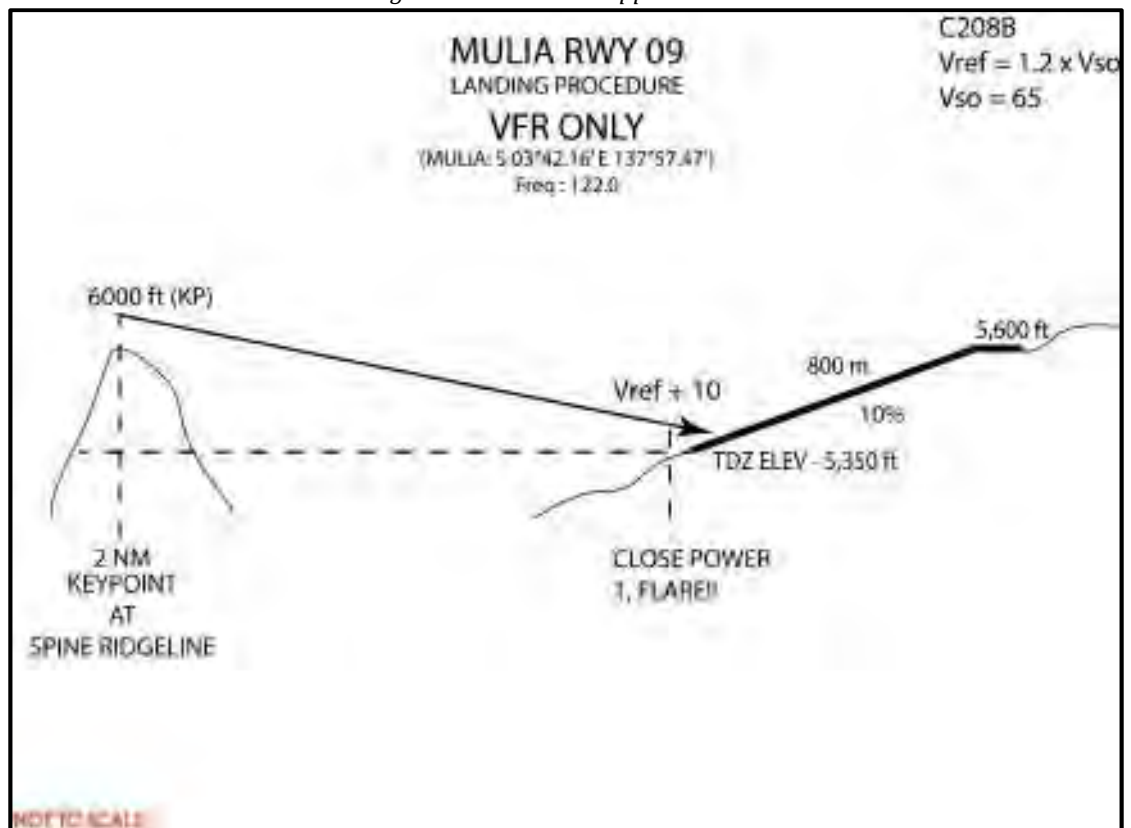


Figure MUL.2 - Mulia Landing Procedure



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PART C AREA, ROUTES AND AERODROMES

(Reverse the suggested inbound track)	<ol style="list-style-type: none"> 2. Above 92 kts: FLAPS – UP 3. Either climbing turn or climb with V_y to reach cruise altitude of 4. 13,000ft before high rising terrain 5. Follow track reversal
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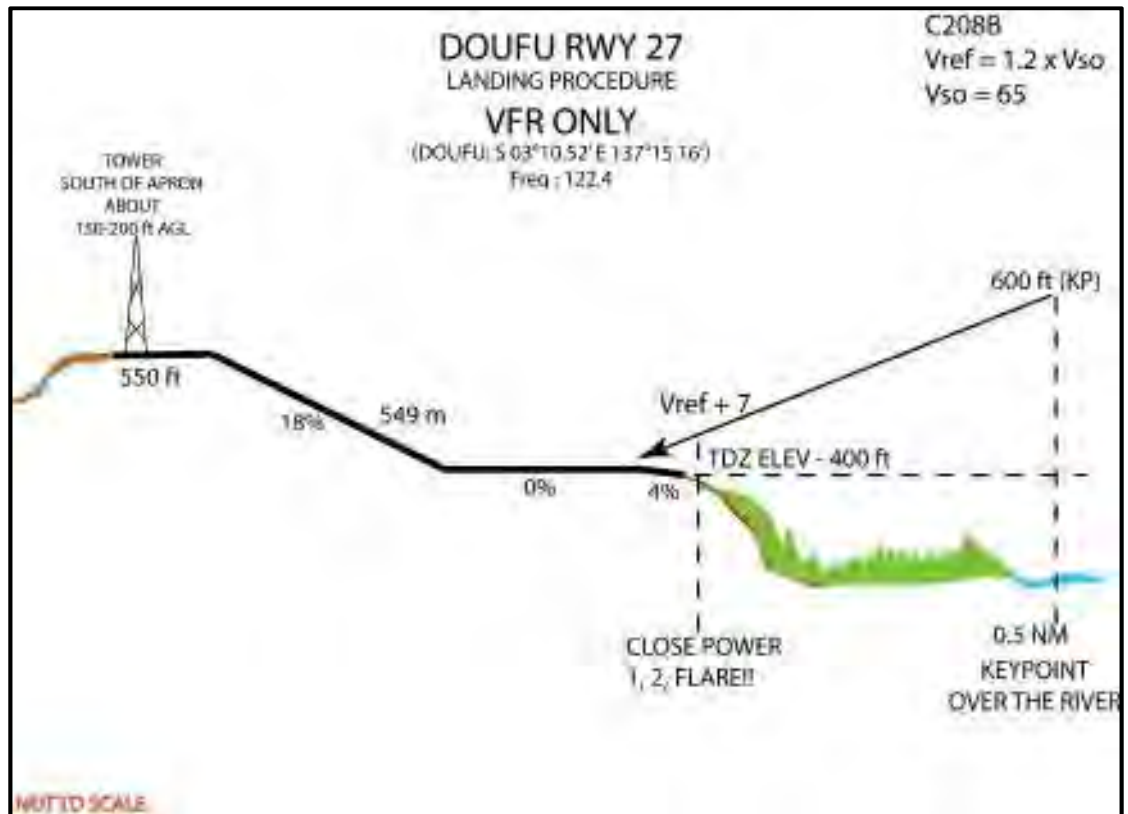


Figure DOU.1 – Doufu Landing Procedure

2.1.8 TIMIKA– BILOGAI

Timika to Bilogai (R310 TMK)						GPS Flight Plan 18	Flight Time 0:7	WAY 7216 WAYB 7222
WAY S 04° 31.88' E 136° 53.30'	TMK S 04° 31.02' E 136° 52.02'	NWGRD S 04° 19.50' E 136° 30.11'	TMBL1 S 04° 10.81' E 136° 36.32'	TMBL2 S 03° 58.80' E 136° 30.08'	TMBL3 S 03° 39.99' E 136° 38.21'	POG S 03° 46.13' E 136° 50.75'		
BIL / WAYB S 03° 44.10' E 137° 01.87'								
Reporting Points - 10NM TMK								
RADIO INFORMATION								
Stations: Timika ATIS 126.80, Kilangin TWR 118.30, Bilogai Radio 122.60 Nav Aids: TMK 112.70 Area Frequencies: 122.40								
TIMIKA TO BILOGAI				BILOGAI TO TIMIKA				
ALTITUDES								
Recommended Altitudes: 10500' 12500' (11500' after TMBL3)		VNAV: 8000' overhead BIL @ 600FPM		Recommended Altitudes: 10500' 12500'		VNAV: 1100' 2NM before TMK @ 800FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Mandatory overhead departure not below 3000' overhead TMK. Not below 10000' at TMBL1 Not below 12500' at TMBL2				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Enarotali, Komopo, Homeyo, Pogapa Reversal Procedures: At any time before TMBL3 in Non Visual altitude LEFT turn to establish back on track; At BIL activate FPL 7 and continue to PTY (SIN Pg. 58/MUL Pg.54/ILU Pg.51) At PTY either continue via Freeway and at MUL1 right turn to establish back on track or activate flatland route to Nabire (Pg.55) until VMC				Emergency Airstrips: Pogapa, Homeyo, Komopo, Enarotali Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Timika and potentially carry out an approach. Adhere to published MSA.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSA. 12500' at TMBL2 Not below 10000' at TMBL1 After TMBL1 VNAV profile as required Advise ATC of deviations from inbound radial.				

2.1.9 TIMIKA– DEKAI

Timika to Dekai (R098 TMK)				GPS Flight Plan —	Flight Time 1.0	WAYP 7216 DEK 8108
WAYP S 04° 31.88' E 138° 53.30'	TMK S 04° 31.02' E 136° 52.02'	DEK S 04° 51.35' E 139° 28.83'				
Reporting Points - 10NM TMK						
RADIO INFORMATION						
Stations: Timika ATIS 126.80, Kilangin TWR 118.30, Dekai INFO 122.65 Nav Aids: TMK 112.70 Area Frequencies: 122.90, 121.00						
TIMIKA TO DEKAI				DEKAI TO TIMIKA		
ALTITUDES						
Recommended Altitudes: 7500' 7500'	VNAV: 1200' 2NM before DEK @ 500FPM	Recommended Altitudes: 8500' 8500'	VNAV: 1100' 4NM before TMK @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met: NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Akimuga, Kenyam, Gearik Reversal Procedures: At any time above 1500' in descent right turn to establish back on track.			Emergency Airstrips: Gearik, Kenyam, Akimuga Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Timika and potentially carry out an approach. Adhere to published MSA.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1500' on VNAV profile. Must be visual below 1500'			Non Visual descent approved adhering to published MSA. Advise ATC of deviations from inbound radial.			



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2.1.10 TIMIKA– EWER

Timika to Ewer (R126 TMK)				GPS Flight Plan —	Flight Time 0.7	WAYV 7215 WAKG 8042
WAYV S 04° 31.88' E 136° 53.30'	TMK S 04° 31.02' E 138° 52.02'	EWR / WAKG S 05° 29.56' E 138° 05.12'				
Reporting Points - 10NM TMK						
RADIO INFORMATION						
Stations: Timika ATIS 126.80, Kilangin TWR 118.30 Nav Aids: TMK 112.70 Area Frequencies: 122.80, monitor 122.90						
TIMIKA TO EWER				EWER TO TIMIKA		
ALTITUDES						
Recommended Altitudes: 5500' 7500'	VNAV: 1000' 1NM before EWR @ 500FPM	Recommended Altitudes: 8500' 8500'	VNAV: 1100' 4NM before TMK @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met: NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Reversal Procedures: At any time above 1000' in descent.			Emergency Airstrips: Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Timika and potentially carry out an approach. Adhere to published MSA.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1000' on VNAV profile. Must be visual below 1000'.			Non Visual descent approved adhering to published MSA. Advise ATC of deviations from inbound radial.			

2.1.11 TIMIKA– KEPI

<u>Timika to Kepi (R126 TMK)</u>				GPS Flight Plan —	Flight Time 1.3	WAYP 7216 WAKP 8116
WAYP S 04° 31.80' E 138° 53.30'	TMK S 04° 31.02' E 138° 52.02'	WAKP / KEI S 06° 32.65' E 139° 19.92'				
Reporting Points - 10NM TMK						
RADIO INFORMATION						
Stations: Timika ATIS 126.80, Kilangin TWR 118.30, Kepi Radio 123.60 Nav Aids: TMK 112.70 Area Frequencies: 122.80						
TIMIKA TO KEPI				KEPI TO TIMIKA		
ALTITUDES						
Recommended Altitudes: 7500' 9500'	VNAV: 1100' 1NM before WAKP @ 500FPM	Recommended Altitudes: 8500' 10500'	VNAV: 1100' 4NM before TMK @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Ewer Reversal Procedures: At any time above 1100' in descent.			Emergency Airstrips: Ewer Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Timika and potentially carry out an approach. Adhere to published MSA.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1100' on VNAV profile. Must be visual below 1100'.			Non Visual descent approved adhering to published MSA. Advise ATC of deviations from inbound radial.			



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PART C AREA, ROUTES AND AERODROMES

2.2 FROM NABIRE

2.2.1 NABIRE – BILOGAI (VFR)



Description	Remark
Approach Procedure R/W 09 <i>(Refer to figure UGU.1 and UG U.3)</i>	<ol style="list-style-type: none"> Begin approach at "HOME0": <ul style="list-style-type: none"> Descend to 9,000 ft overhead "POGAPA" to avoid outbound traffic from Bilogai After overhead "POGAPA", continue descent to 8,500ft If clear, continue down to "SUGGAP" to 8,500 ft: <ul style="list-style-type: none"> Propeller – MAX (FULL FORWARD) After passing "SUGGAP" about 5 nm out of Bilogai: <ul style="list-style-type: none"> Flaps – 20° (TO/APP) All checks – completed Continue descent down to 7,700ft At 7,700 ft. and 2 nm out of Bilogai: <ul style="list-style-type: none"> Flaps – LAND Speed – 95 kts Aim a little off set to the right of final approach path for runway 09 Continue descent down to 7,350 ft: <ul style="list-style-type: none"> Target Key Point (KP) 1 nm final at 7,350 ft Speed – Vref---3 COMMITTED ONCE ON TOUCHDOWN: if go around is required, do it on final
	<ol style="list-style-type: none"> Begin approach at "HOME0": <ul style="list-style-type: none"> Descend to 9,000ft overhead "POGAPA" to avoid outbound traffic from Bilogai After overhead "POGAPA", continue descent to 8,500 ft If clear, continue down to "SUGGAP" to 8,500 ft: <ul style="list-style-type: none"> Propeller – MAX (FULL FORWARD) After passing "SUGGAP": <ul style="list-style-type: none"> Continue descent down to 7,700ft

	<ul style="list-style-type: none"> Join left downwind <ol style="list-style-type: none"> On left downwind at 7,700ft: <ul style="list-style-type: none"> Flaps – 20° (TO/APP) All checks – Completed On final: <ul style="list-style-type: none"> Speed – 90---95kts Flaps – LAND Target Key Point (KP) 1 nm final at 7,400 ft Watch for high tower on the right side Speed – V ref---3 COMMITTED ONCE TOUCHDOWN: if go--- around is required, do it to the right toward Hitadipa Valley
Departure Procedure R/W 09	<ol style="list-style-type: none"> Slightly slant to the right Left turning climb: <ul style="list-style-type: none"> Speed 92kts – Flaps --- UP Follow track back to Nabire
Departure Procedure R/W 27	<ol style="list-style-type: none"> Immediate left turn after departure due to rising terrain ahead Be very careful with the the high terrain on the left Follow track back to Nabire

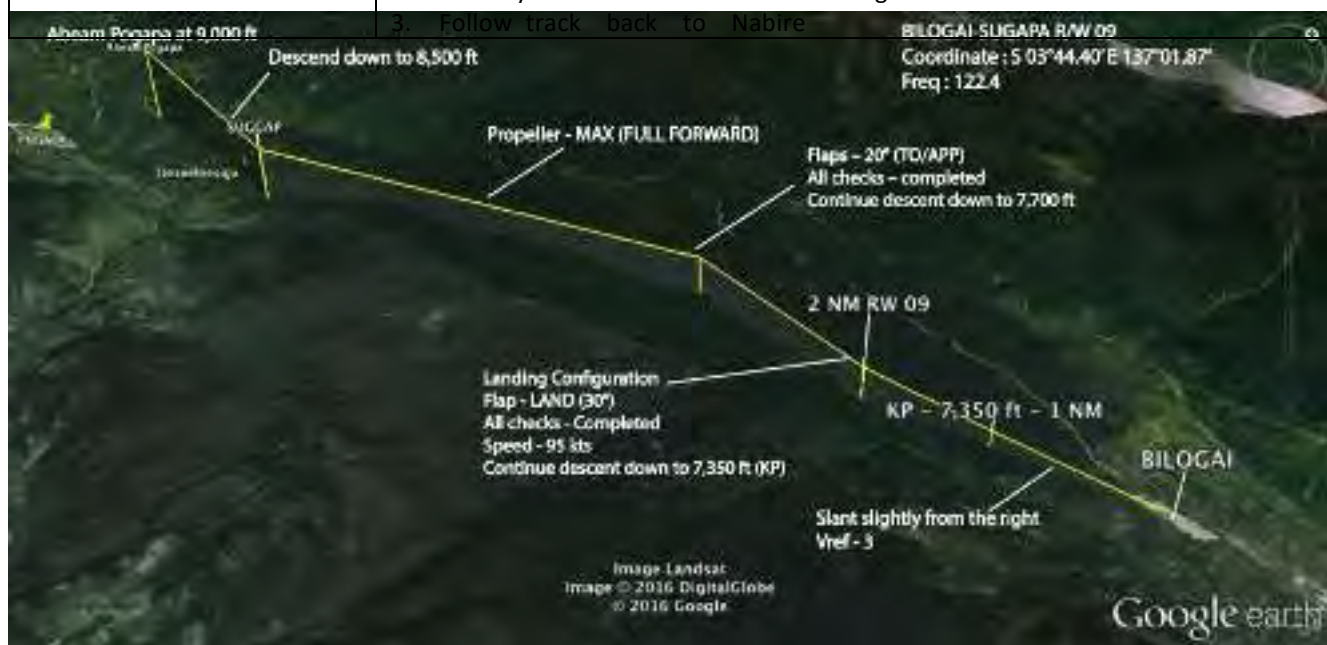
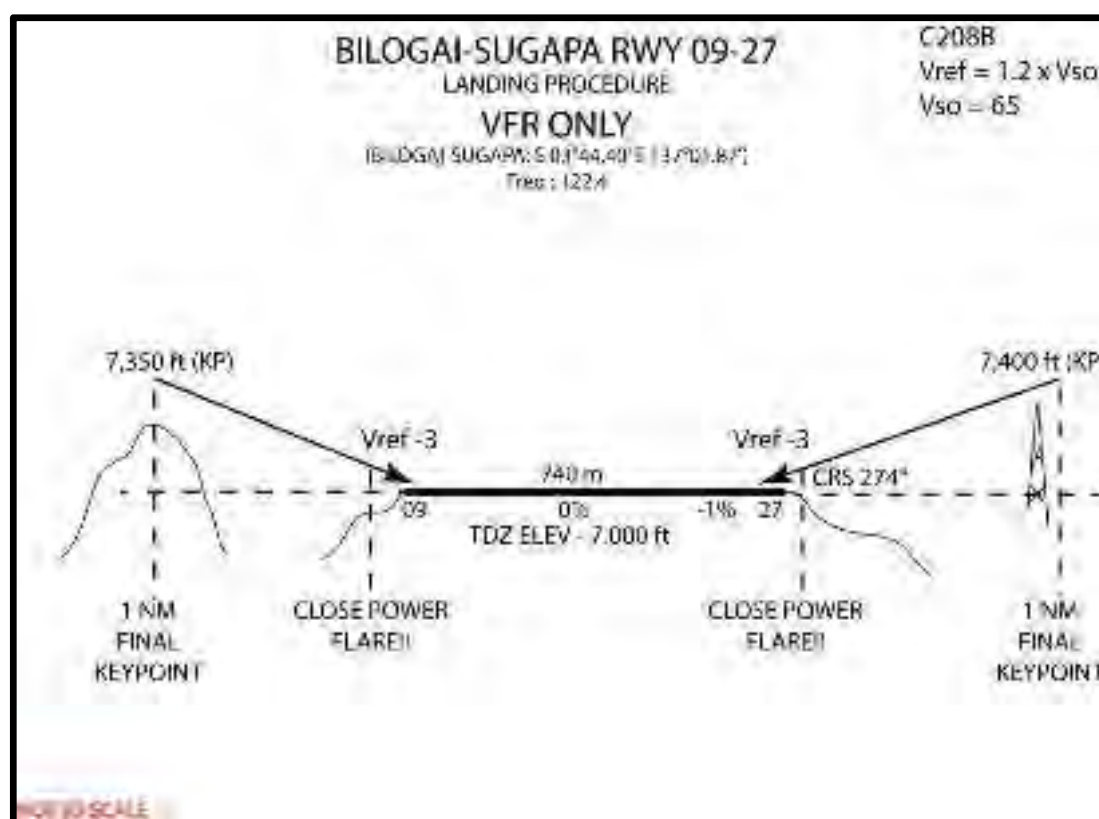


