



AERONAUTICAL INFORMATION PUBLICATION TIMOR-LESTE

Edition 3

**CONSULT NOTAM AND AIP SUPPLEMENT
FOR LATEST INFORMATION**

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PART 1 - GENERAL (GEN)

GEN 0

GEN 0.1 PREFACE

1 NAME OF PUBLISHING AUTHORITY

- 1.1 The AIP is published under the authority of the Civil Aviation Authority of Timor-Leste (AACTL), Ministry of Transport and Communications Timor-Leste.

2 APPLICABLE ICAO DOCUMENTS

- 2.1 The AIP is prepared in accordance with the Standards and Recommended practices (SARPs) from the following ICAO Documents:

- Annex 15 Aeronautical Information Services
- Annex 4 Aeronautical Charts
- Doc 8126 Aeronautical Information Services Manual
- Doc 8697 Aeronautical Chart Manual

3 AIP TIMOR-LESTE STRUCTURE

3.1 The AIP Structure

- 3.1.1 The AIP is made up of three Parts, being Part 1-General (GEN), Part 2.-Enroute (ENR) and Part 3-Aerodromes (AD). Each Part consists of sections and subsections. The AIP Structure is shown in graphic form at page 1-5.

3.2 Part 1 – General (GEN)

- 3.2.1 Part 1 consists of five sections. These sections are described below.

3.2.2 GEN 0 Preface

Preface, Record of AIP Amendments, Record of AIP SUPs, Checklist of AIP pages, List of Hand Amendments to the AIP and the table of Contents to Part 1.

3.2.3 GEN 1 National Regulations and Requirements

Designated authorities, Entry, transit and departure of aircraft, Entry transit and departure of cargo, Aircraft instruments, equipment and documents, Summary of national regulation and international agreements/conventions and differences from ICAO SARPs.

3.2.4 GEN 2 Tables and Codes

Measuring system, Aircraft markings, Holidays, Abbreviations, Chart symbols, Location indicators, List of radio navigation aids, Conversion tables, and Sunrise/sunset information.

3.2.5 GEN 3 Services

Aeronautical Information Service, Aeronautical Charts, Air Traffic Services, Communication Service, Meteorological Services and Search and Rescue Services.

3.2.6 GEN 4 Charges for Aerodromes/Heliports and Air Navigation Services

Aerodrome and helicopter charges/and Air Navigation Service charges.

3.3 Part 2 – Enroute (ENR)

3.3.1 Part 2 consists of seven sections. The sections are described below.

3.3.2 ENR 0 Preface

Record of AIP Amendments, Record of AIP SUPs Checklist of AIP pages, List of hand amendments to the AIP and the Table of contents to Part 2.

3.3.3 ENR 1 General Rules and Procedures

General rules, Visual flight rules, instrument flight rules, ATS airspace classification, Holding approach and departure procedures, Radar service and procedures, Altimeter Setting procedures, regional supplementary procedures, Air traffic flow management, Flight plan messages, interception of civil aircraft, and Air traffic incidents.

3.3.4 ENR 2 Air Traffic Service Airspace

Detailed description of Timor-Leste airspace and other regulated airspace.

3.3.5 ENR 3 ATS Routes

Detailed description of lower ATS routes and helicopter routings.

3.3.6 ENR 4 Radio Navigation Aids/Systems

Radio navigation aids-enroute, Special navigation systems, Name-code designators for significant points, and Aeronautical ground lights-en-route.

3.3.7 ENR 5 Navigation Warnings

Prohibited, restricted and danger areas, Military exercise and training areas and Air Defence Identification Zone (ADIZ), other activities of a dangerous nature and other potential hazards, Air navigation obstacles and bird migration areas with sensitive fauna.

3.3.8 ENR 6 En-Route Charts

En-route Charts, ICAO and index charts.

3.4 Part 3- Aerodromes (AD)

3.4.1 Part 3 consists of four sections. The sections are described below.

3.4.2 AD 0 Preface

Record of AIP Amendments, Record of AIP SUPs, Checklist of AIP pages, List of hand amendments to the AIP and the Table of Contents to Part 3.

3.4.3 AD 1 Aerodromes/Heliports – Introduction

Aerodrome/heliport availability, rescue and fire-fighting services, Index to aerodromes and heliports, Grouping of aerodromes and heliports and Handling services providers.

3.4.4 AD 2 Aerodromes

Detailed information on aerodromes including helicopter-landing areas, if located at the aerodromes.

3.4.5 AD 3 Heliports

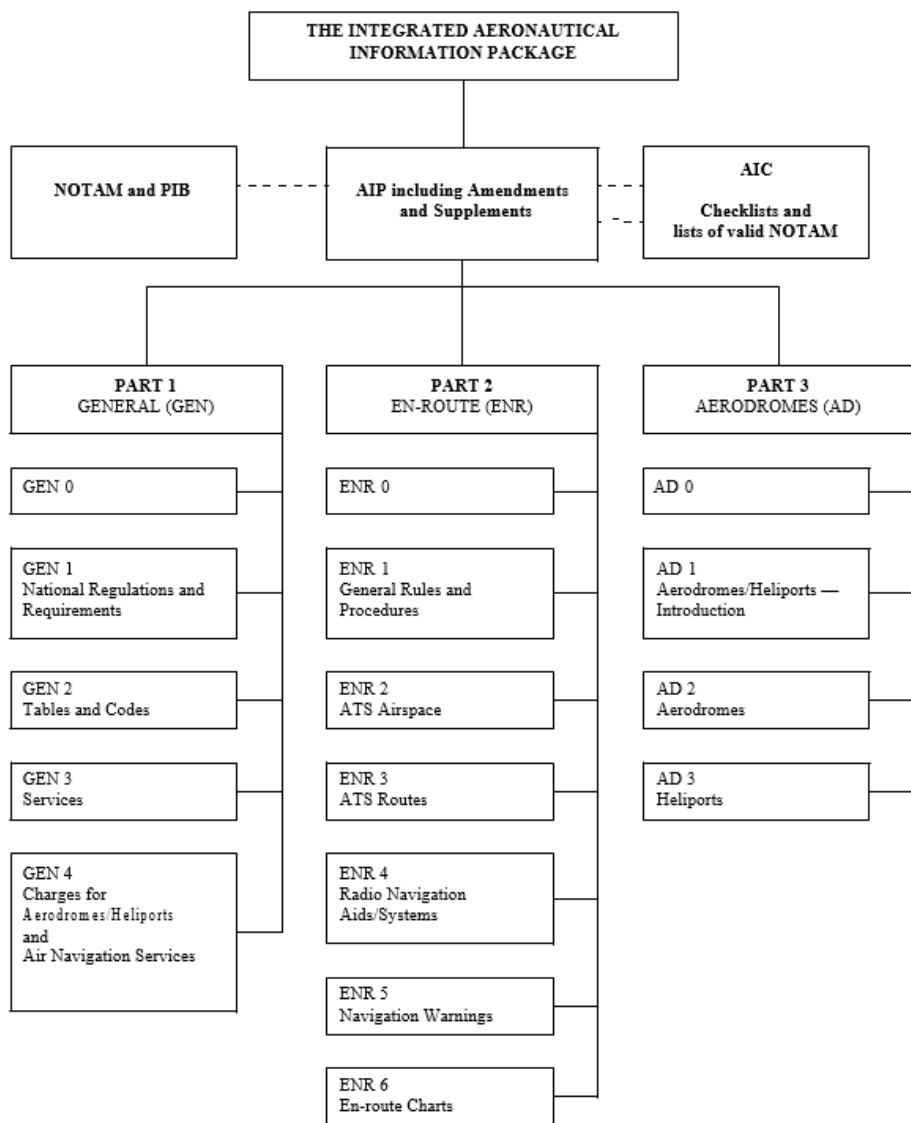
Detailed information on heliports.

4 REGULAR AMENDMENT INTERVAL

- 4.1 The Timor-Leste AIP will be amended every 12 months and will be replaced in its entirety. Interim amendments will be notified via AIC.

5 CONTACT IN CASE OF DETECTED ERRORS

- 5.1 All care has been taken to ensure that the information contained within this AIP is accurate and complete. Any errors and omissions which may be detected, as well as any correspondence concerning the Integrated Aeronautical Information Package, should be referred to AACTL, whose address is shown at GEN 1.