Figure UGU.1 – Bilogai-Sugapa R/W 09 Approach Path



Figure UGU.2 – Bilogai---Sugapa R/W 27 Approach Path



2.2.2 NABIRE – ILAGA (Via Beoga Pass)



Nabire---Ilaga via Beoga Pass

- Flight time (approximate): **1.1 hrs**
- Suggested inbound cruise altitude: **11,500 ft**
- Suggested inbound track:



Ilaga – Nabire via Beoga Pass

- Suggested outbound cruise altitude: **12,500 ft**
- Suggested outbound track:

Approach Procedure (Refer to figure ILA.4 and ILA.2)	<ol style="list-style-type: none"> 1. Begin descent 3 miles after "ILAWLK" down to 8,500 ft: <ul style="list-style-type: none"> • POWER – IDLE • Propeller – MAX (FULL FORWARD) • ROD – 1,500 fpm • Proceed to "ILAXDW" 2. Join left downwind r/w 25: <ul style="list-style-type: none"> • Flaps --- 20° (TO/APP) • All checks – Completed • Turn base prior to SMALL PEAK 3. At 7,900 ft: <ul style="list-style-type: none"> • Flaps – 30° (LAND) • 400 – 500 fpm ROD 4. Target Key Point (KP) and helipad at 7,760 ft: <ul style="list-style-type: none"> • Speed – 80 kts • WATCH OUT FOR UP---SLOPE ILLUSION • COMMITTED BELOW KP
Departure Procedure	<ol style="list-style-type: none"> 1. Follow the suggested outbound track 2. Speed 92: FLAPS – UP 3. Climb to 12,500 ft 4. Follow track back to Nabire



Figure ILA.4 – Ilaga Approach Path (from Nabire via Beoga Pass)

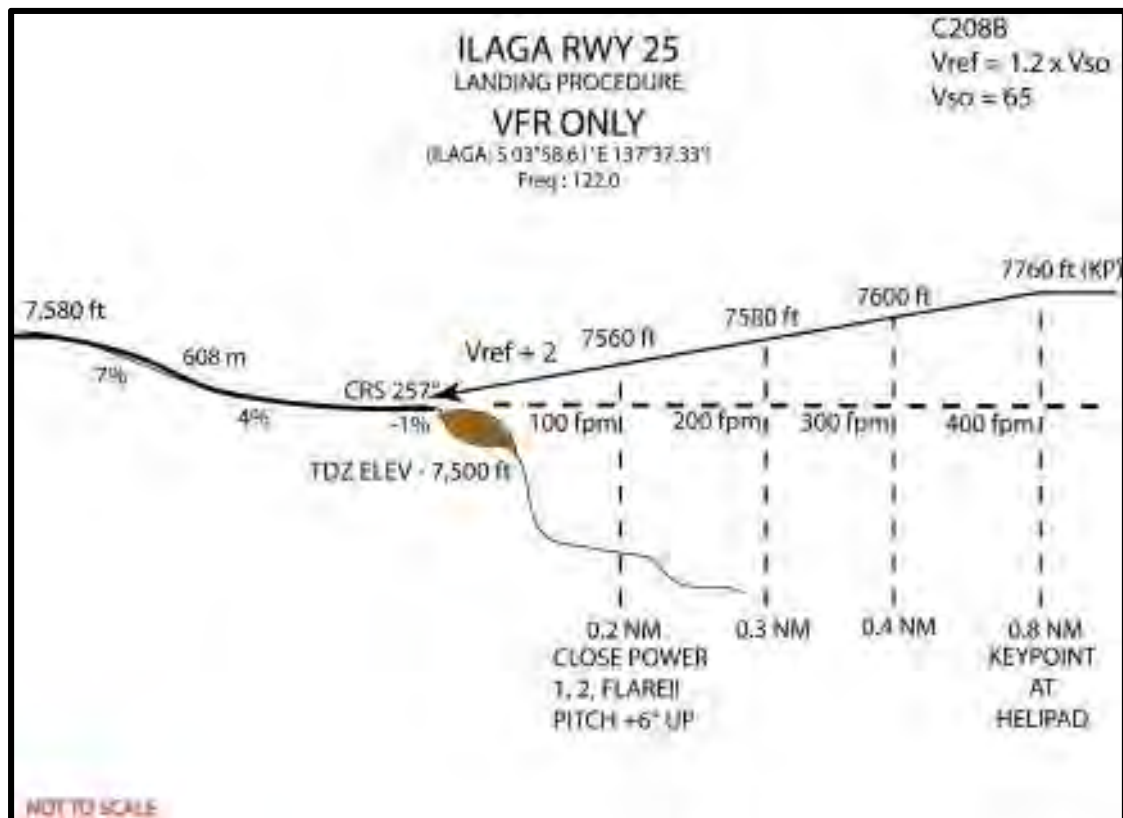


Figure ILA.5 – Ilaga Landing Procedure



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PART C AREA, ROUTES AND AERODROMES

2.2.3 NABIRE – SINAK (VIA POINT YANKEE)



Nabire---Sinak via Point Yankee

- Flight time (approximate): **1.1hrs**
- Suggested inbound cruise altitude: **11,500ft**
- Suggested outbound cruise altitude: **10,500ft**
- Suggested inbound track (track reversal maybe used for outbound flight):

Approach Procedure R/W 17 (Refer to figure SIN.4 and SIN.3)	<ol style="list-style-type: none"> 1. After 2 nm passing "BEOEPZ", descend down to 8,500ft 2. After "LUMO": <ul style="list-style-type: none"> • Continue descent • Propeller – MAX (FULL FORWARD) • Continue descent to 8,000ft 3. 5 nm from Sinak: <ul style="list-style-type: none"> • Flaps – 20° (TO/APP) • All checks – Completed 4. 2 nm from Sinak: <ul style="list-style-type: none"> • Speed – 95kts • Flaps – LAND 5. Target Key Point (KP) is 0.3 mile final at 7,150 ft: <ul style="list-style-type: none"> • Speed – V ref + 2 • COMMITTED ONCE TOUCHDOWN: if go---around is required, do it on final
Departure Procedure R/W 35	<ol style="list-style-type: none"> 1. Slant right after departure to avoid rising terrain on the left 2. 92kts: Flaps – UP 3. Follow track reversal back to Nabire



Figure SIN.4 - Sinak R/W 17 Approach Path (from Nabire)

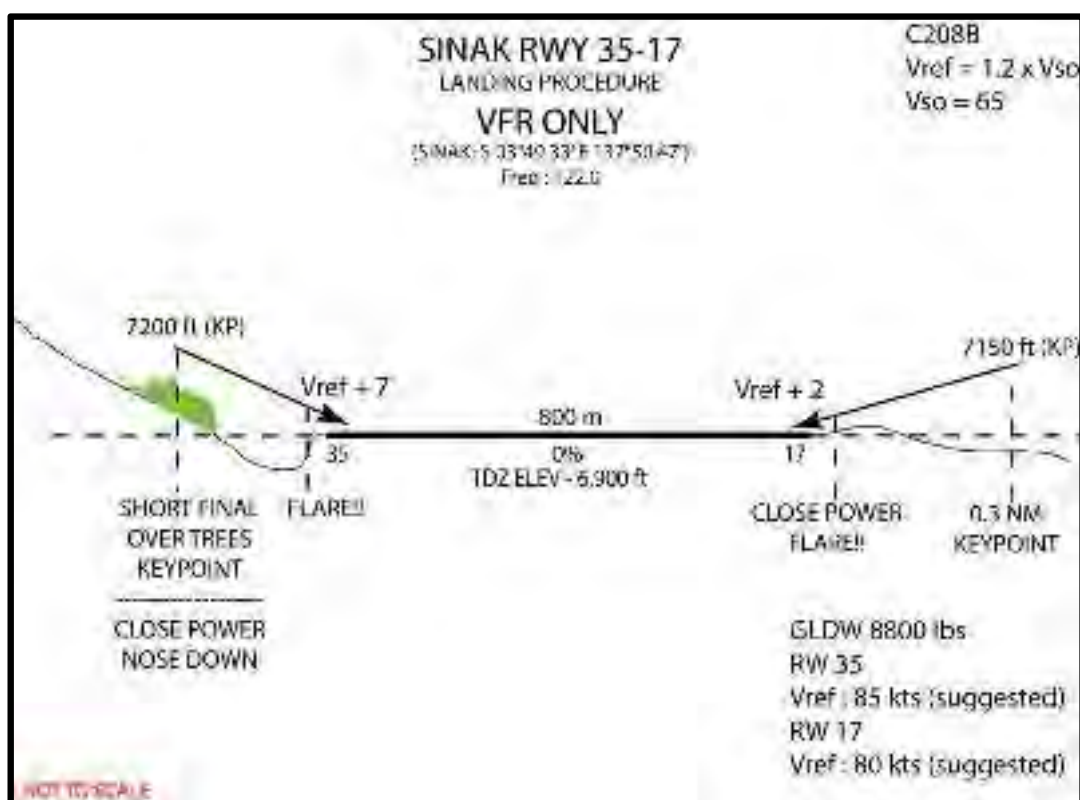


Figure SIN.3 - Sinak Landing Procedure

2.2.4 NABIRE – ENAROTALI



Figure ENA.1 – Enarotali R/W 26 Approach Path

<p>Approach Procedure (Refer to figure ENA.1 and ENA.2)</p>	<ol style="list-style-type: none"> 1. Begin descent at “ENARGP”: 2. Make a normal circuit/traffic pattern at 6,500 ft 3. On downwind r/w 26: <ul style="list-style-type: none"> • Propeller-MAX (FULL FORWARD) • Flaps – 20° (TO/APP) • All checks – Completed • Speed – 95 kts 4. On base: <ul style="list-style-type: none"> • Flaps – LAND • Speed – 90 kts 5. Target Key Point (KP): <ul style="list-style-type: none"> • mile final at 5,900ft for both runways
<p>Departure Procedure</p>	<ol style="list-style-type: none"> 4. Normal departure 5. Speed 92: Flaps – UP 6. Follow track reversal back to Nabire

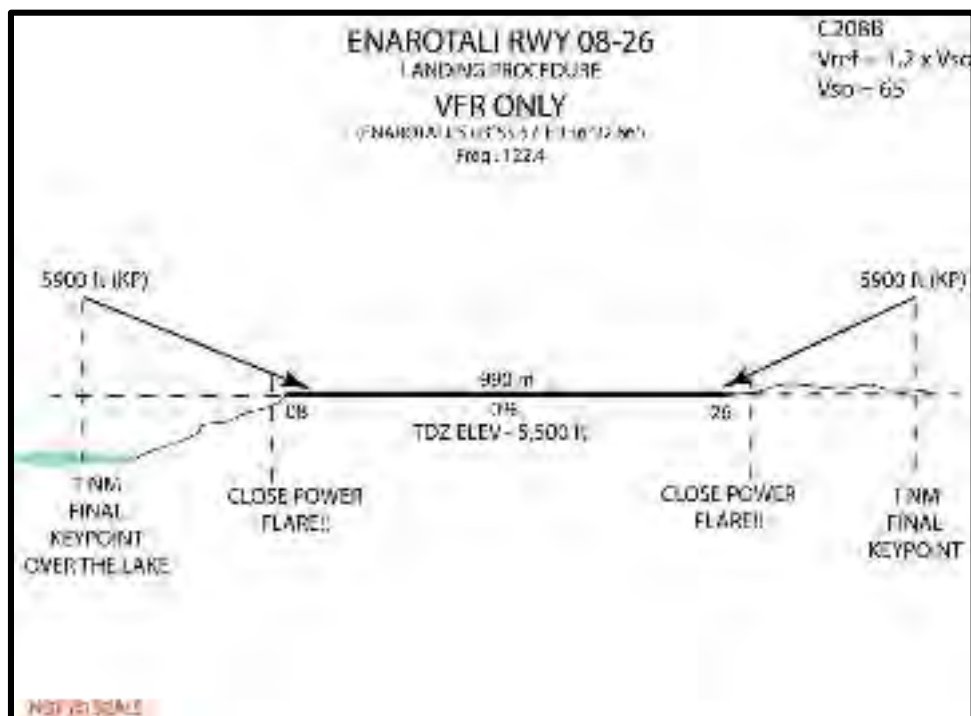


Figure ENA.2 – Enarotali Landing Procedure



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.2.5 NABIRE – BIAK

Nabire to Biak				GPS Flight Plan S	Flight Time 1.0	WABI 7200 WABB 7200
WABI S 03° 22.00' E 135° 30.00'	YAPEN S 01° 45.14' E 136° 21.08'	BIK S 01° 10.94' E 136° 05.17'	WABB S 01° 11.50' E 126° 06.90'			
Reporting Points - 10NM WABI						
RADIO INFORMATION						
Stations: Nabire TWR 122.30, Frans TWR 121.20, Biak ATIS 126.50 Nav Aids: BIK 112.50, IBIK 110.50, NBR 117.30, ZR 242 Area Frequencies: 124.00						
NABIRE TO BIAK				BIAK TO NABIRE		
ALTITUDES						
Recommended Altitudes: 11000' 11000'		VNAV: 1000' 2NM before BIK @ 700FPM		Recommended Altitudes: 10000' 10000'		VNAV: 1000' 2NM before WABI @ 500FPM
CLIMB PROCEDURES						
Non visual climb outs permitted if all 'Non-Visual Conditions' met.				Non visual climb outs require adherence with the specified MSA. Consider climb speed with relation to glide range.		
ENROUTE PROCEDURES						
Emergency Airstrips: Serui, Disused military airstrips Reversal Procedures: Possible at any time on track. Can leave published track visually provided glide range and descent conditions are adhered to.				Emergency Airstrips: Disused military airstrips, Serui Reversal Procedures: Possible at any time on track. Right turns advised if reversing whilst on descent.		
DESCENT/ARRIVAL PROCEDURES						
Non Visual descent approved adhering to published MSAs and the following company restriction: Not below 5500ft - 22 DME Not below 2500ft -15 DME Not below 1000ft - 3 DME				Non visual descent approved to 1000' on VNAV. After at pilot's discretion.		



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PART C AREA, ROUTES AND AERODROMES

2.2.6 NABIRE – BUGALAGA

Nabire to Bugalaga				GPS Flight Plan 6 / 7	Flight Time 0.5	WAB /209 BGL 0000
WAB S 03° 22.00' E 135° 30.00'	PTB S 03° 30.39' E 135° 54.69'	PTE S 03° 37.67' E 136° 20.94'	BGL S 03° 37.40' E 136° 35.79'			
Reporting Points - PTB - Point Bravo, PTE - Point Echo						
RADIO INFORMATION						
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30 ZR 242 Area Frequencies: 122.40						
NABIRE TO BUGALAGA				BUGALAGA TO NABIRE		
ALTITUDES						
Recommended Altitudes: 9500' 11500'		VNAV: 7000' Overhead BGL @ 500FPM		Recommended Altitudes: 10500' 12500'		VNAV: 1000' 2NM before WAB @ 500FPM
CLIMB PROCEDURES						
Climb visually to at least 3000' overhead Nabire before climbing out in non visual conditions. Non visual climb outs permitted if all 'Non-Visual Conditions' met. Minimum 8500' at PTB				Visual only climb out. Be established at required altitude before entering non visual conditions.		
ENROUTE PROCEDURES						
Emergency Airstrips: Siwiro, Bayabiru, Amano, Youtadi, Pagamba Reversal Procedures: At PTB, PTE - Left or right turn back on to track.				Emergency Airstrips: Pagamba, Youtadi, Amano, Bayabiru, Siwiro Reversal Procedures: Not very applicable as the most likely place to get visual will be in Nabire. At PTB, PTE - Left or right turn on to track.		
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Visual Descent only after PTB otherwise follow "Nabire Non Visual Descent" on pg. 42		

2.2.7 NABIRE – DOUFU

Nabire to Doufu				GPS Flight Plan #	Flight Time 0.8	WAB 7208 DOF 0000
WAB S 03° 22.00' E 135° 30.00'	COAST S 03° 12.72' E 135° 34.05'	SWA S 03° 02.20' E 136° 27.64'	DOF S 03° 10.52' E 137° 15.16'			
Reporting Points - 10NM WAB, SWA.						
RADIO INFORMATION						
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 124.00						
NABIRE TO DOUFU				DOUFU TO NABIRE		
ALTITUDES						
Recommended Altitudes: 7000' 9000'	VNAV: 1300' overhead FAO @ 500FPM	Recommended Altitudes: 8000' 10000'	VNAV: 1000' 1NM before WAB @ 500FPM			
CLIMB PROCEDURES						
Non visual climb outs permitted if all 'Non-Visual Conditions' met.		Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES						
Emergency Airstrips: Siwa Reversal Procedures: Left or Right turn at any time on track.		Emergency Airstrips: Siwa Reversal Procedures: Left or right turn at any time.				
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted on VNAV to 2000' at NE sector from from Doufu. Conditions must be visual after this point. Mandatory overhead join.		Non visual descent on VNAV to 1000' then at pilot's discretion. Right turns recommended whilst on descent for reversals.				

2.2.8 NABIRE – FAOWI

Nabire to Faowi					GPS Flight Plan 6	Flight Time 1.0	WABJ 7208 FACJ 8027
WABJ S 03° 22.00' E 135° 30.00'	COAST S 03° 12.72' E 135° 34.08'	SWA S 03° 02.20' E 136° 22.84'	FAO1 S 03° 03.38' E 137° 44.13'	FAO S 03° 13.88' E 137° 43.56'			
Reporting Points - 10NM WABJ, SWA.							
RADIO INFORMATION							
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 124.00							
NABIRE TO FAOWI				FAOWI TO NABIRE			
ALTITUDES							
Recommended Altitudes: 0500' 9500'	VNAV: 1300' overhead FAO @ 500FPM		Recommended Altitudes: 10500' 10500'	VNAV: 1000' 1NM before WABJ @ 500FPM			
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met.				Visual only climb out: Be established at required altitude before entering non visual conditions			
ENROUTE PROCEDURES							
Emergency Airstrips: Doutu, Sefoidi Reversal Procedures: Left or Right turn at any time on track.				Emergency Airstrips: Sefoidi, Doutu Reversal Procedures: Left or right turn at any time.			
DESCENT/ARRIVAL PROCEDURES							
Non visual descent to 2500' at FAO1. If not visual, left turn and intercept track back to Nabire.				Non visual descent on VNAV to 1000' then at pilot's discretion. Right turns recommended whilst on descent for reversals.			

2.2.9 NABIRE – ILU

Nabire to Ilu via the Freeway					GPS Flight Plan 7	Flight Time 1.3	WABI 7200 ILU 6000
WABI S 03° 22.00' E 135° 30.00'	PTB S 03° 30.39' E 136° 54.59'	PTE S 03° 37.67' E 136° 20.94'	POG S 03° 45.13' E 136° 50.75'	BIL / WAYB S 03° 44.40' E 137° 01.87'	HIT S 03° 44.06' E 137° 07.62'	PTY S 03° 38.90' E 137° 21.60'	
BEODR S 03° 40.90' E 137° 30.23'	MUL2 S 03° 39.42' E 137° 55.47'	MUL1 S 03° 40.22' E 138° 00.00'	ILU1 S 03° 42.37' E 138° 04.19'	ILU S 03° 42.47' E 138° 11.97'			
Reporting Points : PTB : Point Bravo, PTE : Point Echo, BIL : Bilogai, PTY : Point Yankee							
RADIO INFORMATION							
Stations: Nabire TWR 122.30, Bilogai Radio 122.60, Mulia Radio 122.10 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 122.40, 122.00							
NABIRE TO ILU				ILU TO NABIRE			
ALTITUDES							
Recommended Altitudes: 11500' 13500'		VNAV 7200' overhead ILU @ 500FPM		Recommended Altitudes: 10500' 12500'		VNAV 1000' 2NM before WABI @ 500FPM	
CLIMB PROCEDURES							
Climb visually to at least 8000' overhead Nabire before climbing out in non visual conditions. Non-visual climb outs permitted if all 'Non-Visual Conditions' met. Minimum 8500' at PTB.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Siwiro, Bayabiru, Amano, Bogobaida, Bugalaga, Poggamba, Pogapa, Bilogai, Bina, Lumo, Mulia. At PTB, PTE - Left or right turn back on to track. At POG - Left turn back on to track. At BIL - Left turn back on to track. At PTY - Left turn on track or flatlands to Nabire. At ILU - Left turn overhead back on to track. At ILU - Activate Mulia to Wamena via Bokondini Pass and at SWART left turn back on to track to Nabire.				Emergency Airstrips: Mulia, Lumo, Bina, Bilogai, Pogapa, Poggamba, Bugalaga, Bogobaida, Amano, Bayabiru, Siwiro Reversal Procedures: Not very applicable as the most likely place to get visual will be in Nabire. At PTY : Right turn to Nabire via flatlands. At PTB, PTE - Left or right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				8500' at PTB; after that either VISUAL descent or if still IMC intercept R080 NBR at 20DME and follow MSA restriction. At PIC discretion you can also follow "Nabire Non Visual Descent" on pg.42.			

<u>Nabire to Ilu via Flatlands</u>						GPS Flight Plan —	Flight Time 1.4	WABI 7209 ILU 8090
WABI S 03° 22.00' E 135° 30.00'	COAST S 03° 12.72' E 135° 34.09'	SWA S 03° 02.20' E 136° 22.64'	SEF S 03° 11.05' E 136° 54.63'	PTY S 03° 38.96' E 137° 21.08'	MUL2 S 03° 39.42' E 137° 55.47'	MUL1 S 03° 40.22' E 138° 00.00'		
ILU1 S 03° 42.37' E 138° 04.19'	ILU S 03° 42.47' E 138° 11.97'							
Reporting Points - 10NM WABI, SIWA, PTY - Point Yankee								
RADIO INFORMATION								
Stations: Nabire TWR 122.30, Mulia Radio 122.10 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 124.00, 122.00								
NABIRE TO ILU					ILU TO NABIRE			
ALTITUDES								
Recommended Altitudes: 11500' 13500'		VNAV: 7200' overhead ILU @ 500FPM		Recommended Altitudes: 10500' 12500'		VNAV: 1000' 2NM before WABI @ 500FPM		
CLIMB PROCEDURES								
Non visual climb out: permitted if all 'Non-Visual Conditions' met.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Doufu, Sefoidi, Bina, Lumo, Mulia Reversal Procedures: Left or Right turn at any time on track until PTY At ILU - Left turn overhead back on to track. At ILU - Activate Mulia to Wamena via Bokondini Pass and at SWART left turn back on to track to Nabire.				Emergency Airstrips: Mulia, Lumo, Bina, Sefoidi, Doufu Reversal Procedures: Not very applicable as the most likely place to get visual will be in Nabire.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non visual descent on VNAV to 1000' then at pilot's discretion. Right turns recommended whilst on descent for reversals.				



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PART C AREA, ROUTES AND AERODROMES

2.2.10 NABIRE – MOANAMANI

Nabire to Moanamani					GPS Flight Plan —	Flight Time 0.8	WABJ /209 MOA 7:04
WABJ S 03° 22.00' E 135° 30.00'	PTB S 03° 30.39' E 135° 54.50'	ENAGP S 03° 48.09' E 136° 15.23'	MOAGP S 03° 53.39' E 136° 15.96'	MOA S 04° 00.42' E 136° 02.24'			
Reporting Points - PTB - Point Bravo, EGAP - Enarotali Gap							
RADIO INFORMATION							
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 122.40							
NABIRE TO MOANAMANI				MOANAMANI TO NABIRE			
ALTITUDES							
Recommended Altitudes: 9500' Visual only		VNAV: 6000' 1NM before MOA @ 500FPM		Recommended Altitudes: 10500' Visual only		VNAV: 10000' 2NM before WABJ @ 500FPM	
CLIMB PROCEDURES							
Climb visually to at least 3000' overhead Nabire before climbing out in non visual conditions. Non visual climb outs permitted if all "Non-Visual Conditions" met. Must be visual after PTB.				Visual only climb out.			
ENROUTE PROCEDURES							
Emergency Airstrips: Dado Reversal Procedures: Not applicable, visual only route.				Emergency Airstrips: Dado Reversal Procedures: Not applicable, visual only route.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or sleeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				8500' at PTB, after that either VISUAL descent or if still IMC intercept R080 NBR at 20DME and follow MSA restriction At PIC discretion you can also follow "Nabire Non Visual Descent" on pg. 42			

2.2.11 NABIRE – MULIA

<u>Nabire to Mulia via the Freeway</u>					GPS Flight Plan 7	Flight Time 1.2	WAB /209 WAWA BQ13
WAB S 03° 22.00' E 135° 30.00'	PTB S 03° 30.39' E 135° 54.69'	PTE S 03° 37.67' E 136° 20.94'	POG S 03° 45.13' E 136° 50.75'	BIL / WAYB S 03° 44.40' E 137° 01.87'	HIT S 03° 44.08' E 137° 07.02'	PTY S 03° 38.98' E 137° 21.08'	
BECDR S 03° 40.90' E 137° 30.23'	MUL2 S 03° 39.42' E 137° 55.47'	MUL3 S 03° 42.19' E 137° 54.69'	MUL / WAWA S 03° 42.16' E 137° 57.47'				
Reporting Points - PTB - Point Bravo, PTE - Point Echo, BIL - Bilogai, PTY - Point Yankee							
RADIO INFORMATION							
Stations: Nabire TWR 122.30, Bilogai Radio 122.60, Mulia Radio 122.10 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 122.40, 122.00							
NABIRE TO MULIA				MULIA TO NABIRE			
ALTITUDES							
Recommended Altitudes: 11500' 11500'		VNAV: 6000' at MUL3 @ 500FPM		Recommended Altitudes: 10500' 12500'		VNAV: 1000' 2NM before WAB @ 500FPM	
CLIMB PROCEDURES							
Climb visually to at least 3000' overhead Nabire before climbing out in non visual conditions. Non visual climb outs permitted if all 'Non-Visual Conditions' met. Minimum 8500' at PTB				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Siwiro, Bayabiru, Amaro, Bogobaida, Bugalaga, Pogamba, Pogapa, Bilogai, Bina, Lumo. At PTB, PTE - Left or right turn back on to track. At POG - Left turn back on to track. At BIL - Left turn back on to track. At PTY - Left turn on track or flatlands to Nabire. At MUL2 - Right turn back on to track.				Emergency Airstrips: Lumo, Bina, Bilogai, Pogapa, Pogamba, Bugalaga, Bogobaida, Amaro, Bayabiru, Siwiro Reversal Procedures: Not very applicable as this most likely place to get visual will be in Nabire. At PTY - Right turn to Nabire via flatlands. At PTB, PTE - Left or right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when applicable: BlueSky message OPS NORMAL received. Satellite phone is on board and contact with Mulia Radio established before the approach.				8500' at PTB, after that either VISUAL descent or if still IMC intercept R080 NBR at 20DME and follow MSA restriction At PIC discretion you can also follow "Nabire Non Visual Descent" on pg. 42			

Nabire to Mulia via Flatlands						GPS: Flight Plan —	Flight Time 1.3	WAB: 7209 WAVA 8013
WAB: S 03° 22.00' E 135° 30.00'	COAST: S 03° 12.72' E 135° 34.09'	SWA: S 03° 02.20' E 136° 22.64'	SEF: S 02° 11.05' E 136° 54.63'	PTY: S 02° 38.96' E 137° 21.08'	BEODR: S 03° 40.90' E 137° 30.23'	MUL2: S 03° 39.42' E 137° 55.47'		
MUL3: S 03° 42.19' E 137° 54.89'	MUL / WAVA: S 03° 42.16' E 137° 57.47'							
Reporting Points - 10NM WAB, SIWA, PTY - Point Yankee								
RADIO INFORMATION								
Stations: Nabire TWR 122.30, Mulia Radio 122.10 Nav Aids: NBFI 117.30, ZR 242 Area Frequencies: 124.00, 122.00								
NABIRE TO MULIA				MULIA TO NABIRE				
ALTITUDES								
Recommended Altitudes: 11500' 11500'		VNAV: 6000' at MUL3 @ 500FPM		Recommended Altitudes: 10500' 12500'		VNAV: 1000' 2NM before WAB @ 500FPM		
CLIMB PROCEDURES								
Non visual climb outs permitted if all 'Non-Visual Conditions' met.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Doufu, Sefoidi, Bina, Lumo, Mulia Reversal Procedures: Left or Right turn at any time on track until PTY. At MUL2 - Right turn back on to track.				Emergency Airstrips: Lumo, Bina, Sefoidi, Doufu Reversal Procedures: Not very applicable as the most likely place to get visual will be in Nabire.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when applicable: BlueSky message OPS NORMAL received. Satellite phone is on board and contact with Mulia Radio established before the approach.				Non visual descent on VNAV to 1000' then at pilot's discretion. Right turns recommended whilst on descent for reversals.				



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2.2.12 NABIRE – POGAMBA

Nabire to Pagamba				GPS Flight Plan 6/7	Flight Time 0.8	WAB 7200 POB 0900
WAB S 03° 22.00' E 135° 30.00'	PTB S 03° 30.39' E 136° 04.59'	PTE S 03° 37.67' E 136° 20.94'	POB S 03° 38.58' E 136° 40.71'			
Reporting Points - PTB - Point Bravo, PTE - Point Echo						
RADIO INFORMATION						
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30 ZR 242 Area Frequencies: 122.40						
NABIRE TO PAGAMBA			PAGAMBA TO NABIRE			
ALTITUDES						
Recommended Altitudes: 9500' 11500'	VNAV: 7000' Overhead BGL @ 500FPM		Recommended Altitudes: 10500' 12500'	VNAV: 1000' 2NM before WAB @ 500FPM		
CLIMB PROCEDURES						
Climb visually to at least 8000' overhead Nabire before climbing out in non visual conditions. Non-visual climb-outs permitted if all 'Non-Visual Conditions' met. Minimum 8500' at PTB.			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Siwiro, Bayabiru, Amaro, Youtadi, Bugalaga Reversal Procedures: At PTB, PTE - Left or right turn back on to track.			Emergency Airstrips: Bugalaga, Youtadi, Amaro, Bayabiru, Siwiro Reversal Procedures: Not very applicable as the most likely place to get visual will be in Nabire. At PTB, PTE - Left or right turn on to track.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			8500' at PTB, after that either VISUAL descent or if still IMC intercept R080 NBR at 20DME and follow MSA restriction. At PIC discretion you can also follow "Nabire Non Visual Descent" on pg. 42			



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2.2.13 NABIRE – POGAPA

Nabire to Pogapa				GPS: Flight Plan 6 / 7	Flight Time 0.7	WAB: 7209 POG 7223
WAB: S 03° 22.00' E 135° 30.00'	PTB: S 03° 30.39' E 135° 54.59'	PTE: S 03° 37.67' E 136° 20.54'	WAYS / POG: S 03° 45.13' E 136° 50.75'			
Reporting Points - PTB - Point Bravo, PTE - Point Echo, Homeo						
RADIO INFORMATION						
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30 ZR 242 Area Frequencies: 122.40						
NABIRE TO POGAPA				POGAPA TO NABIRE		
ALTITUDES						
Recommended Altitudes: 9500' 11500'	VNAV: 7000' Overhead BIL @ 500FPM		Recommended Altitudes: 10500' 12500'	VNAV: 1000' 2NM before WAB @ 500FPM		
CLIMB PROCEDURES						
Climb visually to at least 3000' overhead Nabire before climbing out in non visual conditions. Non visual climb outs permitted if all 'Non-Visual Conditions' met, Minimum 8500' at PTB			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Siwiro, Bayabiru, Amano, Bogobaida, Bugalaga, Pagamba Reversal Procedures: At PTB, PTE - Left or right turn back on to track. At POG - Left turn back on to track.			Emergency Airstrips: Pagamba, Bugalaga, Bogobaida, Amano, Bayabiru, Siwiro Reversal Procedures: Not very applicable as the most likely place to get visual will be in Nabire. At PTB, PTE - Left or right turn on to track.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			8500' at PTB, after that either VISUAL descent or if still IMC intercept R080 NBR at 20DME and follow MSA restriction. At PIC discretion you can also follow "Nabire Non Visual Descent" on pg. 42			

2.2.14 NABIRE – WAGHETE

Nabire to Waghete					GPS Flight Plan B	Flight Time 0.7	WABI 7200 WAG 7200
WABI S 03° 22.00' E 135° 30.00'	PTB S 03° 30.39' E 135° 54.58'	ENAGP S 03° 48.09' E 136° 15.23'	ENA S 03° 55.67' E 136° 22.88'	WAG / WABA S 04° 03.31' E 136° 17' 13'			
Reporting Points - PTB, EGAP							
RADIO INFORMATION							
Stations: Nabire TWR 122.30 Nav Aids: NBR 117.30, ZR 242 Area Frequencies: 122.40							
NABIRE TO WAGHETE				WAGHETE TO NABIRE			
ALTITUDES							
Recommended Altitudes: 9500' 11500'	VNAV: 8500' 1NM before WAG @ 600FPM		Recommended Altitudes: 10500' 12500'	VNAV: 1000' 2NM before WABI @ 500FPM			
CLIMB PROCEDURES							
Climb visually to at least 3000' overhead Nabire before climbing out in non visual conditions. Non visual climb outs permitted if all 'Non-Visual Conditions' met Minimum 8500' at PTB				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Siwiro, Dado, Enarotali Reversal Procedures: ENA - Left / Right turn on to track.				Emergency Airstrips: Enarotali, Dado, Siwiro Reversal Procedures: Not applicable, most likely track to Nabire to get visual.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required.				8500' at PTB, after that either VISUAL descent or if still IMC intercept R080 NBR at 20DME and follow MSA restriction At PIC discretion you can also follow "Nabire Non Visual Descent" on pg. 42			



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PART C AREA, ROUTES AND AERODROMES

2.3 FROM TANAH MERAH

2.3.1 TANAH MERAH – OKSIBIL

Tanah Merah to Oksibil				GPS: Flight Plan 10	Flight Time 0.6	WAKT 8120 WAJO 8015
WAKT S 06° 05.83' E 140° 16.11'	OKS4 S 05° 05.38' E 140° 43.22'	OKS3 S 04° 53.71' E 140° 40.50'	OKS / WAJO S 04° 54.47' E 140° 37.78'			
Reporting Points -						
RADIO INFORMATION						
Stations: Tanah Merah TWR 123.50, Oksibil TWR 122.15 Nav Aids: Area Frequencies: 122.70						
TANAH MERAH TO OKSIBIL				OKSIBIL TO TANAH MERAH		
ALTITUDES						
Recommended Altitudes: 9000' 11000'	VNAV: 5000' 1NM before OKS @ 600FPM	Recommended Altitudes: 10000' 10000'	VNAV: 1100' 2NM before WAKT @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000' AGL			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Iwur Reversal Procedures: At any point left turn to establish back on track until WAJO at IMC altitude.			Emergency Airstrips: Iwur Reversal Procedures: At any time after OKS3 and before 2000'			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only			Non visual descent permitted to 1500'. Must be visual below 1500'. Start descent only at 10NM past OKS4.			

2.3.2 TANAH MERAH – DEKAI

Tanah Merah to Dekai						GPS Flight Plan —	Flight Time 0.5	WAKT 0120 DEK 8108
WAKT S 06° 05.83' E 140° 18.11'	DEK S 04° 51.35 E 139° 28.93'							
Reporting Points -								
RADIO INFORMATION								
Stations: Tanah Merah TWR 123.50, Dekai INFO 122.65 Nav Aids: Area Frequencies: 122.80								
TANAH MERAH TO DEKAI				DEKAI TO TANAH MERAH				
ALTITUDES								
Recommended Altitudes: 6500' 6500'	VNAV: 1200' overhead DEK @ 600FPM	Recommended Altitudes: 5500' 5500'	VNAV: 1100' 2NM before WAKT @ 600FPM					
CLIMB PROCEDURES								
Non visual climb out permitted if all 'Non-Visual Conditions' met: NOT below 1000' AGL				Non visual climb out permitted if all 'Non-Visual Conditions' met: NOT below 1000' AGL				
ENROUTE PROCEDURES								
Emergency Airstrips: Kouh, Bomakia Reversal Procedures: At any time				Emergency Airstrips: Bomakia, Kouh Reversal Procedures: At any time				
DESCENT/ARRIVAL PROCEDURES								
Non visual descent permitted to 1500'. Must be visual below 1500'.				Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.				