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GEN 0.2 RECORD OF AIP TIMOR-LESTE AMENDMENTS

AIP AMENDMENT			
NR/ Year	Publication date	Date Entered	Entered by
1	2004		
2	25 MAR 2021		
3	02 DEC 2021		
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AIRAC AIP AMENDMENT			
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GEN 0.3 RECORD OF AIP TIMOR-LESTE SUPPLEMENTS

NR/ Year	Subjects	AIP Sections(s) Affected	Period of Validity	Cancellation record
AIC 01/2021	PBN	Pt 1 and 2	UFN	NA

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GEN 0.4 CHECKLIST OF AIP TIMOR-LESTE PAGES

Edition No.	Page	Date
PART 1 GEN		
3	Cover 1-2	02 DEC 2021
3	1-1	02 DEC 2021
3	1-2 to 1-6	25 MAR 2021
3	1-7	02 DEC 2021
3	1-8	25 MAR 2021
3	1-9	02 DEC 2021
3	1-10	25 MAR 2021
3	1-11 to 1-14	02 DEC 2021
3	1-15 to 1-16	25 MAR 2021
3	1-17 to 1-21	02 DEC 2021
3	1-22	25 MAR 2021
3	1-23	02 DEC 2021
3	1-24 to 1-36	25 MAR 2021
3	1-37	02 DEC 2021
3	1-38	25 MAR 2021
3	1-39 to 1-43	02 DEC 2021
3	1-44 to 1-100	25 MAR 2021
3	1-101	02 DEC 2021
3	1-102 to 1-119	25 MAR 2021
3	1-120 to 1-121	02 DEC 2021
3	1-122	25 MAR 2021
3	1-123 to 1-124	02 DEC 2021
3	1-125 to 1-130	25 MAR 2021
3	1-131	02 DEC 2021
3	1-132	25 MAR 2021

3	1-133 to 1-135	02 DEC 2021
3	1-136 to 1-138	25 MAR 2021

Edition No.	Page	Date
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3	2-5 to 2-34	25 MAR 2021
3	2-35	02 DEC 2021
3	2-36 to 2-56	25 MAR 2021
3	2-57	02 DEC 2021
3	2-58	25 MAR 2021
3	2-59	02 DEC 2021
3	2-60 to 2-70	25 MAR 2021
3	2-71	02 DEC 2021
3	2-72 to 2-92	25 MAR 2021

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3	3-4	25 MAR 2021
3	3-5	02 DEC 2021
3	3-6 to 3-24	25 MAR 2021
3	3-25	02 DEC 2021
3	3-26 to 3-30	25 MAR 2021
3	3-31	02 DEC 2021
3	3-32 to 3-33	25 MAR 2021
3	3-34 to 3-35	15 JAN 2004
3	3-36 to 3-37	12 NOV 2015

3	3-38 to 3-39	25 MAR 2021
3	3-40 to 3-41	02 DEC 2021
3	3-42 to 3-43	APR 2012
3	3-44 to 3-54	25 MAR 2021
3	3-55	02 DEC 2021
3	3-56	25 MAR 2021
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3	3-68 to 3-69	JAN 2018
3	3-70	JUL 2020
3	3-71	MAR 2017
3	3-72 to 3-78	25 MAR 2021

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GEN 0.5 LIST OF HAND AMENDMENTS TO AIP
TIMOR-LESTE

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GEN 1

NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 DESIGNATED AUTHORITIES

1 INTRODUCTION

- 1.1 República Democrática de Timor-Leste applies to the extent practicable the ICAO Standards and Recommended Practices (SARPs) to ensure the safety and regulation of Air Navigation in Timor-Leste.
- 1.2 The addresses of the designated authorities concerned with facilitation of international air navigation are as follows:

1	Autoridade da Aviação de Timor-Leste (AACTL) Direção Serviço de Navegação Aérea Ministério dos Transportes e Comunicações Dili, Timor-Leste Tel: +670 78579929 Fax: +670 3317111 Email: cnoronha@aactl.gov.tl Web: www.aactl.gov.tl	4	Immigration Direção Nacional da Migração, Polícia Nacional de Timor-Leste, Guartel General, Rua Jacinto Cândido-Caicoli, Dili, Timor-Leste Tel: +670 3310539, +670 7230197/ +670 77195471 Fax: +670 3310 539
2	Meteorology Direção Nacional Meteorologia e Geofísica (DNMG) Ministério dos Transportes e Comunicações Dili, Timor-Leste Tel: +670 3331092 Fax: NIL	5	Health Dr. Lizete Vong Pereira PNLIA Dili, Timor-Leste Tel: +670 77479443 Fax: NIL E-mail: poaisha@gmail.com
3	Customs Direção Nacional das Alfândegas de Timor-Leste, Avenida Mártires da Pátria, Colmera, Dili, Timor-Leste Tel: +670 77952689 Email: yamaral@mopf.gov.tl Fax: NIL E-mail: urodrigues@mopf.gov.tl	6	Quarantine Director-Nacional Quarantine e Biosegurança Ministério de Agricultura e Pescas Comoro Dili, Timor-Leste Tel: +670 77546391/77088163 Fax: NIL Email: velicy2001@yahoo.com.au

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GEN 1.2 ENTRY, TRANSIT AND DEPARTURE OF AIRCRAFT

1 GENERAL

- 1.1 Procedures for international flights into, from or over the territory of República Democrática de Timor-Leste comply with the provisions of ICAO Annex 9.
- 1.2 Aeroporto International Presidente Nicolau Lobato (Dili International Airport) is the designated entry/exit points into Timor-Leste. Entry to or exit from aerodromes other than Aeroporto Internacional Presidente Nicolau Lobato is subject to specific approval by the AACTL.
- 1.3 Aircraft operating into and out of Timor-Leste airports shall comply with all restrictions and limitations established at the airports.
- 1.4 Operators shall comply with Annex 17 on security procedures for their aircraft, passengers, baggage, cargo, and mail.

2 SCHEDULED FLIGHTS

- 2.1 Scheduled services are permitted to operate into República Democrática De Timor-Leste provided it is appropriately covered by either an Air Services Agreement or by other aeronautical agreement with the AACTL.
- 2.2 Presently the AACTL authorizes operators of foreign States to operate schedule services into Timor-Leste on regular and charter basis only.
- 2.3 Foreign State operators wishing to operate services into Timor-Leste under 2.2 above must submit a request for approval to the President of AACTL for consideration with the following minimum documents:
 - a. Letter of intent for the operation
 - b. Copy of Certificate of Registration
 - c. Copy of air operator certificate (AOC) and its operation specification
 - d. Copy of Certificate of Airworthiness
 - e. Copy of Insurance Certificate

- f. Copies of pilots licence(s), valid medical certificate(s) and IELP level 4 certificate(s).
- g. Flight Schedule and slot time (by ANATL, E.P.)
- h. Proposed tariffs
- i. Company Profile
- j. Applicable licenses as required to operate within Timor-Leste as described by government regulations

2.4 Additionally, the operator must satisfy the following conditional:

- a. Possess a valid Air Operator's Certificate issued by the country in which they are registered for operations into Timor-Leste.
- b. Comply with the aviation legislations and regulations of the country in which they are registered.
- c. Has adequate insurance to specifically cover his operations into the territory of Timor-Leste.

2.5 Applications must be submitted to the AACTL at least thirty (30) days prior to the proposed commencement date of services. The decision to approve or not approve the application is at the discretion of the Board members of AACTL. Where approval to operate the services is given, AACTL may specify additional conditions to be complied with.

2.6 The operators of foreign states which are authorized to operate services into Timor-Leste are required to adhere to the National Civil Aviation Safety Regulation (CASR) of Timor-Leste.

2.7 The following documents conforming to the ICAO format as set forth in Annex 9 shall be submitted as necessary for the inbound clearance of aircraft:

- a. General Declaration-3 copies
- b. Passenger Manifest- 3 copies
- c. Cargo Manifest-3 copies

3 NON-SCHEDULED/PRIVATE OR AEROMEDICAL FLIGHTS

- 3.1 Operators intending to operate flights for taking on or discharging cargo and mail must obtain prior approval from the President of AACTL. Applications must be made at least 72 hours before arrival in Timor-Leste.
- 3.2 Requests must be faxed or e-mail to the Executive Director President of AACTL giving the following information as appropriate:
- Aircraft call sign and registration
 - Aircraft type and MTOW
 - Departure point, destination, and ETA (UTC)
 - ETD (UTC) and next destination
 - Name & address of operator including fax number and e-mail address
 - Purpose of flight
 - Any other pertinent information.
- 3.3 Flight approvals are valid for a period of 24 hours from the date/ETA approved, will extended 72 hours unless requested.
- 3.4 Documentation required for aircraft clearance are the same as for Scheduled Flights.

4 FOREIGN STATE AIRCRAFT

- 4.1 Foreign State aircraft means aircraft used in military, police or customs services of that State.
- 4.2 Unless special arrangements are in force, foreign State aircraft intending to land in Timor-Leste or overfly Timor-Leste airspace shall obtain approval to do so through diplomatic channels from the Ministry of Foreign Affairs Timor-Leste giving the following details:
- Aircraft operator
 - Aircraft type and registration mark
 - Name of pilot-in-command and number of crew
 - Purpose of flight
 - MTOW

- f. Point of departure, route, and destination
- g. Next destination and route
- h. Proposed schedule
- i. Any other relevant information considered necessary.

4.3 The Ministry of Foreign Affairs can be contacted as follows:

- Tel: +670 333 9020
- Fax: +670 322 007/322 008

5 DOCUMENTS FOR INSPECTION

5.1 Documents shall be submitted in paper form. The pilot-in-command, airline operator or the authorized agent shall produce for inspection when requested by authorized personnel before commencement of flight or after termination of flight the following documents as appropriate:

- a. Certificate of Airworthiness
- b. Certificate of Registration
- c. Licenses of operating crew
- d. Journey Log Book
- e. Passenger Manifest
- f. Cargo Manifest
- g. General Declaration of Health (Crew medical certificate)

6 TRAFFIC FORM SUBMISSION

6.1 The pilot-in-command or the authorized agent shall complete and submit to the Airport Operations Officer (ANATL, E.P) manually the Traffic Form for each flight prior to departure. The forms are available at ANATL, E.P. from Airport Operations. Traffic submission is required only at Dili International airport.

GEN 1.3 ENTRY, TRANSIT AND DEPARTURE OF PASSENGERS AND CREW

1 CUSTOMS REQUIREMENTS

1.1 All arriving person are required to declare all dutiable and prohibited goods and items to Customs officers using the Customs declaration form. As a general rule, the following should be declared:

- a. Any merchandise not exempt from the payment of duties
- b. Merchandise for commercial or industrial activity
- c. Merchandise that cannot be brought in or its import is conditional to fulfillment of certain formalities

1.2 Items and their quantity that may be brought in duty-free into Timor-Leste provided the passenger's previous trip overseas took place more than thirty (30) days ago are as follows:

- a. Souvenirs with an overall value not exceeding USD 300.00
- b. Tobacco of a gross weight not exceeding 400 grams
- c. Alcoholic beverages not exceeding 1.5 litres in quantity
- d. Special pharmaceuticals meant for self-consumption not exceeding 10 Units and which are not narcotics, pharmaceuticals shall be accompanied by a doctor's medical prescription.