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PART C AREA, ROUTES AND AERODROMES

2.4 FROM MARAUKE

2.4.1 MARAUKE – KEPI

Merauke to Kepi				GPS Flight Plan —	Flight Time 0.9	WAKH 5111 WAKP 8115
WAKK S 06° 31.30' E 140° 25.00'	MKE S 08° 31.38' E 140° 25.03'	WAKP S 08° 32.55' E 138° 19.92'				
Reporting Points						
RADIO INFORMATION Stations: Merauke ATIS 126.10, Mopah TWR 122.20, Kepi INFO 123.60 Nav Aids: MKE 115.8 Area Frequencies: 122.80						
MERAUKE TO KEPI				KEPI TO MERAUKE		
ALTITUDES						
Recommended Altitudes: 8500' 10500'	VNAV: 1000' overhead WAKP @ 600FPM	Recommended Altitudes: 9500' 11500'	VNAV: 1000' 2NM before MKE @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Bade Reversal Procedures: At any time.			Emergency Airstrips: Bade Reversal Procedures: At any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1500'. Must be visual below 1500'			Non Visual descent approved adhering to published MSAs.			



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PART C AREA, ROUTES AND AERODROMES

2.4.2 MARAUKE – BADE

Merauke to Bada						GPS Flight Plan —	Flight Time 0.7	WAKE 0111 WAKE 0105
WAKE S 08° 31.30' E 140° 25.00'	MKE S 08° 31.35' E 140° 25.03'	WAKE S 07° 10.55' E 130° 34.99'						
Reporting Points -								
RADIO INFORMATION								
Stations: Bada INFO 122.30 Nav Aids: Area Frequencies: 122.60								
MERAUKE TO BADE				BADE TO MERAUKE				
ALTITUDES								
Recommended Altitudes: 8500' 8500'		VNAV: 1000' overhead WAKE @ 600FPM		Recommended Altitudes: 7500' 9500'		VNAV: 1000' 2NM before MKE @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA.				Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'				
ENROUTE PROCEDURES								
Emergency Airstrips: Kopi Reversal Procedures: At any time.				Emergency Airstrips: None Reversal Procedures: At any time.				
DESCENT/ARRIVAL PROCEDURES								
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.				Non Visual descent approved adhering to published MSAs.				



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PART C AREA, ROUTES AND AERODROMES

2.4.3 MARAUKE – BOMAKIA

Merauke to Bomakia				GPS Flight Plan —	Flight Time 1.1	WAKL B113 WAKL B010
WAKX S 08° 31.30' E 140° 25.00'	MKE S 08° 31.36' E 140° 25.03'	WAKL S 05° 48.40' E 139° 52.06'				
Reporting Points –						
RADIO INFORMATION						
Stations: Merauke ATIS 126.10, Mopah TWR 122.20 Nav Aids: MKE 115.8 Area Frequencies: 122.80						
MERAUKE TO BOMAKIA				BOMAKIA TO MERAUKE		
ALTITUDES						
Recommended Altitudes: 8500' 10500'	VNAV: 1100' overhead WAKL @ 600FPM	Recommended Altitudes: 9500' 11500'	VNAV: 1000' 2NM before MKE @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Kepi, Badé Reversal Procedures: At any time.			Emergency Airstrips: Badé, Kepi Reversal Procedures: At any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.			Non Visual descent approved adhering to published MSAs.			



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PART C AREA, ROUTES AND AERODROMES

2.4.4 MARAUKE – EWER

Merauke to Ewer				GPS Flight Plan —	Flight Time 1.7	WAKK 8111 WAKQ 8042
WAKK S 08° 31.30' E 140° 25.00'	MKE S 08° 31.36' E 140° 25.03'	WAKQ S 05° 29.56' E 138° 05.12'				
Reporting Points -						
RADIO INFORMATION						
Stations: Merauke ATIS 126.10, Mopah TWR 122.20 Nav Aids: MKE 115.8 Area Frequencies: 122.80						
MERAUKE TO EWER				EWER TO MERAUKE		
ALTITUDES						
Recommended Altitudes: 8500' 10500'	VNAV: 1000' overhead EWR @ 600FPM	Recommended Altitudes: 9500' 11500'	VNAV: 1000' 2NM before MKE @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met: NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Kepi, Bade Reversal Procedures: At any time.			Emergency Airstrips: Bade, Kepi Reversal Procedures: At any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.			Non Visual descent approved adhering to published MSAs.			



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PART C AREA, ROUTES AND AERODROMES

2.4.5 MARAUKE – KIMAM

Merauke to Kimam				GPS Flight Plan —	Flight Time 0.7	WAKK 8111 WAKJ 8230
WAKK S 08° 31.30' E 140° 25.00'	MKE S 08° 31.38' E 140° 25.03'	OKQ1 S 08° 08.72' E 138° 51.86'	WAKJ S 07° 58.78' E 138° 51.19'			
Reporting Points -						
RADIO INFORMATION						
Stations: Merauke ATIS 126.10, Mopah TWR 122.20. Nav Aids: MKE 115.8 Area Frequencies: 122.80						
MERAUKE TO KIMAM				KIMAM TO MERAUKE		
ALTITUDES						
Recommended Altitudes: 8500' 8500'	VNAV: 1000' overhead WAKJ @ 600FPM	Recommended Altitudes: 7500' 7500'	VNAV: 1000' 2NM before MKE @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all "Non-Visual Conditions" met. NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: Okaba Reversal Procedures: At any time.			Emergency Airstrips: Okaba Reversal Procedures: At any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.			Non Visual descent approved adhering to published MSAs.			

2.4.6 MARAUKE – MINDIPTANAH

Merauke to Mindiptanah				GPS Flight Plan —	Flight Time 1.0	WAKK 8111 WAKD 9104
WAKK S 08° 31.30' E 140° 25.00'	MKE S 08° 31.36' E 140° 25.03'	WAKD S 05° 52.64' E 140° 42.62'				
Reporting Points -						
RADIO INFORMATION						
Stations: Merauke ATIS 126.10, Mopah TWR 122.20 Nav Aids: MKE 115.8 Area Frequencies: 122.80, 122.70						
MERAUKE TO MINDIPTANAH			MINDIPTANAH TO MERAUKE			
ALTITUDES						
Recommended Altitudes: 8500' 10500'	VNAV: 1200' overhead WAKD @ 800FPM	Recommended Altitudes: 9500' 11500'	VNAV: 1000' 2NM before MKE @ 800FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: None Reversal Procedures: At any time.			Emergency Airstrips: None Reversal Procedures: At any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1700'. Must be visual below 1700'. Mandatory overhead join.			Non Visual descent approved adhering to published MSAs.			

2.4.7 MARAUKE – OKABA

Merauke to Okaba				GPS Flight Plan —	Flight Time 0.4	WAKK 8111 WAKO 8250
WAKK S 00° 31.30' E 140° 25.00'	MKE S 00° 31.39' E 140° 25.00'	OKO1 S 00° 08.72' E 139° 51.68'	WAKO S 00° 06.69' E 139° 43.32'			
Reporting Points -						
RADIO INFORMATION						
Stations: Merauke ATIS 126.10, Mopah TWR 122.20 Nav Aids: MKE 115.8 Area Frequencies: 122.80						
MERAUKE TO OKABA				OKABA TO MERAUKE		
ALTITUDES						
Recommended Altitudes: 6500' 6500'	VNAV: 1000' overhead WAKO @ 600FPM		Recommended Altitudes: 5500' 5500'	VNAV: 1000' 2NM before MKE @ 600FPM		
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA.			Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'			
ENROUTE PROCEDURES						
Emergency Airstrips: None Reversal Procedures: At any time.			Emergency Airstrips: None Reversal Procedures: At any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.			Non Visual descent approved adhering to published MSAs.			



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2.4.8 MARAUKE – SENGGO

Merauke to Senggo						GPS Flight Plan —	Flight Time 1.2	WAKK 8111 WAKQ 8111
WAKK S 08° 31.30' E 140° 25.00'	MKE S 08° 31.30' E 140° 25.03'	WAKQ S 05° 41.44' E 139° 20.99'						
Reporting Points								
RADIO INFORMATION								
Stations: Merauke ATIS 126.10, Mopah TWR 122.20 Nav Aids: MKE 115.8 Area Frequencies: 122.80								
MERAUKE TO SENGGO				SENGGO TO MERAUKE				
ALTITUDES								
Recommended Altitudes: 10500' 10500'		VNAV: 1000' overhead WAKQ @ 800FPM		Recommended Altitudes: 9500' 9500'		VNAV: 1000' 2NM before MKE @ 800FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA.				Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'				
ENROUTE PROCEDURES								
Emergency Airstrips: None Reversal Procedures: At any time				Emergency Airstrips: None Reversal Procedures: At any time				
DESCENT/ARRIVAL PROCEDURES								
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.				Non Visual descent approved adhering to published MSAs.				



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2.4.9 MARAUKE – WANAM

Merauke to Wanam						GPS Flight Plan —	Flight Time 0.7	WAKK E113 WNN 8917
WAKK S 00° 31.30' E 140° 25.00'	MKE S 00° 31.39' E 140° 25.03'	WNN S 07° 32.70' E 139° 07.12'						
Reporting Points -								
RADIO INFORMATION								
Stations: Merauke ATIS 126.10, Mopah TWR 122.20 Nav Aids: MKE 115.8 Area Frequencies: 122.80								
MERAUKE TO WANAM				WANAM TO MERAUKE				
ALTITUDES								
Recommended Altitudes: 8500' 8500'		VNAV: 1000' overhead WNN @ 600FPM		Recommended Altitudes: 7500' 8500'		VNAV: 1000' 2NM before MKE @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA.				Non visual climb outs permitted if all 'Non-Visual Conditions' met. NOT below 1000'				
ENROUTE PROCEDURES								
Emergency Airstrips: None Reversal Procedures: At any time.				Emergency Airstrips: None Reversal Procedures: At any time.				
DESCENT/ARRIVAL PROCEDURES								
Non visual descent permitted to 1500'. Must be visual below 1500'. Mandatory overhead join.				Non Visual descent approved adhering to published MSAs.				



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PART C AREA, ROUTES AND AERODROMES

2.5 FROM SENTANI

2.5.1 SENTANI – BATOM

Sentani to Batom (R165 JPA)				GPB Flight Plan 9.	Flight Time 0.7	WAJ 3800 WAJG 8179
WAJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	WAJG / BAT S 04° 26.57' E 140° 52.65'				
Reporting Points - 60NM JPA						
RADIO INFORMATION						
Stations: Sentani ATIS 126.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 123.00						
SENTANI TO BATOM				BATOM TO SENTANI		
ALTITUDES						
Recommended Altitudes: 7500' 9500'	VNAV: 1700' 1NM before LUB @ 500FPM	Recommended Altitudes: 6500' 8500'	VNAV: 1300' 2NM before JPA @ 600FPM			
CLIMB PROCEDURES						
Non visual climb out: require adherence with the specified MSA Departure Radial: R288 JPA			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Doyo Baru, Senggil, Luban Reversal Procedures: At any time before descent.			Emergency Airstrips: Luban, Senggil, Doyo Baru Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			

2.5.1 SENTANI – BOKONDINI

Sentani to Bokondini (R230 JPA)				GPS Flight Plan 12	Flight Time 0.9	WAI 8000 WAVE 8035
WAIJ S 02° 34.62' E 140° 30.06'	JPA S 02° 34.70' E 140° 31.00'	KOB S 03° 33.98' E 139° 03.54'	BOK / WAVE S 03° 41.17' E 138° 40.60'			
Reporting Points - 60NM JPA, KOB - Kobakma						
RADIO INFORMATION						
Stations: Sentani ATIS 128.8, Sentani TWR 116.1, Jayapura RADAR 119.85 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 124.00 (120.00)						
SENTANI TO BOKONDINI			BOKONDINI TO SENTANI			
ALTITUDES						
Recommended Altitudes: 10000' 10000'		VNAV: 5500' overhead BOK @ 500FPM		Recommended Altitudes: 9000' 11000'		VNAV: 1300' 2NM before JPA @ 800FPM
CLIMB PROCEDURES						
Non visual climb out: require adherence with the specified MSA. Departure Radial: R230 JPA			Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic transmitting through Bokondini Pass when climbing overhead			
ENROUTE PROCEDURES						
Emergency Airstrips: Lereh, Kobakma. Reversal Procedures: Until KOB - Left or Right turn at any time.			Emergency Airstrips: Kobakma, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			



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PART C AREA, ROUTES AND AERODROMES

2.5.2 SENTANI – BORME

Sentani to Borme (R183 JPA)				GPS Flight Plan 9	Flight Time 0.8	WALJ 8000 BOR 8016
WALJ S 02° 34.62' E 140° 30.08'	JPA S 02° 34.70' E 140° 31.00'	BOR1 S 04° 10.04' E 140° 19.38'	BOR S 04° 23.74' E 140° 26.12'			
Reporting Points - 60NM JPA						
RADIO INFORMATION						
Stations: Sentani ATIS 128.8; Sentani TWR 116.1; Jayapura RADAR 119.85 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 123.00						
SENTANI TO BORME				BORME TO SENTANI		
ALTITUDES						
Recommended Altitudes: 8000' 8000'		VNAV: 4000' 1NM before BOR @ 500FPM		Recommended Altitudes: 9000' 9000'		VNAV: 1300' 2NM before JPA @ 600FPM
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA. Departure Radial: R183 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions.		
ENROUTE PROCEDURES						
Emergency Airstrips: Doyo Baru, Pagai, Luban. Reversal Procedures: At any time until BOR1, right turn at BOR1.				Emergency Airstrips: Luban, Pagai, Doyo Baru. Reversal Procedures: Most likely to continue to Sentani and carry out an approach. However can turn right or left at any time.		
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.		



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PART C AREA, ROUTES AND AERODROMES

2.5.3 SENTANI – DEBERA

Sentani to Dabera (R247 JPA)				BPS Flight Plan —	Flight Time 1.2	WALJ 8000 WAJC 8000
WALJ S 02° 34.62' E 140° 30.88'	JPA S 02° 34.70' E 140° 31.00'	DAB / WALJ S 03° 16.22' E 138° 36.84'				
Reporting Points - 80NM JPA						
RADIO INFORMATION						
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 124.00						
SENTANI TO DABERA				DABERA TO SENTANI		
ALTITUDES						
Recommended Altitudes: 8000' 10000'	VNAV: 1200' 1NM before DAB @ 500FPM	Recommended Altitudes: 9000' 9000'	VNAV: 1300' 2NM before JPA @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA. Departure Radial: R247 JPA			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Doyo Baru, Lereh, Tarla Reversal Procedures: Left or right turn until top of descent			Emergency Airstrips: Tarla, Lereh, Doyo Baru Reversal Procedures: Most likely to continue to Sentani and carry out an approach. However can turn right or left at any time.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be careful of aircraft exiting the SWART valley area.			Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			

2.5.4 SENTANI – FAOWI

Sentani to Faowi (R258 JPA)				GPS Flight Plan —	Flight Time 1.1	WALU 8000 FAO 8027
WALU S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	FAO1 S 03° 03.80' E 137° 44.13'	FAO S 03° 13.88' E 137° 43.58'			
Reporting Points - 60NM JPA						
RADIO INFORMATION						
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 118.20 Area Frequencies: 124.00						
SENTANI TO FAOWI				FAOWI TO SENTANI		
ALTITUDES						
Recommended Altitudes: 10000' 10000'	VNAV: 2500' overhead FAO1 @ 500FPM	Recommended Altitudes: 11000' 11000'	VNAV: 1300' 2NM before JPA @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA. Departure Radial: R258 JPA			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Doyo Baru, Lereh, Dabera, Taiyeve Reversal Procedures: Left or Right turn at any time until top of descent.			Emergency Airstrips: Taiyeve, Dabera, Lereh, Doyo Baru Reversal Procedures: Most likely to continue to Sentani and carry out an approach. However can turn right or left at any time.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent to 2500' at FAO1. If not visual, right turn back on track to Sentani.			Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial			

2.5.5 SENTANI – ILAGA

Sentani to Ilaga via Doorman Pass (R244 JPA)					GPS Flight Plan 11	Flight Time 1.5	WJJI 8000 WAYL 7210
WJJI S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	ING S 03° 22.24' E 138° 35.40'	DORPS S 03° 31.07' E 138° 30.82'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILJI S 03° 42.37' E 138° 04.19'	
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 56.47'	BEODR S 03° 40.90' E 137° 39.23'	ILA1 S 03° 49.40' E 137° 35.06'	ILA2 S 03° 51.92' E 137° 38.44'	ILA3 S 03° 55.70' E 137° 39.95'	ILA / WAYL S 03° 59.67' E 137° 37.33'	
Reporting Points - 60NM JPA, DORPS - Doorman Pass, ILUPS - Ilu Pass							
RADIO INFORMATION							
Stations: Sentani ATIS 128.8; Sentani TWR 118.1; Jayapura RADAR 119.95 (DEP) / 119.1 (ARR); Ilaga Radio 122.25 Nav Aids: JPA 116.20; Area Frequencies: 124.00, 122.00							
SENTANI TO ILAGA				ILAGA TO SENTANI			
ALTITUDES							
Recommended Altitudes: 10000'(10500' after DORPS) 12000'(12500' after DORPS)		VNAV: 8600' 1NM before ILA @ 500FPM		Recommended Altitudes: 11500'(9000' after DORPS) 13500'(11000' after DORPS)		VNAV: 1300' 2NM before JPA @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs require adherence with the specified MSA. Departure Radial: R244 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic entering from Ilaga Pass (Timika) when climbing overhead.			
ENROUTE PROCEDURES							
Emergency Airstrips: Lereh, Taria, Dabera, Mamit, Karubaga, Kanggime, Ilu, Mulia, Lomo, Bina, Sinak. Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (8), right turn at PTY to flatlands or invert flight plan. At ILA- Left turn to intercept track. At ILA- Maintain 12500 and activate ILAGA - NABIRE via High Valley flight plan (8) and follow.				Emergency Airstrips: Sinak, Bina, Lomo, Mulia, Ilu, Kanggime, Karubaga, Mamit, Dabera, Taria, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Be cautious of aircraft departing around ILA2 and ILA3 Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			

Sentani to Ilaga via Bokondini Pass (R230 JPA)					GPS Flight Plan 12	Flight Time 1.5	WALJ R003 WAYL 7210
WALJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	KOB S 03° 39.98' E 139° 03.34'	BOKPS S 03° 40.02' E 138° 36.26'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILU1 S 03° 42.37' E 138° 04.19'	
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 55.47'	BEOBR S 03° 40.00' E 137° 30.23'	ILA1 S 03° 40.40' E 137° 55.06'	ILA2 S 03° 51.02' E 137° 38.44'	ILA3 S 03° 55.70' E 137° 39.85'	ILA / WAYL S 03° 58.61' E 137° 37.33'	
Reporting Points : 80NM JPA, KOB - Kobakma, BOKPS - Bokondini Pass, ILUPS - Ila Pass							
RADIO INFORMATION							
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR), Ilaga Radio 122.25. Nav Aids: JPA 116.20; Area Frequencies: 124.00 (120.00), 122.00.							
SENTANI TO ILAGA				ILAGA TO SENTANI			
ALTITUDES							
Recommended Altitudes: 10000'(10500' after BOKPS) 12000'(12500' after BOKPS)		VNAV: 8600' 1NM before ILA @ 500FPM		Recommended Altitudes: 11500'(9000' after BOKPS) 13500'(11000' after BOKPS)		VNAV: 1300' 2NM before JPA @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs require adherence with the specified MSA. Departure Radial: R230 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic entering from Ilaga Pass (Timika) when climbing overhead.			
ENROUTE PROCEDURES							
Emergency Airstrips: Lereh, Taria, Dabera, Mamit, Karubaga, Kanggime, Ilu, Mulia, Lumo, Bina, Sinak. Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan. At ILA- Left turn to intercept track. At ILA- Maintain 12500 and activate ILAGA- NABIRE via High Valley flight plan (8) and follow.				Emergency Airstrips: Sinak, Bina, Lumo, Mulia, Ilu, Kanggime, Karubaga, Mamit, Wunin, Bokondini, Kelila, Kobakma, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Be cautious of aircraft departing around ILA2 and ILA3. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			

2.5.6 SENTANI – ILU

Sentani to Ilu via Doorman Pass (R244 JPA)						GPS Flight Plan 11	Flight Time 1.1	WALU 8000 WAVC 8000
WALU S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	ING S 00° 22.24' E 138° 35.40'	DORPS S 03° 31.07' E 138° 30.82'	SWART S 03° 39.67' E 138° 24.55'	ILUPS S 00° 40.47' E 136° 16.79'	ILU / WAVC S 03° 42.47' E 138° 11.97'		
Reporting Points - 80NM JPA, DORPS - Doorman Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Sentani ATIS 120.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 118.20 Area Frequencies: 124.00, 122.00								
SENTANI TO ILU						ILU TO SENTANI		
ALTITUDES								
Recommended Altitudes: 10000'(10500' after DORPS) 12000'(12500' after DORPS)		VNAV: 7200' overhead ILU @ 500FPM		Recommended Altitudes: 11500'(9000' after DORPS) 13500'(11000' after DORPS)		VNAV: 1900' 2NM before JPA @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Departure Radial: R244 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic transmitting through Ilu Pass when climbing overhead.				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Taria, Dabera, Mamit, Karubaga, Kanggine Reversal Procedures: At SWART- Left turn to intercept track. At ILU lead MUL1 waypoint, climb 13500' and at MUL1 left turn to intercept track back to Sentani or divert to Wamena on PIC discretion				Emergency Airstrips: Kanggine, Karubaga, Mamit, Dabera, Taria, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.				

Sentani to Ilu via Bokondini Pass (R230 JPA)						GPS Flight Plan 12	Flight Time 1.1	WAM 8000 WAVG 8030
WUJ S 02° 34.62' E 140° 30.08'	JPA S 02° 34.70' E 140° 31.00'	KOB S 03° 38.98' E 138° 03.54'	BOKPS S 03° 40.02' E 138° 36.28'	SWART S 03° 39.67' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILU / WAYC S 03° 40.47' E 138° 11.07'		
Reporting Points - 60NM JPA, KOB - Kobakma, BOKPS - Bokondini Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 116.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 124.00 (120.00), 122.00								
SENTANI TO ILU					ILU TO SENTANI			
ALTITUDES								
Recommended Altitudes: 10000'(10500' after BOKPS) 12000'(12500' after BOKPS)		VNAV: 7200' overhead ILU @ 500FPM		Recommended Altitudes: 9500'(9000' after BOKPS) 11500'(11000' after BOKPS)		VNAV: 1300' 2NM before JPA @ 800FPM		
CLIMB PROCEDURES								
Non visual climb: pilots require adherence with the specified MSA. Departure Radial: R230 JPA				Visual only climb not. Be established at required altitude before entering non visual conditions. Be cautious of traffic transmitting through Ilu Pass when climbing overhead.				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Kobakma, Bokondini, Kelita, Wunin, Mamit, Karubaga, Kanggime Reversal Procedures: At SWART - Left turn to intercept track. At ILU load MULI waypoint, climb 13500' and at MULI left turn to intercept track back to Sentani or divert to Wamena on PIC discretion				Emergency Airstrips: Kanggime, Karubaga, Mamit, Wunin, Kelita, Bokondini, Kobakma, Lereh Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes Advise ATC of deviations from inbound radial.				

2.5.7 SENTANI – KARUBAGA

Sentani to Karubaga via Doorman Pass (R244 JPA)						GPS Flight Plan 11	Flight Time 1.0	WALJ 8000 WAVE 7211
WALJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	ING S 03° 22.24' E 138° 35.40'	DORPS S 03° 31.07' E 138° 30.82'	SWART S 03° 39.87' E 138° 24.55'	KAR / WAVE S 03° 41.16' E 138° 28.75'			
Reporting Points - 80NM JPA, DORPS - Doorman Pass.								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 124.00, 122.00								
SENTANI TO KARUBAGA					KARUBAGA TO SENTANI			
ALTITUDES								
Recommended Altitudes: 10000'(10500' after DORPS) 12000'(12500' after DORPS)		VNAV: 6500' overhead KAR @ 500FPM		Recommended Altitudes: 11500'(9000' after DORPS) 13500'(11000' after DORPS)		VNAV: 1300' 2NM before JPA @ 800FPM		
CLIMB PROCEDURES								
Non visual climb out require adherence with the specified MSA. Departure Radial: R244 JPA.				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic transmitting through SWART valley area.				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Taria, Dabera, Mamit, Kanggime Reversal Procedures: At SWART- Left turn to intercept track.				Emergency Airstrips: Kanggime, Mamit, Dabera, Taria, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.				

Sentani to Karubaga via Bokondini Pass (R230 JPA)						GPS Flight Plan 72	Flight Time 1.0	WALJ 8000 WAVG /211
WALJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	KOB S 03° 39.90' E 138° 03.54'	BOKPS S 03° 40.02' E 138° 36.28'	SWART S 03° 39.67' E 138° 24.55'	KAR / WAVG S 03° 41.18' E 138° 28.75'			
Reporting Points - 80NM JPA, KOB - Kobakma, BOKPS - Bokondini Pass.								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 118.20 Area Frequencies: 124.00 (120.00), 122.00								
SENTANI TO KARUBAGA				KARUBAGA TO SENTANI				
ALTITUDES								
Recommended Altitudes: 10000'(10500' after BOKPS) 12000'(12500' after BOKPS)		VNAV: 6500' overhead KAR @ 500FPM		Recommended Altitudes: 9500'(9000' after BOKPS) 11500'(11000' after BOKPS)		VNAV: 1300' 2NM before JPA @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Departure Radial: R230 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic transmitting through SWART valley area.				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Kobakma, Bokondini, Kelila, Wunin, Mamil, Kanggime Reversal Procedures: At SWART - Left turn to intercept track.				Emergency Airstrips: Kanggime, Mamil, Wunin, Kelila, Bokondini, Kobakma, Lereh Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.				

2.5.8 SENTANI – KASONAWEJA

Sentani to Kasonaweja				GPS Flight Plan 4	Flight Time 1.0	WALJ 8000 KAS 8011
WALJ S 02° 34.62' E 140° 30.98	JPA S 02° 34.70' E 140° 31.00	KAS1 S 02° 15.11' E 138° 26.30	KAS S 02° 18.18' E 138° 01.98			
Reporting Points - 80NM JPA						
RADIO INFORMATION						
Stations: Sentani ATIS 120.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 118.20 Area Frequencies: 124.00						
SENTANI TO KASONAWEJA			KASONAWEJA TO SENTANI			
ALTITUDES						
Recommended Altitudes: 8500' 10500'	VNAV: 1100' 1NM before KAS @ 500FPM	Recommended Altitudes: 8500' 9500'	VNAV: 1300' 2NM before JPA @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA. Departure Radius: R275 JPA Consider departing R285 JPA if weather is bad. Intercept R275 when above 9000'			Non visual climb permitted if all "Non-visual conditions" procedure met. On track and not below 3500'			
ENROUTE PROCEDURES						
Emergency Airstrips: Doyo Baru, Lake Holmes Reversal Procedures: Left/right turn back on track at any time before descent. Right turn after TOD.			Emergency Airstrips: Lake Holmes, Doyo Baru Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach. Be aware of inbound radial as KAS1 - JPA is in the 9000' MSA sector. For non visual descents track right to the SOUTH, to intercept R265 or lower to JPA.			
DESCENT/ARRIVAL PROCEDURES						
Non visual descent permitted to 3500' on VNAV profile. Must be visual below 3500'. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			

2.5.9 SENTANI – KOBAKMA

Sentani to Kobakma (R230 JPA)				GPS: Flight Plan 12	Flight Time 0.8	WALJ 8000 KOB 8029
WALJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 51.00'	KOB S 03° 39.96' E 139° 03.54'				
Reporting Points - 60NM JPA						
RADIO INFORMATION						
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 124.00 (120.00)						
SENTANI TO KOBAKMA			KOBAKMA TO SENTANI			
ALTITUDES						
Recommended Altitudes: 10000' 10000'	VNAV: 4000' overhead KOB @ 500FPM	Recommended Altitudes: 9000 11000	VNAV: 1300' 2NM before JPA @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs require adherence with the specified MSA. Departure Radial: R230 JPA		Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic transmitting through Middle Gap				
ENROUTE PROCEDURES						
Emergency Airstrips: Lereh Reversal Procedures: Until KOB - Left or Right turn at any time.		Emergency Airstrips: Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary		Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.				

2.5.10 SENTANI – MULIA

Sentani to Mulia via Doorman Pass (R244 JPA)						GPS Flight Plan 11	Flight Time 1.3	WAJL 8000 WAWA 8018
WAJL S 02° 34.82' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	ING S 03° 22.24' E 138° 35.40'	DORPS S 03° 31.07' E 138° 30.82'	SWART S 03° 38.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILU1 S 03° 42.37' E 138° 04.39'		
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 56.47'	MUL3 S 03° 42.19' E 137° 54.99'	MUL / WAWA S 03° 42.16' E 137° 57.47'					
Reporting Points - 60NM JPA, DORPS - Doorman Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR), Mulia Radio 122.10 Nav Aids: JPA 116.20; Area Frequencies: 124.00, 122.00								
SENTANI TO MULIA				MULIA TO SENTANI				
ALTITUDES								
Recommended Altitudes: 10000'(10500' after DORPS) 12000'(12500' after DORPS)		VNAV: 6000' at MUL3 @ 600FT/M		Recommended Altitudes: 11500'(9000 after DORPS) 13500'(11000 after DORPS)		VNAV: 1300' 2NM before JPA @ 600FT/M		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Departure Radial: R244 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic arriving to Mulia as radio contact gets blocked by terrain				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Tariu, Dabera, Mamif, Karubaga, Kanggime, Ilu Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (7). right turn at PTY to flatlands or invert flight plan.				Emergency Airstrips: Ilu, Kanggime, Karubaga, Mamif, Dabera, Tariu, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when applicable. BlueSky message OPS NORMAL received, Satellite phone is on board and contact with Mulia Radio established before the approach.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.				

Sentani to Mulia via Bokondini Pass (R230 JPA)						GPS Flight Plan 12	Flight Time 1.3	WUJ 8000 WUVA 8010
WUJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	KOB S 03° 39.96' E 139° 03.54'	BOKPS S 03° 40.02' E 138° 26.28'	SWART S 03° 39.67' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILU1 S 03° 42.37' E 138° 04.18'		
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 55.47'	MUL3 S 03° 42.19' E 137° 54.95'	MUL / WUVA S 03° 42.16' E 137° 57.47'					
Reporting Points - 60NM JPA, KOB - Kobakma, BOKPS - Bokondini Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR), Mulia Radio 122.10 Nav Aids: JPA 115.20; Area Frequencies: 124.00 (120.00), 122.00								
SENTANI TO MULIA				MULIA TO SENTANI				
ALTITUDES								
Recommended Altitudes: 10000'(10500' after BOKPS) 12000'(12500' after BOKPS)		VNAV: 6000' at MUL3 @ 600FPM		Recommended Altitudes: 9500'(9000 after BOKPS) 11500'(11000 after BOKPS)		VNAV: 1900' 2NM before JPA @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Departure Radial: R230 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Be cautious of traffic arriving to Mulia as radio contact gets blocked by terrain				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Kobakma, Bokondini, Kelila, Wunin, Mamit, Karubaga, Kanggima, Ilu Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan				Emergency Airstrips: Ilu, Kanggima, Karubaga, Mamit, Wunin, Bokondini, Kelila, Kobakma, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when applicable; BlueSky message OPS NORMAL received. Satellite phone is on board and contact with Mulia Radio established before the approach				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial				

2.5.11 SENTANI – OKSIBIL/TANAH MERAH/MERAUKE

Sentani to Oksibil / Tanah Merah / Merauke via Kiwirok Pass (R165 JPA)					GFS Flight Plan 9	Flight Time OKS-TM TMH-JA MKE 2.0	WAJI 8000 (Q) 4010 (T) 4120 (M) 2111
WAJI S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	WAJG / BAT S 04° 28.67' E 140° 52.85'	KWR1 S 04° 42.21' E 140° 50.68'	KWRPS S 04° 46.08' E 140° 45.60'	OKS2 S 04° 51.38' E 140° 59.78'	OKS / WAJO S 04° 54.47' E 140° 57.78'	
OKS3 S 04° 55.71' E 140° 40.50'	OKS4 S 06° 05.38' E 140° 45.22'	TMH / WAKT S 06° 05.83' E 140° 18.11'	MKE S 08° 31.35' E 140° 25.03'	WAKK S 08° 31.30' E 140° 25.60'			
Reporting Points - 60NM JPA, WAJG - Batom, KWRPS - Kiwirok Pass							
RADIO INFORMATION							
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR), Oksibil TWR 122.15, TanahMerah TWR 123.50, Mopah TWR 122.20 Nav Aids: JPA 116.20, MKE 115.80, Area Frequencies: 123.00, 122.70, 122.80							
SENTANI TO OKSIBIL/TANAH MERAH/MERAUKE				MERAUKE/TANAH MERAH/OKS TO SENTANI			
ALTITUDES							
Recommended Altitudes: 11500' (8000' after OKS4) 13500' (10000' after OKS4)		6000' overland OKS @ 500FPM 1000' 1NM before TMH or WAKK @ 300FPM		Recommended Altitudes: 9000' (10500' OKS4 - JPA) 11000' (14500' OKS4 - JPA)		VNAV: 1300' 2NM before JPA @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs require adherence with the specified MSA. Departure Radial: R165 JPA				Visual only climb out (Oksibil) Be established at required altitude before entering non visual conditions. Sometimes lots of traffic between Oksibil and TMH			
ENROUTE PROCEDURES							
Emergency Airstrips: Pagal, Luban, Batom, Kiwirok Reversal Procedures: Before WAJG - Left or Right turn at any time WAJG - OKS4 - Right turns back on to track. OKS4 - TMH/WAKK - Left or Right turns at any time.				Emergency Airstrips: Kiwirok, Pagal, Batom, Luban. Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach. Before OKS4 - Left or Right turns at any time. OKS4 - WAJG - Left turns back on to track. WAJG - JPA - Left or Right turns at any time.			
DESCENT/ARRIVAL PROCEDURES							
Oksibil: VISUAL only Tanah Merah: Visual descent only below 1500' on the VNAV or steeper if operationally required. Non Visual descent permitted for WAKK in accordance with prescribed MSAs.				Tanah Merah: Visual Descents only below 1500' Oksibil: VISUAL only Sentani: Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.			

Sentani to Oksibil / Tanah Merah / Merauke via MELAM (R175 JPA)					GFS Flight Plan 10	Flight Time OKS 1.0 TMH 1.4 MKE 2.0	WADD 8000 (D) 8010 (T) 8130 (M) 8111
WADD S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	MELAM S 04° 15.75' E 140° 33.98'	ABM S 04° 40.41' E 140° 34.51'	OKS1 S 04° 46.22' E 140° 38.38'	OKS2 S 04° 51.38' E 140° 39.78'	OKS / WADD S 04° 54.47' E 140° 37.78'	
OKS3 S 04° 55.71' E 140° 40.50'	OKS4 S 05° 05.38' E 140° 43.22'	TMH / WAKT S 05° 05.83' E 140° 18.11'	MKE S 08° 31.35' E 140° 25.03'	WAKK S 08° 31.30' E 140° 25.00'			
Reporting Points - 60NM JPA, MELAM, AMBIS - Ambisibil							
RADIO INFORMATION							
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR), Oksibil TWR 122.15, Tanah Merah TWR 123.50, Mopah TWR 122.20 Nav Aids: JPA 116.20, MKE 115.80, Area Frequencies: 123.00, 122.70, 122.80							
SENTANI TO OKSIBIL/MERAUKE				OKSIBIL/MERAUKE TO SENTANI			
ALTITUDES							
Recommended Altitudes: 11500' (8000' after OKS4) 13500' (10000' after OKS4)		5000' overhead OKS @ 500FPM 1000' 15M before TMH or WAKK @ 500FPM		Recommended Altitudes: 9000' (10500' OKS4 - JPA) 11000' (14500' OKS4 - JPA)		VNAV: 1300' 2NM before JPA @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs require adherence with the specified MSA. Departure Radial: R175 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions. Sometimes lots of traffic between Oksibil and TMH			
ENROUTE PROCEDURES							
Emergency Airstrips: Pagal, Luban, Yapil, Ambisibil, Iwur, Reversal Procedures: Before MELAM - Left or Right turn at any time MELAM - OKS4 - Right turns back on to track OKS4 - TMH/WAKK - Left or Right turns at any time				Emergency Airstrips: Pagal, Luban, Yapil, Ambisibil, Iwur Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach. Before OKS4 - Left or Right turns at any time OKS4 - MELAM - Left turns back on to track MELAM - JPA - Left or Right turns at any time			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only below 1500' on the VNAV or steeper if operationally required. Non Visual descent permitted for WAKK in accordance with prescribed MSAs.				Visual Descents only below 1500' for TMH and VISUAL only for OKS Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial			

2.5.12 SENTANI – SINAK

Sentani to Sinak via Doorman Pass (R244 JPA)						GPS Flight Plan 11	Flight Time 1,4	WALU R000 WADS 8114
WALU S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	ING S 03° 22.24' E 138° 35.40'	DORPS S 03° 31.07' E 138° 30.62'	SWART S 03° 39.87' E 138° 28.55'	ILUPS S 03° 40.47' E 138° 16.78'	ILU1 S 03° 42.07' E 138° 04.19'		
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 55.47'	SIN1 S 03° 40.86' E 137° 47.05'	SIN2 S 03° 43.56' E 137° 49.25'	SIN / WABS S 03° 49.32' E 137° 50.47'				
Reporting Points - 60NM JPA, DORPS - Doorman Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 118.20 Area Frequencies: 124.00, 122.00								
SENTANI TO SINAK				SINAK TO SENTANI				
ALTITUDES								
Recommended Altitudes: 10000'(10500' after DORPS) 12000'(12500' after DORPS)		VNAV: 8000' overhead SIN @ 500FPM		Recommended Altitudes: 11500'(9000 after DORPS) 13500'(11000 after DORPS)		VNAV: 1300' 2NM before JPA @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Departure Radial: R244 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Taria, Dabera, Mamit, Karubaga, Kanggime, Ilu, Mulia Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate SINAK - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan. At SIN1 - Right turn to intercept track. At SIN1 - Activate SINAK - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan.				Emergency Airstrips: Mulia, Ilu, Kanggime, Karubaga, Mamit, Dabera, Taria, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial.				