Note: Customs officers may demand receipts (s) as proof of value.

1.3 Items, which are not permitted to be brought into Timor-Leste, are:

- a. Drugs
- b. Weapons considered prohibited, their ammunitions and explosive substances
- c. Gold in bars or coins
- d. Foreign lottery and games of hazard prohibited by law
- e. Currency and other means of payment outside certain limits and conditions
- f. Other merchandise forbidden by law or whose importation is exclusive to certain entities such as counterfeit books that are

of Timorese property, photographs and other works deemed to have a pornographic content

- 1.4 The following items may be brought in after completion of necessary of formalities:
- a. Guns and ammunitions
 - b. Live animals – for dogs, cats and other pets the official certificate of origin and vaccination is required
 - c. Live plants, parts of plants for dissemination, seeds and serials. The certificate of purity and germination or letter of guaranty issued by the supplier at the place of origin
 - d. Raw food such as meat, fish and seafood in the following states: raw, dry, smoked, salted, dozen or in brine
- 1.5 Trade samples that are not for sale and no commercial value must be declared and their import justified.
- 1.6 Passengers having nothing to declare may use the Green Lane while passengers with merchandise to declare must use Red Lane.
- 1.7 All departing passengers carrying more than USD 5,000.00 Cash (or foreign Equivalent) on their person or in their luggage must declare so in the embarkation form.
- 1.8 All enquiries concerning customs and currency control procedures or requirements should be addressed to the Director of Customs.

2 IMMIGRATION REQUIREMENTS

- 2.1 Enforcement of immigration rules and regulations is undertaken by the Timor-Leste National Police.
- 2.2 All Passengers require a valid passport or other internationally recognized travel Document and visa for entry into Timor-Leste, except members of visiting forces within the meaning of any law for the time being in force regulating visiting forces in Timor-Leste. Flight crews will be accorded temporary admission on production of valid licenses or crewmember certificates issued by the State of Registry of the aircraft.

- 2.3 Application for visa can be made on arrival at the Dili/Presidente Nicolau Lobato International airport. Visa information can be obtained from the Ministry of Immigration.
- 2.4 Passengers arriving and departing Timor-Leste are required to fill in the disembarkation and embarkation forms as appropriate. Disembarkation forms shall be distributed in-flight. Required forms shall be submitted to the authorities on arrival or before departure together with passports and visa.
- 2.5 The Immigration authorities may refuse an arriving passenger not in possession of a valid travel document or visa permission to enter Timor-Leste or, may require the passenger to show evidence of means of support whilst in Timor-Leste and onward passenger to a destination outside Timor-Leste.
- 2.6 Airlines operators, in their own interests should not permit passengers to board their aircraft unless passengers are in possession of the necessary travel documents, as they will be held responsible for the maintenance and subsequent deportation from Timor-Leste of passengers denied entry
- 2.7 Presently no direct transit procedures are applicable.
- 2.8 All queries regarding Immigration procedures should be addressed to the Director of Immigration.

3 HEALTH REQUIREMENTS

- 3.1 Disembarking passengers are not required to furnish vaccination certificates except those passengers coming directly from Yellow Fever affected areas.
- 3.2 The pilot-in-command shall ensure that an aircraft on international flight is adequately disinfected 30 minutes prior to arrival and must furnish evidence that this has been done.
- 3.3 No health formalities are required for departing aircraft and passengers.

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GEN 1.4 ENTRY, TRANSIT AND DEPARTURE OF CARGO

1 CUSTOMS REQUIREMENTS

- 1.1 Goods may be imported or exported by air in accordance with applicable rules. All goods to be imported or exported whether subject to import/export duties must be declared in writing.
- 1.2 All declarations must indicate a full and true account of the number and description of goods and packages, value, weight, measurement or quantity and the country of origin or destination as appropriate.
- 1.3 Where duties are payable on imported goods, such duties must be paid in full before the goods can be released. Where export duties are payable such duties must be paid in full before goods can be exported.
- 1.4 The duties levied are Import Duty and Sales Tax. The rates for Import Duty vary according to the categories of goods imported. The sales tax applicable is 6%.
- 1.5 Full information for the import and export of goods and duties applicable may be obtained from the Director of Customs.

2 QUARANTINE REQUIREMENTS

- 2.1 The Timor-Leste Quarantine Services makes all efforts to prevent the introduction of harmful pests and diseases into Timor-Leste. Passengers and cargo are therefore subject to inspection and treatment if necessary.
- 2.2 Quarantine risk management includes:
 - a. Handling of quarantine waste
 - b. Transportation of exotic insects and pathogens
 - c. Foodstuffs carried by passengers
 - d. Cargo carried on board aircraft
- 2.3 All foodstuffs and food-related waste is subject to quarantine control. Quarantine Control remains in force while the aircraft is in Timor-Leste and quarantinable material is on board. The Quarantine Officer may randomly board aircraft to supervise waste removal and disinfection.

- 2.4 All food waste and refuse shall be placed into heavy-duty plastic bags and transported as soon as possible for immediate destruction (incineration). Airline operators shall enter into agreement with authorized Timor-Leste contractors for the removal and destruction of quarantine waste. Alternatively, the waste must be securely stowed on board and taken to the point of origin. Quarantine waste shall not be handled other than in the manner stated above.
- 2.5 Aircraft operators shall conduct cabin and cargo hold disinfection for all arriving flights. Empty disinfection spray containers shall be made available to Quarantine or Customs officers upon request.
- 2.6 Aircraft operators shall notify the Quarantine Services (Serviço de Quarentena Timor-Leste) of any live animal carried on board.
- 2.7 Spraying must be completed using an SCTL approved aerosol. Approved propellants are (HFC134a or a mixture of 134a and HCFC 141b). Spray rate must be equivalent to 10 grams per 100 cubic feet (10 grams per 28.3 cubic meters).
- 2.8 Approved spray types:
- a. Pre-Spray: Permethrin 2%.
 - b. Top of Descent: Phenothrin 2%.
 - c. Hold Spray: Phenothrin 2% with Permethrin 2%.
- 2.9 Pre-Spray shall be applied in the last port the aircraft lands prior to arrival into Timor-Leste. Pre-Spray shall be applied through the cabin immediately before passengers aboard the aircraft.
- 2.10 Top of Descent Spray shall be applied just before the aircraft commences descent into Timor-Leste.
- 2.11 Hold spray shall be applied to holds at completion of loading in the country of origin just prior to departure. Cargo doors shall be closed as much as possible, the applicable amount of cargo Hold spray discharged and the cargo doors immediately sealed. Empty spray containers should then be handed to the cabin crew for presentation to Quarantine Officers on arrival at Timor-Leste.

- 2.12 When applying Pre-Spray and Top of Descent disinfection in small aircraft, the procedure should be to walk at the rate of one (1) step per second from the rear of the aircraft to the Front while spraying towards the ceiling to achieve the spray rate stated in 2.7.
- 2.13 Passengers shall declare quarantinable goods/material on the customs declaration form.
- 2.14 Quarantine Officers are on duty at Dili International Airport for scheduled flights. Operators of all other flights are required to notify the Quarantine Services in advance giving details of their flight. No quarantine services are available at other airports.
- 2.15 All enquiries concerning Quarantine procedures shall be sent to Quarantine Services at the address given in GEN 1.1.

3 CARRIAGE OF DANGEROUS GOODS

- 3.1 Prior permission must be obtained from the Flight Safety Division (FSD) Executive Director of AACTL for the carriage of dangerous goods (restricted articles) in aircraft. Except as otherwise approved by the Flight Safety Division (FSD) Executive Director of AACTL, dangerous goods shall only be carried on board an aircraft in accordance with the CASR-TL part 12 (CARRIAGE OF DANGEROUS GOODS BY AIR) ICAO Dangerous Goods Regulations as contained in Doc 9284-AN/905 Technical Instructions for the Safe Transport of Dangerous Goods and ICAO Annex 18.
- 3.2 It is the responsibility of the aircraft operator to inform the Pilot in Command (PIC) before any flight begins of the identity of any dangerous goods on board, the danger to which they give rise to and the weight or quantity of the goods. Under no circumstances shall operators carry dangerous goods forbidden for transportation by air.
- 3.3 No person may take or cause to be taken on board an aircraft, or deliver or cause to be delivered for loading thereon, any goods which he/she knows or has reason to believe or suspect to be goods the carriage of which by reason of their nature, are liable to endanger the safety of the aircraft or persons on board the aircraft.

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GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS

1 GENERAL

- 1.1 Commercial air transport aircraft must adhere to the provisions of Annex 6 - Operation of Aircraft Part 1, Chapters 6 and 7 with respect to aircraft instruments, equipment, and flight documents.
- 1.2 The minimum navigation equipment to be carried on board IFR aircraft is a serviceable VOR/DME or GNSS.
- 1.3 Aircraft GNSS equipment shall meet at least one of the standards specified below:
 - a. (E)TSO-C145
 - b. (E)TSO-C146
 - c. (E)TSO-C196a
- 1.4 Air Transport Operations shall either be equipped with two independent GNSS systems that allow completion of the flight in the event of the failure of one system. Where an operator has MEL approvals are in place for operations with one GNSS system, this shall also be approved in Timor-Leste airspace.
- 1.5 Other operations may be equipped with a single GNSS system. Where a VOR/DME is not installed to allow for the MNN to be used to continue a flight, a suitable alternate must be carried.
- 1.6 Installed GNSS equipment shall meet the specified TSO requirements and able to support ADSB operations.
- 1.7 At least one ELT shall always be carried on board.

2 SPECIAL EQUIPMENT TO BE CARRIED

- 2.1 Nil.

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GEN 1.6 SUMMARY OF NATIONAL REGULATIONS AND INTERNATIONAL AGREEMENTS AND CONVENTIONS

1 LIST OF APPLICABLE CIVIL AVIATION LEGISLATION, REGULATIONS, DIRECTIVES AND CIRCULAR

- 1.1 The following are the list of Legislation, Regulations and Directives affecting Civil Aviation within Timor-Leste.

2 CIVIL AVIATION LEGISLATION

- 2.1 Electronic versions of Civil Aviation Legislation and Decree law can be found at:

<http://timor-leste.gov.tl/?cat=36&lang=en> and
www.aactl.gov.tl

No	Civil Aviation Legislation	Date of Publication
1	Civil Aviation Basic Law No.1/2003	10 March 2003
2	Decree-law N.º 1/2019 First Amendment on Civil Aviation Basic Law No. 1/2003	23 January 2018
3	Decree-law N.º 8/2005 Creation of Civil Aviation Authority Timor-Leste (AACL)	16 September 2005
4	Government Decree N.º 8/2005, Creation of National Airport and Air Navigation Services Authority	16 September 2005
5	Decree-law N.º 3/2006, on the licensing for private use of Airport infrastructures;	1 March 2006
6	Decree-law N.º 5/2006, Legal regime for certification of Commercial Air Transportation Operator	1 March 2006
7	Decree-law N.º 6/2006, Regime for Access to Restricted and Reserved Areas At Airports	1 March 2006
9	Decree law N.º 10/2006, Legal regime on Ground Handling operations licensing.	12 April 2006

No	Civil Aviation Legislation	Date of Publication
10	Decree-law n.º 42/2016, first amendment to the Civil Aviation Authority of Timor-Leste by-laws	5 October 2016
11	Decree-law N.º 13/2018, Civil Aviation law on Security	16 May 2018
12	Decree-law n.º 32/2019, Aerodrome certification	18 December 2019
11	Ministerial Decree 29/2018, AACTL internal competences and organization regulation	17 October 2018
12	Ministerial Decree 55/2019, Rules of aircraft leasing	30 October 2019
13	Decree-law n.º 1/2020, Creation of the accidents and incidents investigation committee and amends Decree-law n.º 1/2019 and Decree-law n.º 8/2005;	8 January 2020

3 CIVIL AVIATION REGULATIONS AND DIRECTIVES/CIRCULARS

3.1 Electronic versions of Civil Aviation Regulations, Directives and Circulars can be found at:

www.aactl.gov.tl

No	Civil Aviation Regulations and Directives/Circulars	Date of Publication
1	TL CASR Part 1-General Policies, Procedures and Definitions	June 2016
2	TL CASR Part 2-Personnel Licensing	June 2016
3	TL CASR Part 3-Approved Training Organisations	June 2016
4	TL CASR Part 4-Aircraft Registration and Marking	June 2016
5	TL CASR Part 5-Airworthiness	June 2016

No	Civil Aviation Regulations and Directives/Circulars	Date of Publication
6	TL CASR Part 6-Approved Maintenance Organisations	June 2016
7	TL CASR Part 7-Instruments and Equipment	June 2016
8	TL CASR Part 8-Operations	June 2016
9	TL CASR Part 9-Air Operation Certification and Administration	June 2016
10	TL CASR Part 10-Regulation of Commercial Air Transport by Foreign Aircraft	June 2016
12	Aerodrome use, Certification and Operator obligations	15 June 2015
13	Directive 0107, Issuing Air Operating Certificate (AOC)	01 August 2007
14	AACTL advisory circular (AC)-AGA 01/11, establishing reporting system to record hazard, risk and action taken	February 2011
15	AACTL advisory circular (AC)-AIR 01/11, approval for special flight	February 2011
16	Runway Safety Program	2011
17	CASR Pt 65 ATC Licensing	2021
18	CASR Pt 171 Communication, Navigations and Surveillance	2021
19	CASR Pt 172 Air Traffic Services Providers	2021
20	CASR Pt 173 PANS OPS	2021
21	CASR Pt 174 Meteorology	2021
22	CASR Pt 175 Aeronautical Information Management	2021
23	CASR Pt 176 Search and Rescue	2021

4 INTERNATIONAL CONVENTIONS AND AGREEMENTS

No	International Conventions and Agreements	Date of Publication
1	Chicago Convention Ratification	November 2004
1	Chicago convention amendment for the adoption of article 83-bis	August 2005
2	Bilateral agreement between Australia Transportation Safety Bureau (ATSB) on safety accident investigation	TBC
3	Agreement between Civil Aviation Timor-Leste and COSCAP-SEA on inspection of foreign Air Operators within Timor-Leste	18 November 2011

GEN 1.7 DIFFERENCES FROM ICAO SARPS

1 LISTED DIFFERENCES

1.1 The following are differences from ICAO SARPS:

- Annex 11: FIS not provided in Class G airspace
- Annex 14:
 - RESA not available WPDL
 - GRF not fully implemented

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GEN 2

TABLES AND CODES

GEN 2.1 MEASURING SYSTEM, AIRCRAFT MARKINGS AND HOLIDAYS

1 UNITS OF MEASUREMENTS

- 1.1 The following units of measurement will be used for air and ground operations:

Measurement	Units
Distances used in navigation (generally in excess of 2NM*)	nautical miles and tenths*
Short distances	metres
Altitudes, elevations and heights	feet
Horizontal speed, including wind speed	knots
Vertical speed	feet per minute
Wind direction for runway operations	degrees magnetic
Wind direction except for runway operations	degrees true
Visibility, including runway visual range	kilometres or metres
Altimeter setting	hectopascals
Temperature	degrees celsius
Weight (Mass) Metric	tonnes or kilograms
Time	hours and minutes
<i>*Miles must be read as meaning nautical miles unless otherwise stated. The word "nautical" may be omitted from air-ground communications.</i>	

2 TIME SYSTEM

- 2.1 Coordinated Universal Time (UTC) is used for civil aviation.

- 2.2 Date and time are indicated in a combination of the date and time in a single six figure group. However, a 10 figure group comprising the year, month, date, hours and minutes is used for NOTAM and SUPs. This is reduced to an eight figure group (nil year) for SPFIB.

3 GEODETIC REFERENCE DATUM

- 3.1 All published geographical coordinates are expressed in term of the World Geodetic System – 1984 (WGS-84). Most geographical coordinates have been surveyed; however, those geographical coordinates that have been mathematically derived are indicated by an asterisk.
- 3.2 Geographical coordinates published in AIP documents/charts and NOTAM are expressed as degrees, minutes, seconds (if required), and if more precision is required, tenths/hundredths of a second with the cardinal point last; e.g. 3635S 14626E or 050721.2S 0652522.6E.

4 AIRCRAFT NATIONAL AND REGISTRATION MARKS

- 4.1 The national mark for aircraft registered in Timor-Leste is 4W. This national mark is followed by a hyphen and a registration mark consisting of 3 characters.

5 PUBLIC HOLIDAYS

- 5.1 Public holidays observed in Timor-Leste are published via government website and [AACTL website](#).

GEN 2.2 DEFINITIONS AND ABBREVIATIONS

1 DEFINITIONS

Airborne Collision Avoidance System (ACAS): An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.

Aerodrome: A defined area of land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and movement of aircraft.

Aerodrome Beacon: An aeronautical beacon, used to indicate the location of an aerodrome from the air.

Aerodrome Control Service: ATC service for aerodrome traffic.

Aerodrome Control Tower: A unit established to provide ATC service to aerodrome traffic.

Aerodrome Elevation: The elevation of the highest point of the landing area.

Aerodrome Meteorological Minima (Ceiling and Visibility Minima): The minimum heights of cloud base (ceiling) and minimum values of visibility which are prescribed for the purpose of determining the useability of an aerodrome either for takeoff or landing.

Aerodrome Proprietor: Any Owner, Licensee, Authority, Corporation, or any other body which has a legal responsibility for a particular aerodrome.

Aerodrome Reference Point (ARP): The designated geographical location of an aerodrome.

Aerodrome Traffic: All traffic on the manoeuvring area of an aerodrome and all aircraft flying in, entering, or leaving the traffic circuit.

Aerodrome Traffic Circuit: The specified path to be flown by aircraft flying in, entering, or leaving the traffic circuit.

Note: At a controlled aerodrome, an aircraft is in the traffic circuit when it is within the CTR and established on a leg of the circuit.

Aeronautical Beacon: An aeronautical ground light visible at all azimuths, either continuously or intermittently, to designate a particular point on the surface of the earth.

Aeronautical Information Circular (AIC): A notice containing information that does not qualify for the origination of a NOTAM, or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters.

Aeronautical Information Publication (AIP): A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

AIP Supplement (SUP): Temporary changes to the information contained in the AIP which are published by means of special pages.

Aircraft Address: A unique combination of 24 bits available for assignment to an aircraft for the purpose of air-ground communications, navigation and surveillance. Expressed as a six character hexadecimal code.

Aircraft Classification Number (ACN): A number expressing the relative effect of an aircraft on a pavement for a specific standard sub-grade category.