Sentani to Sinak via Bokondini Pass (R230 JPA)						GPS Flight Plan 12	Flight Time 1.4	WALJ 8000 WABS 8114
WALJ S 02° 34.62' E 140° 30.98'	JPA S 02° 34.70' E 140° 31.00'	KOB S 03° 39.86' E 138° 03.54'	BOKPS S 03° 40.02' E 138° 38.26'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILUJ S 03° 42.37' E 138° 04.39'		
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 56.47'	SIN1 S 03° 40.86' E 137° 47.06'	SIN2 S 03° 43.86' E 137° 49.26'	WABS S 03° 49.33' E 137° 50.47'				
Reporting Points - 60NM JPA, KOB - Kobakma, BOKPS - Bokondini Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Sentani ATIS 128.8, Sentani TWR 118.1, Jayapura RADAR 119.95 (DEP) / 119.1 (ARR) Nav Aids: JPA 116.20 Area Frequencies: 124.00 (120.00), 122.00								
SENTANI TO SINAK				SINAK TO SENTANI				
ALTITUDES								
Recommended Altitudes: 10000'(10500' after BOKPS) 12000'(12500' after BOKPS)		VNAV: 8000' overhead SIN @ 500FPM		Recommended Altitudes: 9500'(9000 after BOKPS) 11500'(11000 after BOKPS)		VNAV: 1300' 2NM before JPA @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs require adherence with the specified MSA. Departure Radial: R230 JPA				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Lereh, Kobakma, Bokondini, Kelila, Wunin, Mamit, Karubaga, Kanggime, Ilu Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2- Left turn to intercept track. At MUL2 - Activate SINAK - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan. At SIN1 - Right turn to intercept track. At SIN1 - Activate SINAK - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan.				Emergency Airstrips: Ilu, Kanggime, Karubaga, Mamit, Wunin, Bokondini, Kelila, Kobakma, Lereh Reversal Procedures: Less likely on this route as the safest and most likely option is to continue on to Sentani and potentially carry out an approach.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Non Visual descent approved adhering to published MSAs and RADAR altitudes. Advise ATC of deviations from inbound radial				



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.6 FROM WAMENA

2.6.1 WAMENA – APAHALAPSILI

Wamena to Apahapsili and Elelim via North Gap					GPS Flight Plan 13	Flight Time 0.4	WAVV 8023 (A)8002 (F)8014
WAVV S 04° 05.85' E 138° 57.08'	JIWIK S 03° 58.09' E 138° 56.85'	MALIO S 03° 44.78' E 138° 19.55'	ELM / WAVE S 03° 47.00' E 139° 23.15'	APA S 03° 52.95' E 138° 18.05'			
Reporting Points - JIWIK - Jiwika, PAV - Pass Valley, MALIO							
RADIO INFORMATION							
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 120.00, 121.0X							
WAMENA TO APAHAPSILI/ELELIM				APAHAPSILI/ELELIM TO WAMENA			
ALTITUDES							
Recommended Altitudes: 9000' 11000'	4000' 1NM before APA @ 800FPM 2400' Overhead ELM @ 600FPM			Recommended Altitudes: 10000' 12000'	VNAV: 6100' 2NM before WAVV @ 600FPM		
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 11000' by JIWIK.				Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 12000' by MALIO. Monitor 120.00 for conflicting traffic on climb out.			
ENROUTE PROCEDURES							
Consider tracking via Apahapsili Pass as to avoid traffic inbound Wamena via North Gap - VMC only Emergency Airstrips: Pass Valley, Apahapsili, Elelim Reversal Procedures: WAVV - JIWIK - Left turn on to track. JIWIK - MALIO - Right turn on to track.				Emergency Airstrips: Apahapsili, Elelim, Pass Valley Reversal Procedures: MALIO - JIWIK - Left turn on to track. JIWIK - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only into Apahapsili and Elelim. Be conscious of frequency change, maintain listening watch.				After JIWIK descend to 10000' until overhead WAVV, then at pilots discretion. Consider tracking out to Pyramid to get visual.			

2.6.2 WAMENA – BOKONDINI

Wamena to Bokondini				GPS Flight Plan 16	Flight Time 0.3	WAVV 8023 WAVB 8059
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	KEL S 03° 43.69' E 138° 42.65'	BOK / WAVB S 03° 41.17' E 138° 40.60'			
Reporting Points - PYR - Pyramid, KEL - Kelila						
RADIO INFORMATION						
Stations: Wamena TWR 120.0X Nav Aids: Area Frequencies: 124.00 (120.00)						
WAMENA TO BOKONDINI			BOKONDINI TO WAMENA			
ALTITUDES						
Recommended Altitudes: 10500' 12500'	VNAV: 5500' overhead BOK @ 800FPM	Recommended Altitudes: 11500' 11500'	VNAV: 6100' 2NM before WAVV @ 800FPM			
CLIMB PROCEDURES						
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Pyramid, Danime, Kelila Reversal Procedures: Activate flight plan to Mulla/Sinak/Itu/Itaga, continue to SWART and right turn back on to track.			Emergency Airstrips: Kelila, Danime, Pyramid. Reversal Procedures: PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join			Maintain 11500' until PYR. After PYR descend down to 10000', further at pilots discretion.			

2.6.3 WAMENA – DEKAI

Wamena to Dekai via South Gap					GPS Flight Plan 13/14	Flight Time 0,4	WAVV 8023 DEK 8106
WAVV S 04° 05,05' E 138° 57,00'	DEK1 S 04° 16,04' E 139° 03,99'	DEK2 S 04° 19,32' E 138° 03,10'	STHGP S 04° 33,80' E 139° 19,30'	DEK S 04° 51,35' E 138° 28,93'			
Reporting Points - POL - Polimo, PAS - Pasema, STHGP - South Gap							
RADIO INFORMATION							
Stations: Wamena TWR 120.00, Dekai INFO 122.65 Nav Aids: Area Frequencies: 121.00							
WAMENA TO DEKAI				DEKAI TO WAMENA			
ALTITUDES							
Recommended Altitudes: 9500' 11500'	VNAV: 1200' 1NM before DEK @ 600FPM		Recommended Altitudes: 10500' 12500'	VNAV: 6100' 2NM before WAVV @ 600FPM			
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 9000' by POL - Polimo in non visual conditions.				Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 9000' by STHGP - South Gap.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pasema, Holuwon, Sumo Reversal Procedures: Continue to STHGP on track, at STHGP right turn back on to track.				Emergency Airstrips: Sumo, Holuwon, Pasema Reversal Procedures: Before STHGP left turn back on to track Between STHGP and POL stay on track, then follow arrival procedure			
DESCENT/ARRIVAL PROCEDURES							
Non visual descent permitted if 'Non-Visual Conditions' met. Start descent at 10NM from STHGP. Do not descend below 9000' at STHGP. Further descent only after STHGP to 2200' overhead Dekai.				Maintain 12500' until overhead POL - Polimo then descend down to 10000'. After visually only at pilot's discretion. Consider tracking to Pyramid for visual conditions.			



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.6.4 WAMENA – HOLUWON

Dekai to Holuwon				GPS Flight Plan —	Flight Time 0.2	DEK 8108 HOL 8019
DEK S 04° 51.35' E 139° 28.93'	STHGP S 04° 33.86' E 139° 18.38'	HOL S 04° 28.91' E 139° 16.35'				
Reporting Points - STHGP - South Gap						
RADIO INFORMATION						
Stations: Dekai INFO 122.65 Nav Aids: Area Frequencies: 121.00						
DEKAI TO HOLUWON				HOLUWON TO DEKAI		
ALTITUDES						
Recommended Altitudes: 4500' Visual only	VNAV: 4500' overhead HOL @ 600FPM	Recommended Altitudes: 3500' Visual only	VNAV: 1200' 2NM before DEK @ 600FPM			
CLIMB PROCEDURES						
Visual only climb out.			Visual only climb out.			
ENROUTE PROCEDURES						
Emergency Airstrips: Sumo Reversal Procedures: Not applicable, visual only.			Emergency Airstrips: Sumo Reversal Procedures: Not applicable, visual only.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join.			

2.6.5 WAMENA – ILAGA

Wamena to Ilaga via Poga Pass					GPS Flight Plan 16	Flight Time 0.7	WAVV 8023 WAYL 7210
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILU1 S 03° 42.37' E 138° 04.19'	MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 55.47'	
BEODR S 03° 40.90' E 137° 30.23'	ILA1 S 03° 49.40' E 137° 35.08'	ILA2 S 03° 51.92' E 137° 38.44'	ILA3 S 03° 55.70' E 137° 39.95'	ILA / WAVL S 03° 58.81' E 137° 37.33'			
Reporting Points - PYR - Pyramid, POGPS - Poga Pass, ILUPS - Ilu Pass							
RADIO INFORMATION							
Stations: Wamena TWR 120.00, Ilaga INFO 122.25 Nav Aids: Area Frequencies: 122.00							
WAMENA TO ILAGA				ILAGA TO WAMENA			
ALTITUDES							
Recommended Altitudes: 10500' 12500'		VNAV: 8600' overhead ILA @ 600FPM		Recommended Altitudes: 11500' 13500'		VNAV: 6100' 2NM before WAVV @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pyramid, Danime, Karubaga, Kanggime, Ilu, Mulia, Lumo, Bina, Sinak Reversal Procedures: At SWART - right turn back on to track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate ILU - NABIRE flight plan (8), right turn at PTY to flatlands or invert flight plan. At WAYL- Left turn to intercept track. At WAYL- Maintain 12500 and activate ILAGA - NABIRE via High Valley flight plan (6) and follow.				Emergency Airstrips: Sinak, Bina, Lumo, Mulia, Ilu, Kanggime, Karubaga, Danime, Pyramid Reversal Procedures: At BEODR - Left turn to PTY then flatlands. At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Be cautious of aircraft departing around ILA2 and ILA3. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				14NM to PYR start descent down to 11500' After PYR descend down to 10000', further at pilots discretion.			

Wamena to Ilaga via Bokondini Pass						GPS Flight Plan 16	Flight Time 0.7	WAVV 8023 WAYL /210
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 48.72'	KEL S 03° 43.09' E 138° 42.65'	BOK / WAVB S 03° 41.17' E 138° 48.60'	BOKPS S 03° 40.02' E 138° 38.26'	SWART S 03° 39.87' E 138° 28.56'	ILUPS S 03° 40.47' E 138° 16.19'	ILU1 S 03° 42.37' E 138° 04.19'	
MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 00.47'	BEODR S 03° 40.00' E 137° 30.23'	ILA1 S 03° 48.40' E 137° 35.06'	ILA2 S 03° 51.92' E 137° 38.44'	ILA3 S 03° 58.70' E 137° 33.06'	ILA / WAYL S 03° 58.61' E 137° 37.33'		
Reporting Points - PYR - Pyramid, BOKPS - Bokondini Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Wamena TWR 120.00, Ilaga INFO 122.25 Nav Aids: Area Frequencies: 124.00 (120.00), 122.00								
WAMENA TO ILAGA				ILAGA TO WAMENA				
ALTITUDES								
Recommended Altitudes: 10500' 12500'		VNAV: 8500' overhead ILA 800FPM		Recommended Altitudes: 11500' 11500'		VNAV: 6100' 2NM before WAVV @ 600FPM		
CLIMB PROCEDURES								
Non-visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Pyramid, Danime, Karubaga, Kanggime, Ilu, Mulia, Lumo, Bina, Sinak Reversal Procedures: At SWART - right turn back on to track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan. At WAYL - Left turn to intercept track. At WAYL - Maintain 12500 and activate ILAGA - NABIRE via High Valley flight plan (6) and follow.				Emergency Airstrips: Sinak, Bina, Lumo, Mulia, Ilu, Kanggime, Karubaga, Danime, Pyramid. Reversal Procedures: At BEODR - Left turn to PTY then flatlands. At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be cautious of aircraft departing around ILA2 and ILA3. Mandatory overhead join Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Maintain 11500' until PYR. After PYR descend down to 10000', further at pilots discretion.				

Wamena to Ilaga via Tiom					GPS Eight Plan 18	Flight Time 0.6	WAVV 8023 WAVL 7210
WAVV S 04° 05.85' E 138° 57.08'	PVN S 03° 54.20' E 138° 45.77'	PIT S 03° 58.94' E 138° 31.99'	TIO S 03° 55.60' E 138° 27.24'	KWI S 04° 01.50' E 138° 12.31'	SIN4 S 03° 53.80' E 137° 54.81'	SIN3 S 03° 52.13' E 137° 52.33'	
ILA3 S 03° 55.70' E 137° 39.95'	ILA / WAVL S 03° 58.61' E 137° 37.33'						
Reporting Points - PYR - Pyramid, PIT - Pit River, KWI - Kwijawagi							
RADIO INFORMATION							
Stations: Wamena TWR 120.00, Ilaga INFO 122.25 Nav Aids: Area Frequencies: 121.00, 122.00							
WAMENA TO ILAGA				ILAGA TO WAMENA			
ALTITUDES							
Recommended Altitudes: 12500' Visual only	VNAV: 8800' overhead ILA @ 500FPM	Recommended Altitudes: 13500' Visual only	VNAV: 6100' 2NM before WAVV @ 500FPM				
CLIMB PROCEDURES							
Visual only climb out.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pyramid, Makki, Pit River, Tiom, Kwijawagi Reversal Procedures: Not applicable, visual only.				Emergency Airstrips: Kwijawagi, Tiom, Pit River, Makki, Pyramid. Reversal Procedures: Not applicable, visual only.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Visual descent only on the VNAV or steeper if operationally required.			

2.6.6 WAMENA – ILU

Wamena to Ilu via Poga Pass					GPS Flight Plan 16	Flight Time 0.5	WAVV 8023 WAVC 8039
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'	ILU / WAVC S 03° 42.47' E 138° 11.87'			
Reporting Points - PYR - Pyramid, PQGPS - Poga Pass, ILUPS - Ilu Pass							
RADIO INFORMATION							
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 122.00							
WAMENA TO ILU				ILU TO WAMENA			
ALTITUDES							
Recommended Altitudes: 10500' 12500'		VNAV: 7200' overhead ILU @ 600FPM		Recommended Altitudes: 11500' 13500'		VNAV: 6100' 2NM before WAVV @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pyramid, Danimo, Kanggima, Wunin, Mamit Reversal Procedures: At SWART - right turn back on to track. Consider reactivating flight plan and continue to MUL1 then left turn on to track.				Emergency Airstrips: Mamit, Wunin, Kanggima, Danimo, Pyramid. Reversal Procedures: At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				14NM to PYR start descent down to 11500' After PYR descend down to 10000' further at pilots discretion.			

Wamena to Ilu via Bokondini Pass						OPS Flight Plan 16	Flight Time 0.5	WAVV 8023 WAVC 8030
WAVV S 01° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	KEL S 03° 43.89' E 138° 42.65'	BOK / WAVB S 03° 41.17' E 138° 40.60'	BOKPS S 03° 40.02' E 138° 36.26'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 16.79'		
ILU / WAVC S 03° 42.47' E 138° 11.97'								
Reporting Points - PYR - Pyramid, BOKPS - Bokondini Pass								
RADIO INFORMATION								
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 124.00 (120.00), 122.00								
WAMENA TO ILU					ILU TO WAMENA			
ALTITUDES								
Recommended Altitudes: 10500' 12500'		VNAV: 7200' overhead ILU @ 600FPM		Recommended Altitudes: 11500' 11500'		VNAV: 6100' 2NM before WAVV @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs permitted if all 'Non Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Pyramid, Danime, Kanggima, Wunin, Mamit Reversal Procedures: At SWART - right turn back on to track. Consider reactivating flight plan and continue to MUL1 then left turn on to track.				Emergency Airstrips: Mamit, Wunin, Kanggima, Danime, Pyramid Reversal Procedures: At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Maintain 11500' until PYR. After PYR descend down to 10000' further at pilots discretion				



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

2.6.7 WAMENA – KARUBAGA

Wamena to Karubaga via Poga Pass				GPS Flight Plan 16	Flight Time 0.4	WAVV 8023 WAVG 7211
WAVV S 04° 05.85' E 138° 57.06'	PYR S 03° 54.20' E 138° 45.77'	SWART S 03° 39.87' E 138° 24.55'	KAR / WAVG S 03° 41.18' E 138° 28.75'			
Reporting Points - PYR - Pyramid, POGPS - Poga Pass						
RADIO INFORMATION						
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 122.00						
WAMENA TO KARUBAGA			KARUBAGA TO WAMENA			
ALTITUDES						
Recommended Altitudes: 10500' 12500'	VNAV: 6500' overhead KAR @ 600FPM	Recommended Altitudes: 11500' 13500'	VNAV: 6100' 2NM before WAVV @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Pyramid, Danime, Kanggime, Wunin, Mamit Reversal Procedures: At SWART - right turn back on to track.			Emergency Airstrips: Mamit, Wunin, Kanggime, Danime, Pyramid. Reversal Procedures: PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			14NM to PYR start descent down to 11500' After PYR descend down to 10000', further at pilots discretion.			

Wamena to Karubaga via Bokondini Pass					GPS Flight Plan 10	Flight Time 0.4	WAVV 8023 WAVG 7211
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	KEL S 03° 43.60' E 138° 42.85'	BOK / WAVB S 03° 41.17' E 138° 40.80'	BOKPS S 03° 40.02' E 138° 36.26'	SWART S 03° 39.87' E 138° 34.55'	KAR / WAVG S 03° 41.16' E 138° 28.75'	
Reporting Points - PYR - Pyramid, BOKPS - Bokondini Pass							
RADIO INFORMATION							
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 124.00 (120.00), 122.00							
WAMENA TO KARUBAGA				KARUBAGA TO WAMENA			
ALTITUDES							
Recommended Altitudes: 10500' 12500'		VNAV: 8500' overhead KAR @ 800FPM		Recommended Altitudes: 11500' 11500'		VNAV: 6100' 2NM before WAVV @ 800FPM	
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pyramid, Danime, Kanggime, Wunin, Mamil Reversal Procedures: At SWART - right turn back on to track.				Emergency Airstrips: Mamil, Wunin, Kanggime, Danime, Pyramid. Reversal Procedures: At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Maintain 11500' until PYR. After PYR descend down to 10000', further at pilots discretion.			