Aircraft Identification: An identification of up to seven (7) alpha-numeric characters used to identify the aircraft in flight notifications and in Mode S transponders/ADS-B transmitters.

Note: The Aircraft Identification entered into the Mode S Transponder, or ADS-B Transmitter, must match the Aircraft Identification entered into Item 7 of the Flight Notification or, when no flight notification has been filed, the aircraft registration. Hyphens or symbols may not be used within the identification.

Aircraft Parking Position Taxilane: A portion of an apron designated as a taxiway and intended to provide access to aircraft parking positions only.

Air-Ground Communications: Two way communications between aircraft and stations on the surface of the earth.

Air-Report (AIREP): A report from an aircraft in flight prepared by the pilot during the course of a flight in conformity with the requirements for position, operational or meteorological reporting in the AIREP form.

Airspace Release: A defined volume of airspace normally under the jurisdiction of one controlling authority that is temporarily released, by common agreement, for exclusive use of another.

Airspace Speed Limitation: A speed limit specified for a particular class of airspace.

Air Taxiing: Movement of a helicopter/VTOL above the surface of an aerodrome, normally in ground effect and at a speed normally less than 20KT.

Air Traffic Control Clearance: Authorisation for aircraft to proceed under conditions specified by an ATC unit.

Note: For convenience, the term “Air Traffic Control Clearance” is normally abbreviated to “Clearance” when used in appropriate context.

Air Traffic Control Instructions: Directives issued by ATC for the purpose of requiring a pilot to take a specific action.

Air Traffic Control Service: A service provided for the purpose of:

- a. preventing collisions:
 - i. between aircraft; and
 - ii. on the manoeuvring area between aircraft and obstructions; and
- b. expediting and maintaining an orderly flow of air traffic.

Air Traffic Control Speed Restriction: An ATC traffic management speed or an ATC-issued speed control instruction.

Air Traffic Service (ATS): A generic term meaning variously, flight information service, alerting service, air traffic advisory service, ATC service (area control service, approach control service, or aerodrome control service).

Air Transit: The airborne movement of a helicopter that is:

- a. for the expeditious transit from one place within an aerodrome to another place within the aerodrome;
- b. at or below 100FT above the surface; and
- c. at speeds greater than those used in air taxiing.

Airways Clearance: A clearance, issued by ATC, to operate in controlled airspace along a designated track or route at a specified level to a specified point or flight planned destination.

Alerted See-and-Avoid: A procedure where flight crew, having been alerted to the existence and approximate location of other traffic in their immediate vicinity, seek to sight and avoid colliding with those known aircraft.

Alerting Post: An agency designated to serve as an intermediary between a person reporting an aircraft in distress and a rescue coordination centre.

Alerting Service: A service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid, and to assist such organisations as required.

Alternate Aerodrome: An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing.

Altimeter Setting: A pressure datum which when set on the sub-scale of a sensitive altimeter causes the altimeter to indicate vertical displacement from that datum. A pressure-type altimeter calibrated in accordance with Standard Atmosphere may be used to indicate altitude, height or flight levels, as follows:

- a. when set to **QNH** or **Area QNH** it will indicate **altitude**;
- b. when set to **Standard Pressure** (1013.2 HPA) it may be used to indicate **flight levels**.

Altitude: The vertical distance of a level, a point or an object, considered as a point, measured from mean sea level.

Approach Control Service: ATC service for arriving or departing flights.

Approach Sequence: The order in which two or more aircraft are cleared to approach to land at the aerodrome.

Apron: A defined area on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail, cargo, fuelling, parking or maintenance.

Apron Service: A traffic regulatory and information service provided to aircraft using the apron area of an aerodrome.

Apron Taxiway: A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron.

Area Control Service: ATC service for controlled flights in control areas.

Area Navigation: A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground or space-based navigation aids, or within the limits of the capability of self-contained aids, or a combination of these.

Area Navigation Route: An ATS route established for the use of aircraft capable of employing area navigation.

Area Navigation Systems: Navigation systems supporting area navigation.

Area VHF: The appropriate FIA VHF channel for a location.

ATS Route: A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services.

ATS Surveillance Service: Term used to indicate an air traffic service provided directly by means of an ATS surveillance system.

ATS Surveillance System: A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.

Note: A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to, or better than, monopulse SSR.

Automatic Dependent Surveillance Broadcast (ADS-B): A means by which aircraft, aerodrome vehicles and other objects can automatically transmit or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

Automatic Terminal Information Service (ATIS): The provision of current, routine information to arriving and departing aircraft by means of continuous and repetitive broadcasts during the hours when the unit responsible for the service is in operation.

Base Turn (Instrument Approach): A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal.

Note: Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.

Blanket Clearance: A pre-arranged clearance originated for specific activities or events and specified in a letter of agreement.

Blind Transmission: A transmission from one station to another station in circumstances where two way communication cannot be established, but where it is believed that the called station is able to receive the transmission.

Block Level: A section of airspace with specified upper and lower limits on a specific track, in which cleared aircraft are permitted to manoeuvre.

Briefing: The act of giving in advance, specific pre-flight instructions or information to aircrew.

Broadcast: A transmission of information relating to air navigation for which an acknowledgement is not expected.

Ceiling: The height above the ground or water of the base of the lowest layer of cloud below 20,000FT covering more than one-half of the sky.

Centre: A generic callsign which can include ATC, Advisory, Flight Information and Alerting services, depending on the classification of airspace in which the service is provided.

Certified Aerodrome: A place that is certified as an aerodrome under the Civil Aviation Safety Regulations.

Circling Approach: An extension of an instrument approach procedure which provides for visual circling of the aerodrome prior to landing.

Clearance Limit: The point to which an aircraft is granted an ATC clearance.

Clearance Expiry Time: A time specified by an ATC unit at which a clearance ceases to be valid.

Clearway: A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.

Collocated (Navigation) Aids: En route waypoints or navigation aids that are within 600M of each other.

Common Traffic Advisory Frequency (CTAF): A designated frequency on which pilots make positional broadcasts when operating in the vicinity of a non-controlled aerodrome or within a Broadcast Area.

Communicable Diseases: Communicable diseases include cholera, typhus (epidemic), smallpox, yellow fever, plague, and such other diseases as the contracting States shall, from time to time, decide to designate.

Company Operations Representative: The representative of an operating agency who is authorised to act in the capacity of liaison officer between ATC and the operating agency in respect of the control of an aircraft of that agency.

Continuous Descent Final Approach (CDFA): A technique, consistent with stabilised approach procedures, for flying the final approach segment of a non-precision instrument approach procedure as a continuous descent, without level-off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 50FT above the landing runway threshold or the point where the flare manoeuvre should begin for the type of aircraft flown.

Control Area (CTA): A controlled airspace extending upwards from a specified limit above the earth.

Controlled Aerodrome: An aerodrome at which ATC service is provided to aerodrome traffic.

Controlled Airspace: Airspace of defined dimensions within which ATC service is provided in accordance with the airspace classification.

Controlling Authority: With respect to airspace classifications, this is the Air Traffic Service provider for that area. With respect to PRD, this is the agency nominated to exercise the conditions of entry specified for the area.

Control Zone (CTR): A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

Cruise Climb: An aeroplane cruising technique resulting in a nett increase in altitude as the aeroplane weight decreases.

Cruising Level: A level maintained during a significant portion of a flight.

Danger Area: An airspace of defined dimensions within or over which activities of potential danger to aircraft flying over the area may exist.

Day: The period between the beginning of morning civil twilight (first light) and the end of evening civil twilight (last light).

Dead Reckoning (DR) Navigation: The estimating or determining of position by advancing an earlier known position by the application of direction, time and speed data.

Decision Altitude/Height (DA/H): A specified altitude or height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

Note 1: DA is referenced to mean sea level and DH is referenced to the threshold elevation.

Note 2: The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.

Defined Point After Takeoff (DPATO): The point within the takeoff and initial climb phase before which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.

Density Height: An atmospheric density expressed in terms of height which corresponds to that density in the Standard Atmosphere.

Distance Measuring Equipment (DME): Equipment which measures in nautical miles, the slant range of an aircraft from the selected DME ground station.

DME Distance: The slant range from the source of a DME signal to the receiving antenna.

Elevation: The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.

Emergency Fuel: The term used to describe a situation when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the fixed fuel reserve for the flight.

Note: The emergency fuel declaration is a distress message.

Emergency Phases:

- a. **Uncertainty Phase:** A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

- b. Alert Phase: A situation wherein apprehension exists as to the safety of an aircraft and its occupants.
- c. Distress Phase: A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

Equivalent Single Isolated Wheel Load: The equivalent load that would be imposed on a pavement by a single wheel if any wheel group on an aircraft were replaced by a single wheel using the same tyre pressure.

Essential Radio Navigation Service: A radio navigation service whose disruption has a significant impact on operations in the affected airspace or aerodrome.

Estimate: The time at which it is estimated that an aircraft will be over a position reporting point or over the destination.

Estimated Elapsed Time (EET): The estimated time required to proceed from one significant point to another.

Estimated Off Block Time: The estimated time at which the aircraft will commence movement associated with departure.

Estimated Time of Arrival (ETA): For IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For VFR flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.

Expected Approach Time (EAT): The time at which ATC expects that an arriving aircraft, following a delay, will leave the holding fix to complete its approach for a landing.

Note: The holding fix referred to in the EAT is that shown on the instrument approach chart from which the instrument approach is prescribed to commence.

Final Approach: That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified:

- a. at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or
- b. at the point of interception of the last track specified in the approach procedure; and
- c. ends at a point in the vicinity of an aerodrome from which a landing can be made, or a missed approach is initiated.

Final Approach Altitude: The specified altitude at which final approach is commenced.

Final Approach Course: Where the aircraft is established laterally on that part of a GLS approach procedure which commences at the specified initial approach fix and ends at the aerodrome, from which point a landing can be made, or a missed approach is initiated.

Final Approach Fix (FAF): A specified point on a non-precision instrument approach which identifies the commencement of the final segment.

Final Approach Point (FAP): A specified point on the glide path of a precision instrument approach which identifies the commencement of the final segment.

Note: The FAP is co-incident with the FAF of a localiser based non-precision approach.

Final Approach Segment: That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.

Final Approach and Take off Area (FATO): A defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take off manoeuvre is commenced. Where the FATO is to be used by performance Class 1 helicopters, the defined area includes the rejected take off area available.

Final Leg: The path of an aircraft in a straight line immediately preceding the landing (alighting) of the aircraft.

Fix: A geographical position of an aircraft at a specific time determined by visual reference to the surface, or by navigational aids.

Flight Information: Information useful for the safe and efficient conduct of flight, including information on air traffic, meteorological conditions, aerodrome conditions and airways facilities.

Flight Information Area (FIA): An airspace of defined dimensions, excluding controlled airspace, within which flight information and SAR alerting services are provided by an ATS unit.

Note: FIAs may be sub-divided to permit the specified ATS unit to provide its services on a discrete frequency or family of frequencies within particular areas.

Flight Information Region (FIR): An airspace of defined dimensions within which flight information service and SAR alerting service are provided.

Flight Information Service (FIS): A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Flight Level (FL): A surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2HPA, and is separated from other such surfaces by specific pressure intervals.

Flight Visibility: The visibility forward from the cockpit of an aircraft in flight.

Forecast: A statement of expected meteorological conditions for a specified period, and for a specified area or portion of airspace.

Formation: Two or more aircraft flown in close proximity to each other and operating as a single aircraft with regard to navigation, position reporting and control.

Free text message element: Part of a message that does not conform to any standard message element in the PANS-ATM (DOC 4444).

Glide Path (GP): A descent profile determined for vertical guidance during a final approach.

Global Navigation Satellite System (GNSS): A satellite-based radio navigation system that uses signals from orbiting satellites to determine precise position and time.

Global Positioning System (GPS): A GNSS constellation operated by the United States Government.

Gross Weight: The weight of the aircraft together with the weight of all persons and goods (including fuel) on board the aircraft at that time.

Ground Based Augmentation System (GBAS): An augmentation system in which the user receives augmentation information directly from a ground-based transmitter.

Ground Based Augmentation System (GBAS) Landing System (GLS): A system for approach and landing operations using a GBAS, as the primary navigational reference.

Ground Based Navigation Aid: Means NDB, VOR, DME.

Ground Taxiing: The movement of a helicopter under its own power and on its undercarriage wheels.

Ground Visibility: The visibility at an aerodrome, as reported by an accredited observer.

Hazardous Conditions: Meteorological conditions which may endanger aircraft or adversely affect their safe operation, particularly those phenomena associated with volcanic ash cloud and thunderstorms - icing, hail and turbulence.

Head of State: Heads of State or of Government, or other selected dignitaries on official visits to Timor-Leste or the personal transport of the President or the Prime Minister.

Heading (HDG): The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid).

Height: The vertical distance of a level, a point or an object considered as a point measured from a specified datum.

Helicopter Access Corridor: A corridor wholly within controlled airspace designed for the exclusive use of helicopters in VMC. The extent and alignment of the corridor is related to and delineated by prominent geographical/topographical features.

Helicopter Landing Site (HLS): A place that is used as an aerodrome for the purposes of the landing and taking-off of helicopters.

Helicopter Lane: A lane, outside controlled airspace, designed for use by helicopters to facilitate traffic flow.

Helicopter Movement Area: The movement area for helicopters is that part of an aerodrome that can safely be used for the hovering, taxiing, takeoff and landing of helicopters and consists of the manoeuvring area and aprons, but excluding those areas reserved for unrestricted use by the general public.

Helicopter Reference Point (HRP): The designated location of a heliport or a landing location.

High Capacity Aircraft: An aircraft that is certified as having a maximum seating capacity exceeding 38 seats or a maximum payload exceeding 4,200KG.

Holding Bay: A defined area where aircraft can be held, or bypassed, to facilitate efficient surface movement of aircraft.

Holding Fix: A specified location identified by visual or other means in the vicinity of which the position of an aircraft in flight is maintained in accordance with ATC Instructions.

Holding Procedure: A predetermined manoeuvre which keeps an aircraft within a specified airspace whilst awaiting further clearance.

Hospital Aircraft: (see Medical Flight).

IFR Pick-up: A pilot procedure whereby a flight operating to the IFR in Class G airspace changes to VFR upon entering Class E airspace whilst awaiting an airways clearance.

Inertial Navigation/Reference System (INS/IRS): A self-contained navigation system that continually measures the accelerations acting upon the vehicle of which it is part. Suitably integrated, these forces provide velocity and thence position information.

Initial Approach Fix (IAF): The fix at the commencement of an instrument approach.

Initial Approach Segment: That segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix or, where applicable, the final approach fix or point.

Initial Departure Fix (IDF): The terminal fix for the visual segment and the fix where the instrument phase of the PinS departure begins.

Instrument Approach Operations: An approach and landing using instruments for navigation guidance based on an instrument approach procedure. There are two methods for executing instrument approach operations:

- a. a two-dimensional (2D) instrument approach operation, using lateral navigation guidance only; and

- b. a three-dimensional (3D) instrument approach operation, using both lateral and vertical navigation guidance.

Note 1: Lateral and vertical navigation guidance refers to the guidance provided either by:

- a. *ground-based radio navigation aids; or*
- b. *computer-generated navigation data from ground-based, space-based, self-contained navigation aids or a combination of these.*

Instrument Approach Procedure (IAP): A series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en route obstacle clearance criteria apply. Instrument approach procedures are classified as follows:

- a. Non-precision approach (NPA) procedure. An instrument approach procedure designed for 2D instrument approach operations Type A.

Note: Non-precision approach procedures may be flown using a Continuous Descent Final Approach technique (CDFA). CDFA with advisory. VNAV guidance calculated by on-board equipment are considered 3D instrument approach operations. CDFA with manual calculation of the required rate of descent are considered 2D instrument approach operations.

- b. Approach Procedure with Vertical guidance (APV). A Performance Based Navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A.
- c. Precision Approach (PA) procedure. An instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS CAT I) designed for 3D instrument approach operations Type A or B.

Instrument Landing System (ILS): A precision instrument approach system which normally consists of the following electronic components: VHF Localiser, UHF Glideslope, VHF Marker Beacons.

Instrument Runway: One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

- a. Non-precision approach runway. An instrument runway served by visual aids and a non-visual aid providing at least directional guidance adequate for a straight-in approach.
- b. Precision approach runway, CAT I. An instrument runway served by a precision approach procedure and visual aids intended for operations with a decision height not lower than 60M (200FT) and either a visibility not less than 800M, or a RVR not less than 550M.
- c. Precision approach runway, CAT II. An instrument runway served by ILS and visual aids intended for operations with a decision height lower than 60M (200FT), but not lower than 100FT, and a RVR not less than 300M.
- d. Precision approach runway, CAT III. An instrument runway served by ILS to and along the surface of the runway and:
 - i. for CAT IIIA – intended for operations with a decision height lower than 30M (100FT), or no decision height, and a RVR not less than 175M;
 - ii. for CAT IIIB – intended for operations with a decision height lower than 15M (50FT), or no decision height, and a RVR less than 175M, but not less than 50M;
 - iii. for CAT IIIC – intended for operations with no decision height and no RVR limitations.

Integrated Aeronautical Information Package: A package which consists of the following elements: AIP, including amendment service; supplements to the AIP; NOTAM and Preflight Information Bulletins (PIBs); AIC; and checklists and summaries.

Integrity: That quality which relates to the trust which can be placed in the correctness of information supplied by a system. It includes the ability of a system to provide timely warnings to users when the system should not be used for navigation.

Intermediate Approach Segment: That segment of an instrument approach procedure between either the intermediate approach fix and the final approach fix or point, or between the end of the reversal, race track or dead reckoning track procedure and the final approach fix or point, as appropriate.

Intermediate Fix (IF): A fix on an RNAV (or RNP) approach that marks the end of an initial segment and the beginning of the intermediate segment.

In the Vicinity: An aircraft is in the vicinity of a non-controlled aerodrome if it is within a horizontal distance of 10 miles; and within a height above the aerodrome reference point that could result in conflict with operations at the aerodrome.

Landing Area: That part of the movement area intended for the landing or takeoff of aircraft.

Land Rescue Unit: A land party equipped to undertake a search for an aircraft within the region of its responsibility.

Level: A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.

Localiser (LOC): The component of an ILS which provides azimuth guidance to a runway. It may be used as part of an ILS or independently.

Low Jet Route (LJR): A route, or part of a route, at or below 5,000FT AGL used by MLJ aircraft for low level, high speed operations.

Low Visibility Operation: An operation involving:

- a. an approach with minima less than precision approach category I; or
- b. a takeoff with visibility below 550M.

Low Visibility Procedures: Procedures applied at an aerodrome for protecting aircraft operations during conditions of reduced visibility or low cloud.

Lowest Safe Altitude (LSALT): The lowest altitude which will provide safe terrain clearance at a given place.

Manoeuvring Area: That part of an aerodrome to be used for the takeoff, landing and taxiing of aircraft, excluding aprons.