2.6.8 WAMENA – KENYAM

Wamena to Kenyam						GPS Flight Plan 15	Flight Time 0.6	WAVV 8023 KEN 0122
WAVV S 04° 05.85' E 138° 57.08'	DEK1 S 04° 15.04' E 139° 03.99'	DEK2 S 04° 19.32' E 139° 03.10'	KEN1 S 04° 23.84' E 139° 08.14'	KEN2 S 04° 29.73' E 139° 08.19'	KEN3 S 04° 35.72' E 139° 01.83'	GEA S 04° 39.08' E 138° 45.07'		
KEN S 04° 35.06' E 138° 22.95'								
Reporting Points - POL - Polimo, PAS - Pasema, GEA - Gearik								
RADIO INFORMATION								
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 121.00								
WAMENA TO KENYAM				KENYAM TO WAMENA				
ALTITUDES								
Recommended Altitudes: 9500' 11500'		VNAV: 1400' 1NM before KEN @ 800FPM		Recommended Altitudes: 10500' 12500'		VNAV: 6100' 2NM before WAVV @ 800FPM		
CLIMB PROCEDURES								
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 3000' by POL - Polimo in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Pasema, Holuwon, Gearik, Paro Reversal Procedures: Continue on track until KEN3 then Left turn back on to track. At GEA - Left turn on to track. Over KEN - Left turn on to track.				Emergency Airstrips: Paro, Gearik, Holuwon, Pasema. Reversal Procedures: At GEA/KEN3 - Right turn on to track. Continue on track from KY3 to WAVV then right turn overhead.				
DESCENT/ARRIVAL PROCEDURES								
Start at KEN3 to not below 7000 ft at GEA. Not below 3000 ft KEN then at pilots discretion. Visual descent only on the VNAV or steeper if operationally required below 3000'. Mandatory overhead join.				Maintain 12500' until overhead POL - Polimo then descend down to 10000'. After visually only at pilot's discretion. Consider tracking to Pyramid for visual conditions.				

2.6.9 WAMENA – KOBAKMA

Wamena to Kobakma					GPS Flight Plan 14	Flight Time 0.4	WAVV 8023 KOB 8029
WAVV S 04° 05.85' E 138° 57.06'	PYR S 03° 54.20' E 138° 45.77'	WOL S 03° 51.10' E 138° 51.54'	ILG S 03° 50.22' E 138° 55.20'	KOB S 03° 39.98' E 139° 03.54'			
Reporting Points - PYR - Pyramid.							
RADIO INFORMATION: Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 124.00 (120.00)							
WAMENA TO KOBAKMA				KOBAKMA TO WAMENA			
ALTITUDES							
Recommended Altitudes: 8500'/10500' 12500'		VNAV: 4000' overhead KOB @ 600FPM		Recommended Altitudes: 11500' 11500'		VNAV: 6100' 2NM before WAVV @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions. Recommend visual climb via Kelila or Middle Gap.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pyramid, Danime, Kelila, Bokondini, Wolo, Ilugwa. Reversal Procedures: Left or Right turn overhead KOB				Emergency Airstrips: Ilugwa, Wolo, Bokondini, Kelila, Danime, Pyramid. Reversal Procedures: PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join.				Maintain 11500' until PYR. After PYR descend down to 10000', further at pilots discretion.			



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PART C AREA, ROUTES AND AERODROMES

2.6.10 WAMENA – MAMIT

Wamena to Mamit via Poga Pass				GPS Flight Plan 16	Flight Time 0.4	WAVV 8023 MAM 8031
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	SWART S 03° 39.87' E 138° 24.55'	MAM S 03° 35.31' E 138° 23.81'			
Reporting Points - PYR - Pyramid, POGPS - Poga Pass						
RADIO INFORMATION						
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 122.00						
WAMENA TO MAMIT				MAMIT TO WAMENA		
ALTITUDES						
Recommended Altitudes: 10500' 12500'	VNAV: 5000' overhead MAM @ 600FPM	Recommended Altitudes: 11500' 13500'	VNAV: 6100' 2NM before WAVV @ 600FPM			
CLIMB PROCEDURES						
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.			Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES						
Emergency Airstrips: Pyramid, Danime, Kanggime, Wunin, Karubaga Reversal Procedures: At SWART - right turn back on to track.			Emergency Airstrips: Karubaga, Wunin, Kanggime, Danime, Pyramid. Reversal Procedures: PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES						
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.			Maintain 11500' until PYR. After PYR descend down to 10000', further at pilots discretion.			

Wamena to Mamit via Bokondini Pass						GPS Flight Plan 18	Flight Time 0.4	WAVV 8023 MAM 8031
WAVV S 04° 05.65' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	KEL S 03° 43.69' E 138° 42.65'	BOK S 03° 41.17' E 138° 40.80'	BOKPS S 03° 40.02' E 138° 36.28'	SWART S 03° 39.67' E 136° 24.55'	MAM S 03° 35.31' E 138° 23.81'		
Reporting Points - PYR - Pyramid, BOKPS - Bokondini Pass								
RADIO INFORMATION								
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 124.00 (120.00), 122.00								
WAMENA TO MAMIT					MAMIT TO WAMENA			
ALTITUDES								
Recommended Altitudes: 10500' 12500'	VNAV: 6000' overhead MAM @ 600FPM		Recommended Altitudes: 11500' 11500'		VNAV: 6100' 2NM before WAVV @ 600FPM			
CLIMB PROCEDURES								
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Pyramid, Danimo, Kanggimo, Wunin, Karubaga Reversal Procedures: At SWART - right turn back on to track.				Emergency Airstrips: Karubaga, Wunin, Kanggimo, Danimo, Pyramid. Reversal Procedures: PYR - WAVV - Right turn on to track.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Mandatory overhead join. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				Maintain 11500' until PYR, After PYR descend down to 10000' further at pilots discretion.				

2.6.11 WAMENA – MULIA

Wamena to Mulia via Poga Pass						GPS Flight Plan 16	Flight Time 0.8	WAVV 6023 WAVA 8019
WAVV S 04° 05.85' E 138° 57.08'	PYR S 03° 54.20' E 138° 45.77'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 46.47' E 138° 16.79'	ILU1 S 03° 42.37' E 138° 04.15'	MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 59.47'		
MUL3 S 03° 42.19' E 137° 54.98'	MUL / WAVA S 03° 42.16' E 137° 57.47'							
Reporting Points : PYR - Pyramid, POGPS - Poga Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Wamena TWR 120.00, Mulia INFO 122.10 Nav Aids: Area Frequencies: 122.00								
WAMENA TO MULIA				MULIA TO WAMENA				
ALTITUDES								
Recommended Altitudes: 10500' 12500'		VNAV: 6000' at MUL3 @ 600FPM		Recommended Altitudes: 11500' 13500'		VNAV: 6100' 2NM before WAVV @ 600FPM		
CLIMB PROCEDURES								
Non visual climb out permitted if all 'Non-Visual Conditions' met Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Pyramid, Danime, Kanggime, Wunin, Mamit, Ilu Reversal Procedures: At SWART - right turn back on to track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan.				Emergency Airstrips: Ilu, Mamit, Wunin, Kanggime, Danime, Pyramid. Reversal Procedures: At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when applicable. BlueSky message OPS NORMAL received, Satellite phone is on board and contact with Mulia Radio established before the approach.				14NM to PYR start descent down to 11500' After PYR descend down to 10000', further at pilots discretion.				

Wamena to Mulia via Bokondini Pass						GPS Flight Plan 16	Flight Time 0.8	WAVV 8053 WAVA 8013
WAVV S 04° 05.05' E 138° 57.08	PYR S 03° 54.20' E 138° 46.77	KEL S 03° 43.69' E 138° 42.65	BOK / WVB S 03° 41.17' E 138° 40.60	BOKPS S 03° 46.02' E 138° 36.28'	SWART S 03° 39.67' E 136° 24.55'	ILUPS S 03° 40.47' E 138° 16.79		
ILU1 S 03° 42.37' E 138° 04.15	MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 55.47	MUL3 S 03° 42.19' E 137° 54.99'	MUL / WAVA S 03° 42.16' E 137° 57.47'				
Reporting Points - PYR - Pyramid, BOKPS - Bokondini Pass, ILUPS - Ilu Pass								
RADIO INFORMATION								
Stations: Wamena TWR 120.00, Mulia INFO 122.10 Nav Aids: Area Frequencies: 124.00 (120.00), 122.00								
WAMENA TO MULIA				MULIA TO WAMENA				
ALTITUDES								
Recommended Altitudes: 10500' 12500'		VNAV: 8000' at MUL3 @ 600FPM		Recommended Altitudes: 11500' 11500'		VNAV: 6100' 2NM before WAVV @ 600FPM		
CLIMB PROCEDURES								
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.				
ENROUTE PROCEDURES								
Emergency Airstrips: Pyramid, Danimo, Kanggimo, Wunin, Mamit, Ilu Reversal Procedures: At SWART - right turn back on to track. At MUL1/MUL2 - Left turn to intercept track. At MUL2 - Activate MULIA - NABIRE flight plan (7). right turn at PTY to flallands or invert flight plan.				Emergency Airstrips: Ilu, Mamit, Wunin, Kanggimo, Danimo, Pyramid. Reversal Procedures: At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.				
DESCENT/ARRIVAL PROCEDURES								
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when applicable; BlueSky message OPS NORMAL received. Satellite phone is on board and contact with Mulia Radio established before the approach				Maintain 11500' until PYR. After PYR descend down to 10000' further at pilots discretion.				

2.6.12 WAMENA – SINAK

Wamena to Sinak via Poga Pass					GPS Flight Plan 16	Flight Time 0,7	WAVV 8023 WABS 8114
WAVV S 04° 05.85' E 138° 57.06'	PYR S 03° 54.20' E 138° 45.77'	SWART S 03° 39.87' E 138° 24.55'	ILUPS S 03° 40.47' E 138° 18.79'	ILU1 S 03° 42.37' E 138° 04.19'	MUL1 S 03° 40.22' E 138° 00.00'	MUL2 S 03° 39.42' E 137° 55.47'	
SIN1 S 03° 40.86' E 137° 47.05'	SIN2 S 03° 43.66' E 137° 49.25'	SIN / WABS S 03° 49.33' E 137° 50.47'					
Reporting Points - PYR - Pyramid, POGPS - Poga Pass, ILUPS - Ilu Pass							
RADIO INFORMATION							
Stations: Wamena TWR 120.00 Nav Aids: Area Frequencies: 122.00							
WAMENA TO SINAK				SINAK TO WAMENA			
ALTITUDES							
Recommended Altitudes: 10500' 12500'		VNAV: 8000' 1NM before SIN @ 600FPM		Recommended Altitudes: 11500' 13500'		VNAV: 6100' 2NM before WAVV @ 600FPM	
CLIMB PROCEDURES							
Non visual climb outs permitted if all 'Non-Visual Conditions' met. Must be 10000' by PYR - Pyramid in non visual conditions.				Visual only climb out. Be established at required altitude before entering non visual conditions.			
ENROUTE PROCEDURES							
Emergency Airstrips: Pyramid, Danime, Kellia, Wunin, Mamit, Karubaga, Kanggime, Ilu, Mullia Reversal Procedures: At SWART - Left turn to intercept track. At MUL1/MUL2- Left turn to intercept track. At MUL2 - Activate SINAK - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan. At SIN1 - Right turn to intercept track. At SIN1 - Activate SINAK - NABIRE flight plan (7), right turn at PTY to flatlands or invert flight plan.				Emergency Airstrips: Bina, Iumo, Ilu, Mamit, Wunin, Kanggime, Danime, Pyramid. Reversal Procedures: At SWART - Left turn on to track. PYR - WAVV - Right turn on to track.			
DESCENT/ARRIVAL PROCEDURES							
Visual descent only on the VNAV or steeper if operationally required. Be familiar with Remote Destination Safety Procedure and follow when deemed necessary.				14NM to PYR start descent down to 11500' After PYR descend down to 10000', further at pilots discretion.			



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PAPUA AIRSTRIPS & WAYPOINTS COORDINATES

Waypoint	Coordinates
906030 (9000 ft TIM Rad 060 30nm)	S 04°17.77' E 137°19.05'
BEOEGP (Beoga East Gap)	S 03°47.34' E 137°31.46'
BEOEPZ (Beoga East Pass)	S 03°40.86' E 137°29.84'
BEOGA (Beoga Airstrip)	S 03°48.97' E 137°25.48'
BEOPZ (Beoga Pass)	S 03°48.21' E 137°16.12
BESVLY (Beoga South Valley)	S 03°56.29' E 137°17.23'
BILAI (Bilai Airstrip)	S 03°44.50' E 136°51.50'
BILGP (Bilogai West Gap)	S 03°44.69' E 136°56.00'
BINA (Bina Airstrip)	S 03°42.03' E 137°43.08'
BLO23 (Bilogai 23nm SW)	S 03°50.77' E 136°40.76'
BLOGAI (Bilogai/Sugapa Airstrip)	S 03°44.40' E 137°01.87'
BUGLGA (Bugalaga Airstrip)	S 03°37.40' E 136°35.79'
DOUFU (Doufu Airstrip)	S 03°10.52' E 137°15.16'
DUMAPZ (Duma Pass)	S 03°58.38' E 136°40.93'
ENARGP (Enarotali Gap)	S 03°48.09' E 136°15.23'
ENARO (Enarotali Airstrip)	S 03°55.57' E 136°22.66'
EPOTO (Epouto Airstrip)	S 03°56.99' E 136°20.24'
EWIGP (Enarotali---Timika Gap)	S 04°00.83' E 136°26.74'
HILAKE (High Lake)	S 03°55.60' E 137°48.36'
HITDPA (Hitadipa Airstrip)	S 03°44.06' E 137°07.02'
HLAKPZ (High Lake Pass)	S 03°55.01' E 137°44.56'
HOMEO (Homeo Airstrip – Old)	S 03°42.04' E 136°42.61'
ILACUW (Ilaga Cut West)	S 04°10.41' E 137°30.69'



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PART C AREA, ROUTES AND AERODROMES

Waypoint	Coordinates
ILAGA (Ilaga Airstrip)	S 03°58.61' E 137°37.33'
ILAGPZ (Ilaga Pass)	S 04°03.84' E 137°35.55'
ILALIP (Ilaga Lips)	S 03°48.82' E 137°38.57'
ILANRV (Ilaga North River)	S 03°55.73' E 137°39.56'
ILAWLK (Ilaga West Lake)	S 03°57.00' E 137°26.42'
ILNRPZ (Ilaga North Pass)	S 03°51.58' E 137°38.03'
JILA (Jila Airstrip)	S 04°14.81' E 137°35.71'
JILAPZ (Jila Pass)	S 04°05.64' E 137°40.28'
KOMOPA (Komopa Airstrip – closed)	S 03°47.98' E 136°28.64'
KWYWAG (Kwijawagi Airstrip)	S 04°01.50' E 138°12.31'
LUMO (Lumo Airstrip)	S 03°40.08' E 137°48.47'
MBUGLO (Mbugolo Airstrip/Homeo New/Wandai)	S 03°42.48' E 136°44.56'
MONMNI (Moanamani Airstrip)	S 04°00.42' E 136°02.24'
MUL9RB (Mulia Right Base RW09)	S 03°43.70' E 137°54.53'
MULIA (Mulia Airstrip)	S 03°42.16' E 137°57.47'
NBXCTR (Nabire Airport Midfield)	S 03°22.04' E 135°29.78'
PGAMBA (Pagamba Airstrip)	S 03°38.58' E 136°40.71'
PTB (Point Bravo)	S 03°30.39' E 135°54.49'
PTC (Point Charlie)	S 03°42.61' E 136°02.05'
PTE (Point Echo)	S 03°37.67' E 136°20.94'
PTY (Point Yankee)	S 03°36.97' E 137°21.20'
POGAPA (Pogapa Airstrip)	S 03°45.13' E 136°50.75'
SINAK (Sinak Airstrip)	S 03°49.33' E 137°50.47'
SINEGP (Sinak East Gap)	S 03°57.51' E 137°49.32'



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PART C AREA, ROUTES AND AERODROMES

Waypoint	Coordinates
SINKPZ (Sinak---Jila Pass)	S 04°05.27' E 137°52.90'
SNNRPZ (Sinak North Pass)	S 03°46.50' E 137°50.78'
SNSEGP (Sinak Southeast Gap)	S 03°54.09' E 137°55.59'
SNSIN (Sinak South In)	S 03°52.87' E 137°50.88'
TEMBPZ (Tembagapura Pass)	S 04°03.16' E 137°13.62'
TIM30 (Timika Runway 30)	S 04°32.11' E 136°53.76'
TOPO (Topo Village – NBR Rad 140 10nm)	S 03°30.94' E 135°36.09'
UPAZ (U Pass)	S 04°08.18' E 137°30.28'
WAGGAP (Waghete---Timika Gap)	S 04°05.07' E 136°22.69'
WAGHTE (Waghete Airstrip)	S 04°02.62' E 136°16.58'
WAGTGP (Waghete---Timika North Gap)	S 04°00.83' E 136°22.61'
WANGBE (Wangbe Airstrip)	S 03°52.10' E 137°28.17'
YOTADI (Youtadi Airstrip)	S 03°40.40' E 136°34.01'
SIN1	S 03° 40.86' E 137° 47.05'
SIN2	S 03° 43.66' E 137° 49.25'
ILU4	S 03° 39.42' E 137° 55.47'
ILU3	S 03° 40.22' E 138° 00.00'
ILU2	S 03° 42.37' E 138° 04.19'
MLSNGP (Mulia---Sinak Gap)	
SUGGAP (Sugapa Gap)	
ILAXDW (Ilaga extended downwind)	

(Always check and make sure the coordinates are correct and accurate)