Marker: An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

Marker Beacon: A type of radio beacon, the emissions of which radiate in a vertical pattern.

Markings: A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

Maximum Takeoff Weight (MTOW): The maximum takeoff weight of an aircraft as specified in its Certificate of Airworthiness.

Medical Flight: A flight providing transport of medical patients, personnel, and/or equipment, prioritised as follows:

MEDEVAC: a life critical medical emergency evacuation e.g. An aircraft proceeding to pick up, or carrying, a severely ill patient, or one for whom life support measures are being provided.

HOSP: a medical flight declared by medical authorities e.g. An aircraft transporting or proceeding to pick up medical personnel and/or equipment urgently required for the treatment of a severely ill patient, or returning urgently required medical personnel and/or equipment at the termination of a MEDEVAC flight.

Meteorological Information: Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.

Meteorological Office (MO): An office designated to provide meteorological service for air navigation.

Meteorological Warning: A statement or meteorological report of the occurrence or expectation of a deterioration or improvement in meteorological conditions or of any meteorological phenomenon which may seriously affect the safe operation of aircraft.

Military Low Jet (MLJ): Military aircraft operating on LJR

Minimum Crossing Altitude (MCA): The minimum IFR altitude that aircraft may cross the IDF.

Minimum Descent Altitude/Height (MDA/H): A specified altitude or height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference.

Note 1: MDA is referenced to Mean Sea Level (MSL) and MDH is referenced to the aerodrome elevation or to the threshold elevation if that is more than 7FT below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.

Note 2: The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In the case of a circling approach the required visual reference is the runway environment.

Minimum Fuel: The term used to describe a situation when an aircraft's fuel supply has reached a state where having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than fixed fuel reserve for the flight.

Note: The minimum fuel state is not an emergency situation but an indication that an emergency situation is possible should any additional delay occur.

Minimum Sector Altitude (MSA): The lowest altitude which may be used which will provide a minimum clearance of 1,000FT above all objects located in an area contained within a sector of a circle of 25NM or 10NM radius centred on a significant point, the ARP, or the HRP.

Missed Approach Holding Fix (MAHF): A fix on an RNAV (or RNP) approach that marks the end of the missed approach segment and the point for the missed approach holding (where applicable).

Missed Approach Point (MAPt): That point in an instrument approach procedure at or before which the prescribed missed approach procedure must be initiated in order to ensure that the minimum obstacle clearance is not infringed.

Missed Approach Procedure: The procedure to be followed if the approach cannot be continued.

Missed Approach Turning Fix (MATF): A fix on an RNAV (or RNP) approach that marks a turning point during the missed approach segment.

Movement Area: That part of an aerodrome to be used for the takeoff, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

Navigation Specification: A set of aircraft and flight crew requirements needed to support performance based navigation operations within a defined airspace. There are two kinds of navigation specifications:

RNP Specification: A navigation specification based on area navigation that includes the requirement for on board performance monitoring and alerting, designated by the prefix RNP, e.g. RNP4, RNP APCH.

RNAV Specification: A navigation specification based on area navigation that does not include the requirement for on board performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

Note: The Performance-based Navigation Manual (Doc 9613), Volume II, contains detailed guidance on navigation specifications.

Night: The period between the end of evening civil twilight (last light) and the beginning of the following morning civil twilight (first light).

Night Vision Goggles (NVG): A self-contained binocular night vision enhancement device, usually helmet mounted or otherwise worn by a person, that can detect and amplify light in both the visual and near infra- red bands of the electromagnetic spectrum.

Non-Controlled Aerodrome: An aerodrome at which ATC is not operating.

Non-Directional Beacon (NDB): A special radio station, the emissions of which are intended to enable a mobile station to determine its radio bearing or direction with reference to that special radio station.

NOTAM: A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

Operator: A person, organisation or enterprise engaged in or offering to engage in aircraft operation.

Operations Manual: A manual provided by an operator for the use and guidance of its operations staff, containing instructions as to the conduct of flight operations, including the responsibilities of its operations staff.

Overshoot Shear: A wind shear occurrence which produces an INITIAL effect of overshooting the desired approach path and/or increasing airspeed.

Parking Area: A specially prepared or selected part of an aerodrome within which aircraft may be parked.

Pavement Classification Number (PCN): A number expressing the bearing strength of a pavement for unrestricted operations.

Performance-Based Navigation (PBN): Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.

Note: Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.

Performance Class 1 (PC1): PC1 is the class of helicopter performance such that in the event of failure of the critical power-unit the helicopter is able either to land within the rejected takeoff distance available, or to safely continue the flight to an appropriate landing area, depending on when the failure occurs.

Performance Class 2 (PC2): PC2 is the class of helicopter performance such that in the event of critical power-unit failure performance is available to enable the helicopter to safely continue the flight except when the failure occurs early during the takeoff manoeuvre or late in the landing manoeuvre, in which cases a forced landing may be required.

Permissible All-Up-Weight: The weight to which an aircraft is limited by virtue of the physical characteristics of an aerodrome.

Pilot in Command: The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Precision Approach Procedure: An instrument approach procedure utilising lateral and vertical guidance provided by an ILS or GLS.

Preferred Runway: A runway nominated by ATC or listed in the AIP as the most suitable for the prevailing wind, surface conditions or noise sensitive areas in the proximity of the aerodrome.

Primary Means Navigation System: A navigation system that, for a given operation or phase of flight, must meet accuracy and integrity requirements, but need not meet full availability and continuity of service requirements. Safety is achieved by either limiting flights to specific time periods, or through appropriate procedural restrictions and operational requirements.

Procedure Altitude/Height: A specified altitude/height flown at or above the minimum altitude/height, and established to accommodate a stabilised descent at a prescribed descent gradient/angle in the intermediate/final approach segment.

Prohibited Area: An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited. Designation is appropriate only for reasons of military necessity.

Published Speed: A speed restriction shown on a Standard Instrument Departure (SID), Standard Instrument Arrival (STAR), or other instrument flight procedure.

QNH Altimeter Setting: That pressure setting which, when placed on the pressure setting sub-scale of a sensitive altimeter of an aircraft located at the reference point of an aerodrome, will cause the altimeter to indicate the vertical displacement of the reference point above mean sea level.

Radio Altimeter (RA) Height: An indication of vertical distance between a point on the normal glidepath at DA and the terrain directly beneath this point.

Radio Navigation Service: A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.

Rapid-Exit Taxiway: A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at high relative speeds.

Receiver Autonomous Integrity Monitoring (RAIM): A system whereby an airborne GNSS receiver/processor autonomously monitors the integrity of the navigation signals from GNSS satellites.

Reduced Vertical Separation Minimum (RVSM): The vertical separation minimum of 1,000FT between FL 290 and FL 410 inclusive.

Reference Datum Height (RDH): The height of the measured ILS glide path at the threshold. It will provide a similar value to Threshold Crossing Height.

Registered Aerodrome: A place that is registered as an aerodrome under the Civil Aviation Safety Regulations.

Reporting Point: A specified geographical location in relation to which the position of an aircraft can be reported.

Required Navigation Performance (RNP): A statement of the navigation performance necessary for operation within a defined airspace.

RNP Type: A containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 per cent of the total flying time.

Rescue Coordination Centre (RCC): A unit established for promoting efficient organisation of search and rescue service and for coordinating the conduct of search and rescue operations within a search and rescue region.

Resolution Advisory (RA): An indication given to the flight crew recommending a manoeuvre or a manoeuvre restriction to avoid collision.

Restricted Area: An airspace of defined dimensions above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.

Note: This designation is used when necessary in the interests of public safety or the protection of the environment.

Route: A way to be taken in flying from a departure to a destination aerodrome, specified in terms of track and distance for each route segment.

Runway (RWY): A defined rectangular area on a land aerodrome prepared for the landing and takeoff of aircraft.

Runway-Holding Position: A designated position intended to protect a runway, an obstacle limitation surface, or an ILS critical/sensitive area at which taxiing aircraft and vehicles must stop and hold, unless otherwise authorised by the aerodrome control tower.

Note: In radiotelephony phraseologies, the expression “holding point” is used to designate the runway-holding position.

Runway Number: The runway identification associated with the runway direction end.

Runway Strip: The defined area, including the runway (and stopway if provided), intended both to reduce the risk of damage to aircraft inadvertently running off the runway and to protect aircraft flying over it during takeoff, landing or missed approach.

Runway Visibility (RV): The distance along a runway over which a person can see and recognise a visibility marker or runway lights.

Note: The term RUNWAY VISIBILITY is used by ATC or ground personnel to report visibility along a runway as determined by a ground observer.

Runway Visual Range (RVR): The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line. (ICAO)

SARWATCH: A generic term covering SAR alerting based either on full position reporting procedures, scheduled reporting times (SKEDS), or SARTIME.

Search and Rescue (SAR): The act of finding and returning to safety, aircraft and persons involved in an emergency phase.

Search and Rescue Region (SRR): The specified area within which search and rescue is coordinated by a particular Rescue Coordination Centre.

Segment Minimum Safe Altitude: The lowest altitude at which the minimum obstacle clearance is provided.

Self Contained Navigation Systems: Area navigation systems based on INS, IRS or GNSS.

Significant Point: A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

Note: There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from ground-based navigation aids.

Significant Weather: Any weather phenomenon which might affect flight visibility or present a hazard to an aircraft.

Situation Display: An electronic display depicting the position and movement of aircraft and other information as required.

Sole Means Navigation System: A navigation system that, for a given phase of flight, must allow the aircraft to meet all four navigation system performance requirements - accuracy, integrity, availability and continuity of service.