Appendix C AIRSTRIP/AIRPORT INFORMATION

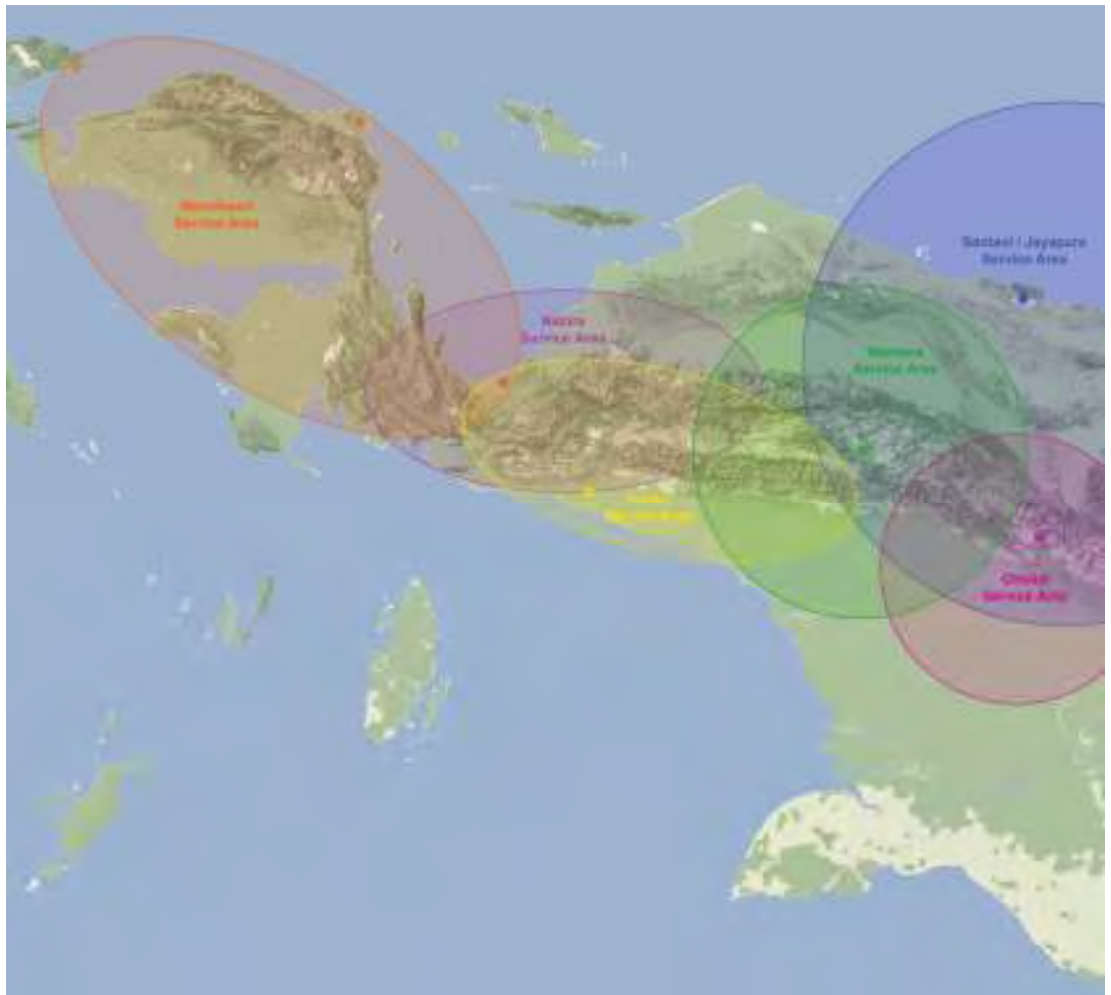
1. PAPUA AREAS AERODROMES

Introduction

Aerodrome Classification Determination Process considering 17 characteristic factors such as :

Airstrip elevation, runway length, surface, slope, direction, navigation aid, communication radio reporting/fuel availability, airstrip facility/maintenance, weather phenomena, special required/procedure approach/landing/go-around, obstacles, weight restriction, illusion problem, security factor and other risks.

Each characteristic factor is given multiplier factor to determine its risk score, and then all 17 characteristic factor scores are sum up together and if the total risk score



1.1. BEOGA (BEO) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	5600 ft
LENGTH	566m
SLOPE	8 % at TDZ then 12 %
WIDTH	25m
SURFACE	Asphalt
LATITUDE	S 03 48 97
LONGITUDE	E 137 25 48
WIND	1.000
MAX LDW & TWO	Full/ 7850
MAX GS	100 @ V.ref 85Kts
RADIO	122,0
CLASS	C

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Asphalt(590m)	None
OBSTACLES	None	None
WEATHER & WIND	Normally good in the morning until mid-day, often Closes with rain and clouds in the late afternoon. Midmorning up valley wind can generate significant turbulence on approach (1.000)	Restrict operation at 09.30
ABORTED LANDING	Just passing KP on final, left turn out. Continue straight off upper end.	Follow procedure accurately
ABORTED TAKE OFF	10-25 m intro take off roll. Swerve off strip to the right.	Follow procedure accurately
HAZARD OTHERS	Very short final space with no go-around possible after established on final. Possible sun light over strip in the early morning	Committal point before turning final Use sun visor or sunglasses.
LIMITED OPERATION	09.30	
REMARK	Landing RW 16 Take off RW 34	

1.2. BIAK (BIK) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	46 ft.
LENGTH	3,571m
SLOPE	0%
WIDTH	11
SURFACE	Asphalt
LATITUDE	S 01 11 24
LONGITUDE	E 136 06 27E
WIND	TBD
MAX LDW & TWO	TBD
MAX GS	TBD
RADIO	118.1
CLASS	A

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Sealed	Nil
OBSTACLES	Nil	Nil
WEATHER & WIND	Nil	Nil
ABORTED LANDING	Nil	Nil
ABORTED TAKE OFF	Nil	Nil
HAZARD OTHERS	Caution for dog and birds. All Pilot/ Operation to contact ATC when Filling Flight Plan Circuit Rwy Right-han. Rwy 29 Left hand	Keep situational awareness
LIMITED OPERATION	Nil	
REMARK	Nil	

1.3. BILOGAI (BIL) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	5950 ft
LENGTH	835m
SLOPE	-1% at 27 TDZ 0% Aft
WIDTH	17 m
SURFACE	Asphalt
LATITUDE	S 03 44 40
LONGITUDE	E 137 01 87
WIND	1.000
MAX LDW & TWO	None
MAX GS	95@Vref 80Kts
RADIO	122.4
CLASS	B

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Asphalt (800m)	None
OBSTACLES	Hill on approach RW 09	<ol style="list-style-type: none"> 1. For RW 09 requires curved approach from the west over the hill. 2. Best approach 27. 3. Best departure RW 09.
WEATHER & WIND	Often morning ground fog. Quickly changing fog condition . Possible strong turbulence after 10.00 . Wind curfew for Caravan 10.00	<ol style="list-style-type: none"> 1. Obtain WX information prior to departure 2. Restrict operation until 10.00 <p>Best time to land at 09.30</p>
ABORTED LANDING	Rw27 : over threshold, straight up strip then left turn out. RWY 09; touch and go swerve into right ditch either direction.	Follow procedure accurately
ABORTED TAKE OFF	250m-275m into take off roll. Swerve into right ditch either direction. DO NOT go off either end.	Follow procedure accurately
HAZARDOTHERS	Heavy traffic on peak hour	Maintain Communication and visual contact.
LIMITED OPERATION	Restrict operation until 10.00	
REMARK	Landing and takeoff both directions.	

1.4. DOUFU (DOF) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	1.801 ft.
LENGTH	549 m
SLOPE	4
WIDTH	14 m
SURFACE	Red Clay with gravel
LATITUDE	S 03 10 52 E
LONGITUDE	E 137 15 16
WIND	TBD
MAX LDW & TWO	TBD
MAX GS	TBD
RADIO	122.4
CLASS	C

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Hard surface with good braking, Red Clay with Gravel. Slight undulation	1 To ensure runway in dry condition at Doufu prior to fly. Check Weather radar /information at one night before and before flight
OBSTACLES	None	None
WEATHER & WIND	Usually fog and low clouds until 09:00 am	landing at Doufu after 09.00 am
ABORTED LANDING	Immediate right of left turn west side of river	Follow missed approach procedure accurately
ABORTED TAKE OFF	100m, on T.O roll, if unable to stop. Swerve to the right of left.	Follow procedure accurately
HAZARD OTHERS	Low ground fog in the morning. It could become a threat sticky soil when wet. Be aware of people and animal on the runway since there is no perimeter fence.	<ol style="list-style-type: none"> 1. Landing at Doufu after 09.00 am. 2. Keep situational awareness
LIMITED OPERATION	09.00 am – 14.00 pm	
REMARK	None	

1.5. ENAROTALI (ENA) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	5500 ft
LENGTH	990m
SLOPE	0%
WIDTH	20
SURFACE	Asphalt
LATITUDE	S 03 55 57
LONGITUDE	E 136 22 66
WIND	-
MAX LDW & TWO	-
MAX GS	-
RADIO	122.4
CLASS	A

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Rough asphalt; pot holes and grass growing out through asphalt in places	Avoid the stones, use aircraft brake accordingly .
OBSTACLES	Fences at both ends.	Be aware of those fences
WEATHER & WIND	early morning; possible rain showers in late afternoon covering the hills but lake area normally still open. Midday WNW winds Create crosswind and turbulence from hill to the northwest.	Operation time is limited until 12 .00 am
ABORTED LANDING	Touch and go both directions. Should be done before 25% marker or 250m. continue straight off either end,	Follow procedure accurately
ABORTED TAKE OFF	Up to 50% continue straight off either end.	Follow procedure accurately
HAZARD OTHERS	Crowd control is a real problem. Peoples on the sides and ends of airstrips.	Keep situational awareness
LIMITED OPERATION	07.00 -12.00 am	
REMARK		

1.6. EWER (EWR) AIRPORT/ AIRSTRIIP INFORMATION



AIRPORT/ AIRSTRIIP INFORMATION	
ELEV (FT)	50 ft
LENGTH	600 m
SLOPE	0 %
WIDTH	30 m
SURFACE	Steel Mats
LATITUDE	S 05 29 56
LONGITUDE	E 138 05 12
WIND	0
MAX LDW & TWO	None
MAX GS	None
RADIO	122.2
CLASS	B

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Steel mat on whole length with grass growing through	Avoid hard Landing
OBSTACLES	Tress to Southwest	Expect steeper approach to run way 24
WEATHER & WIND	Low clouds and fog common early midmorning. Scattered rain showers in the afternoon	Check Weather radar before departure. Ensure weather information is obtained before departure
ABORTED LANDING	Touch and go both directions	Follow procedure accurately
ABORTED TAKE OFF	Take off must be continued beyond 200 M take off roll.	Follow procedure accurately
HAZARD OTHERS	Expect turbulence and crosswind on approach to Rwy 6	Follow procedure accurately
LIMITED OPERATION	none	
REMARK	Maintain Vref + 5.	

1.7. ILU (ILU) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	5950 ft at TDZ
LENGTH	800 m
SLOPE	6% @ TDZ then 8% & 7%
WIDTH	20 m
SURFACE	Asphalt
LATITUDE	S 03 42 47 E
LONGITUDE	E 138 11 97
WIND	0
MAX LDW & TWO	Full & 8200
MAX GS	None
RADIO	122.4
CLASS	C

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Asphalt	None
OBSTACLES	Mountain across river.	Make tighter approach
WEATHER & WIND	Normally open all day. Wind by midday create crosswind with a lot of turbulence and downdraft from wind crossing the plateau.	Check windsock and act accordingly
ABORTED LANDING	Committal point at 500m final, turn right before plateau. Continue straight off upper end.	Follow missed approach procedure accurately
ABORTED TAKE OFF	100-150 during takeoff roll. Continue straight off lower end.	Follow procedure accurately
HAZARD OTHERS	Sun light on right base in early morning .	Use Sun visor or sunglasses
LIMITED OPERATION	Limit operation until 12.00	
REMARK	Landing RW 17 Take off RW 35	

1.8. KENYAM (KEN) AIRPORT/ AIRSTRIIP INFORMATION



AIRPORT/ AIRSTRIIP INFORMATION	
ELEV (FT)	400 ft
LENGTH	604 m
SLOPE	0
WIDTH	17 m
SURFACE	Gravel over day, some loose rocks
LATITUDE	S 043606
LONGITUDE	E 1382299
WIND	0
MAX LDW & TWO	Full & 7725
MAX GS	100@ Vref 85Kts
RADIO	○ 121.0
CLASS	○ B

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Quite hard and very smooth, gravel over clay base; thin grass; can be very slippery and edge are soft when wet.	Maintain RW center line.
OBSTACLES	Trees 2 degrees approach and departure angles.	Maintain approach and departure path correctly
WEATHER & WIND	Early morning fog and low cloud common	Operation time is limited from 08.00- 12 .00
ABORTED LANDING	Touch and go from either direction. Touch down before 150m or less. If you touch beyond 150m and stop on the runway is not possible, swerve into east ditch. – DO NOT go off either end	Follow procedure accurately
ABORTED TAKE OFF	Beyond 200 meter during take off roll up to 50% depending on conditions, swerve into east ditch – DO NOT go off either end	Follow procedure accurately
HAZARD OTHERS	Very slippery and/or soft when wet. There were aircrafts stuck in soft areas while turning around during wet season.	1.Keep approach speed down and land early 2. Avoid turning around in soft area.
LIMITED OPERATION	operation until 12.00	
REMARK	Landing and Take off both RW direction 27 and 09	

1.9. NABIRE (NBX) AIRPORT/ AIRSTrip INFORMATION



AIRPORT/ AIRSTrip INFORMATION	
ELEV (FT)	20
LENGTH	1.400m
SLOPE	0%
WIDTH	30m
SURFACE	Sealed
LATITUDE	S 03 22 00
LONGITUDE	E 135 30 00
WIND	None
MAX LDW & TWO	Full/ Full
MAX GS	None
RADIO	122.3
CLASS	A

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Sealed	-
OBSTACLES	Slightly rising terrain to the Southeast	-
WEATHER & WIND	Generally fine in the morning closing in the afternoon with shower	-
ABORTED LANDING		Touch and Go both direction
ABORTED TAKE OFF		Shortly after becoming airborne
HAZARD OTHERS	None	
LIMITED OPERATION	16 : 00 WIT	
REMARK	-	

1.10. SINAK (SIN) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	6.900
LENGTH	800 m
SLOPE	0%
WIDTH	18 m
SURFACE	Asphalt
LATITUDE	S 03 49 22
LONGITUDE	E 137 50 47
WIND	10
MAX LDW & TWO	
MAX GS	
RADIO	122.0
CLASS	A

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Asphalt with some undulation, 95% covered with thin layer of sands. At the first 300 meters of runway 17 sands covered with sandy clay eroded from west side man made wall ground which was left after runway work.	-
OBSTACLES	Runway 17 short final has a small ridge on the west side adjacent to runway extended centerline and 3% up sloping clear grass field but not these are not significant. Runway 35 has high trees on higher ground on short final which makes approach slope steep.	Runway 17 is better with flatter approach angle 200-300 FPM with short field landing to minimize landing roll. Runway 35 at key point altitude over trees on short final maximum 85 KIAS close power and glide 80-85 KIAS for touchdown
WEATHER & WIND	Common fog early morning but clears quickly. Often closes by rain after mid-day. Generally strong wind after 10:00 am, makes bumpy on runway 35 approach and around east downwind on northerly valley wind.	-
ABORTED LANDING	Runway 17 - Over threshold make level at 10-50 feet above runway and make left turn while climbing after midfield join east downwind. Runway 35 - Over threshold make normal balked landing. Committed after touchdown for both runways for C208B Caravan near maximum landing weight.	-
ABORTED TAKE OFF	Runway 35 300 meters into roll.	
HAZARD OTHERS	Expect turbulence on approach to runway 35 if northerly valley wind is present commonly after 10:00 am, this condition makes gradual sink rate. Push a nose down attitude and add slight power momentarily to recover from sink rate. Wet runway surface (wet sands over wet runway) makes it very slippery and can be considered as grass runway in which poor braking is highly likely.	Push a nose down attitude and add slight power momentarily to recover from sink rate. Based on experience please calculate landing distance as follow for runway condition like Sinak (wet sands over wet runway) : Ground roll + 40% ground roll assume grass runway condition - 10% maximum reverse immediately after touchdown + 40 meters conservative value + 30 meters for C208B EX type.



OPERATION MANUAL

PART C AREA, ROUTES AND AERODROMES

		<p>Example : Elevation => 8000FT/30°C/Calm wind/zero slope/ C208B EX. Landing roll 321 meters, 40% equal to +128.4, 10% -32.1 meters. $321 + 128.4 - 32.1 + 40 + 30 = 487.3$ meters.</p> <p>This is the minimum safe runway length you have to have on runway condition line Sinak described above.</p>
LIMITED OPERATION		
REMARK		

1.11. TANAH MERAH (TMH) AIRPORT/ AIRSTrip INFORMATION



AIRPORT/ AIRSTrip INFORMATION	
ELEV (FT)	100 ft.
LENGTH	900 m
SLOPE	0%
WIDTH	28 m
SURFACE	Asphalt
LATITUDE	S 06 05 83 E
LONGITUDE	E 140 18 11
WIND	None
MAX LDW & TWO	Full/ Full
MAX GS	None
RADIO	123.4
CLASS	A

DESCRIPTION	HAZARD	MITIGATION
SURFACE & 0 DIMENSION	Checked Asphalt with grass growing thought crack	-
OBSTACLES	None	-
WEATHER & WIND	Same as boma and south direction	-
ABORTED LANDING	Touch and go either direction	-
ABORTED TAKE OFF	Up to 50%	
HAZARD OTHERS	People and traffic can be heavy on and round airstrip vicinity. Watch for tower at NW end of airstrip, about 1,5 miles	Keep situational awareness
LIMITED OPERATION	-	
REMARK	None	

1.12. TIMIKA (TIM) INFORMATION



AIRPORT/ AIRSTRIIP INFORMATION	
ELEV (FT)	103
LENGTH	2390 m
SLOPE	0%
WIDTH	40m
SURFACE	Sealed
LATITUDE	S 04 31 54
LONGITUDE	E 136 53 18
WIND	None
MAX LDW & TWO	Full/ Full
MAX GS	None
RADIO	118.3
CLASS	A

DESCRIPTION	HAZARD	MITIGATION
SURFACE & 0 DIMENSION	Sealed	Nil
OBSTACLES	-	-
WEATHER & WIND	-	-
ABORTED LANDING	-	-
ABORTED TAKE OFF	-	-
HAZARD OTHERS	Aircraft Traffic	Keep situational awareness
LIMITED OPERATION	Nil	
REMARK	Nil	

1.13. WAGEHE (WAG) AIRPORT/ AIRSTRIP INFORMATION



AIRPORT/ AIRSTRIP INFORMATION	
ELEV (FT)	5400ft
LENGTH	1400m
SLOPE	Level
WIDTH	25 m
SURFACE	Asphalt
LATITUDE	S 040262
LONGITUDE	E 1361658
WIND	0
MAX LDW & TWO	Full & 8000
MAX GS	None
RADIO	122.4
CLASS	B

DESCRIPTION	HAZARD	MITIGATION
SURFACE & DIMENSION	Asphalt (1400 M)	None
OBSTACLES	None	TBD
WEATHER & WIND	Normally good all day; possible low clouds in the early morning; weather can quickly deteriorate when wind is from south. Midday wind from the WNW Creates crosswind and turbulence as it spills over the hill to the northwest.	TBD
ABORTED LANDING	Touch and go both directions, should be down by 25% marker (150m) Continue straight off either end.	TBD
ABORTED TAKE OFF	Up to 50, Continue Straight off either end.	TBD
HAZARD OTHERS	Very Poorly maintained airstrip very rough can have strong crosswinds; parking area is wet and muddy.	TBD
LIMITED OPERATION	TBD	
REMARK	TBD	