Special Air-Report (AIREP Special): An AIREP containing the report of special meteorological conditions, i.e. SIGMET phenomenon, or any other MET phenomenon which is likely to affect the safety or efficiency of other aircraft.

SSR Code: The number assigned to a particular multiple-pulse reply signal transmitted by a transponder in Mode A or Mode C.

Standard Instrument Arrival (STAR): A designated IFR arrival route linking a significant point, normally on an ATS route, with a point from which a published instrument approach procedure can be commenced.

Standard Instrument Departure (SID): A designated IFR departure route linking the aerodrome or a specified runway of the aerodrome with a specified significant point, normally on a designated ATS route, at which the en route phase of a flight commences.

Standard Message Element: Part of a message defined in the PANS- ATM (DOC 4444) in terms of display format, intended use and attributes.

Standard Pressure: The pressure of 1013.2 Hectopascals which, if set upon the pressure sub-scale of a sensitive altimeter, will cause the latter to read zero when at mean sea level in a standard atmosphere.

State Aircraft: An aircraft of any part of the Defence Force (including any aircraft that is commanded by a member of that force in the course of his/her duties as such a member), and aircraft used in the military, customs, or police services of a foreign country.

Stop-and-Go Landing: A procedure whereby an aircraft lands, comes to a complete stop on the runway and then commences takeoff from that point.

Stopway: A defined rectangular area on the ground at the end of the takeoff run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned takeoff.

Supplemental Means Navigation System: A navigation system that must be used in conjunction with a sole means navigation system.

Tactical Air Navigation (TACAN): An ultra-high frequency navigation aid which provides a continuous indication of bearing and slant range, in nautical miles, to the selected ground station.

Taxiway (TWY): A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another.

Terrain Clearance: The vertical displacement of an aircraft's flightpath from the terrain.

Threshold: The beginning of that portion of the runway usable for landing.

Threshold Crossing Height (TCH): The calculated height of the procedure nominal approach path at the threshold. For ILS or GLS, the TCH will be similar to the Reference Datum Height.

Total Estimated Elapsed Time: For IFR flights, the estimated time required from takeoff to arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or if no navigation aid is associated with the destination aerodrome, to arrive over the destination aerodrome. For VFR flights the estimated time required from takeoff to arrive over the destination aerodrome.

Touch-and-Go Landing: A procedure whereby an aircraft lands and takes off without coming to a stop.

Track: The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

Traffic Advisory (TA): An indication given to the flight crew that a certain intruder is a potential threat.

Transition Altitude: The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.

Transition Layer: The airspace between the transition altitude and the transition level.

Transition Level: The lowest flight level available for use above the transition altitude.

Transitional Surface: An inclined plane associated with the runway strip and the approach surfaces.

Transponder: A receiver/transmitter which will generate a reply signal upon proper interrogation; the interrogation and reply being on different frequencies.

Unalerted See-and-Avoid: A procedure where flight crew, who have no specific knowledge of other aircraft in their vicinity, rely solely on their ability to physically sight and avoid colliding with aircraft that may be in their vicinity.

Undershoot Shear: A wind shear occurrence which produces an INITIAL effect of undershooting the desired approach path and/or decreasing air speed.

UNICOM (Universal Communications): UNICOM is a non-ATS communications service provided to enhance the value of information normally available about a non-controlled aerodrome.

Unmanned Free Balloon: A non-power-driven, unmanned, lighter-than-air aircraft in free flight.

Unserviceable Area: A portion of the movement area not available for use by aircraft because of the physical condition of the surface, or because of any obstruction on the area.

VHF Omni-directional Radio Range (VOR): A VHF radio navigational aid which provides a continuous indication of bearing from the selected VOR ground station.

Visibility: Visibility for aeronautical purposes is the greater of:

- a. the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognised when observed against a bright background; or
- b. the greatest distance at which lights in the vicinity of 1,000 candelas can be seen and identified against an unlit background.

Visibility Marker: A dark object of suitable dimensions for use as a reference in evaluating runway visibility.

Visual (ATC usage): Used by ATC to instruct a pilot to see and avoid obstacles while conducting flight below the MVA or MSA/LSALT.

Visual (Pilot usage): Used by a pilot to indicate acceptance of responsibility to see and avoid obstacles while operating below the MVA or MSA/LSALT.

Visual Approach Slope Indicator System (VASIS): A system of lights so arranged as to provide visual information to pilots on approach of their position in relation to the optimum approach slope for a particular runway.

Vs1g means the one-g stall speed at which the aeroplane can develop a lift force (normal to the flight path) equal to its weight.

Waypoint: A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation.

Waypoints are identified as either:

- a. **Fly-by Waypoint:** A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or
- b. **Flyover Waypoint:** A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.

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2 GENERAL AND METEOROLOGICAL ABBREVIATIONS

This list covers abbreviations which may be found throughout the AIP and on associated charts, or which are used in NOTAM, AIP Supplements (SUP) and in meteorological messages and documentation.

2D	Two-dimensional	AD	Aerodrome
3D	Three-dimensional	ADDN	Addition, Additional
A/A	Air to Air	ADF	Automatic Direction Finding Equipment
AAR	Actual Arrival Report	ADIZ	Air Defence Identification Zone
AAL	Above Aerodrome Level	ADJ	Adjacent
ABM	Abeam	ADS-B	Automatic Dependent Surveillance-
ABN	Aerodrome Beacon	ADS-C	Automatic Dependent Surveillance-Contract
ABV	Above...	ADZ	Advise
AC	Altostratus	AEP	Aerodrome Emergency Plan
ACARS	Aircraft Communication Addressing and Reporting System (pronounced "AY-CARS")	AFIL	Flight notification: - filed in the air, or - indicating the position at which ATS services will be first required
ACAS	Airborne Collision Avoidance System	AFM	Yes, Affirm, Affirmative, That is correct
ACC	Area Control Centre	AFT	After....
ACD	Airways Clearance Delivery	A/G	Air-to-Ground
ACFT	Aircraft	AGA	Aerodromes, Air Routes and Ground Aids
ACK	Acknowledge	AGL	Above Ground Level
CAN	Aircraft Classification Number		
ACPT	Accept, Accepted		
ACT	Active, Activated, Activity		

AGN	Again	AMDT	Amendment (AIP Amendment)
AH	After Hours		
AIC	Aeronautical Information Circular	AMSL	Above Mean Sea Level
AIP	Aeronautical Information Publication	AOC	Air Operator's Certificate
AIRAC	Aeronautical Information Regulation and Control	AP	Airport
AIREP	Air-Report	APAPI	Abbreviated Precision Approach Path Indicator (pronounced "AY-PAPI")
AIRMET	Information concerning weather significant to aircraft operations at or below 10,000FT not contained in a valid GAF	APCH	Approach
AIS	Aeronautical Information Service	APN	Apron
ALA	Aircraft Landing Area	APP	Approach Control, Approach Control Office, Approach Control Service
ALERFA	Alert Phase	APR	April
ALS	Approach Lighting System	APRX	Approximate, Approximately
ALT	Altitude	APU	Auxiliary Power Unit
ALTN	Alternate, Alternating (light alternates in colour)	APV	Approach Procedure with Vertical guidance
ALTN	Alternate (aerodrome)	ARN	Aviation Reference Number
ALTRV	Altitude Reservation	ARNG	Arrange
AMD	Amend, Amended	ARP	Aerodrome Reference Point
AMDAR	Aircraft Meteorological Data Relay	ARR	Arrive, Arrival
		AS	Altostratus
		ASAP	As Soon as Possible
		ASDA	Accelerate-Stop Distance Available
		ASE	Altimetry System Error

ASPH	Asphalt	AVBL	Available
ATA	Actual Time of Arrival	AVFAX	Meteorological and NOTAM Facsimile Service
ATC	Air Traffic Control (in general)	AVG	Average
ATD	Actual Time of Departure	AVGAS	Aviation Gasoline
ATFM	Air Traffic Flow Management	AWIS	Aerodrome Weather Information Service
ATFMX	Exemption from ATFM measures by ATC	AWK	Aerial Work
ATM	Air Traffic Management	AWR	Aerodrome Weather Report
ATP	At... (time or place)	AWS	Automatic Weather Station
ATIS	Automatic Terminal Information Service	AWY	Airway
ATS	Air Traffic Services	AZM	Azimuth
ATTN	Attention	B	Blue
AT-VASIS	Abbreviated "T" Visual Approach Slope Indicator System (pronounced "AY-TEE-VASIS")	BARO- VNAV	(to be pronounced "BAA-RO-VEENAV") Barometric Vertical Navigation
ATZ	Aerodrome Traffic Zone	BASE	Cloud Base
AUG	August	BCFG	Fog Patches
AUTH	Authorised, Authorisation	BCN	Beacon (aeronautical ground light)
AUTO	Automatic	BCST	Broadcast
AUW	All Up Weight	BDRY	Boundary
AUX	Auxiliary	BECMG	Becoming
AVM	Abrupt Vertical Manoeuvres (by the MIL)	BFR	Before
		BKN	Broken (cloud descriptor)
		BL...	Blowing (followed by DU=dust, SA=sand or SN=snow)

BLDG	Building	CEN	En Route and Area ATC Unit
BLW	Below		
BOF	Briefing Office	CFM	Confirm, I confirm
BOMB	Bombing	CH	Channel
BR	Mist	CHEM	Chemical
BRG	Bearing	CHTR	Charter
BRKG	Braking	CI	Cirrus
BS	Broadcasting Station (Commercial)	CIV	Civil
		CK	Check
BTN	Between	CL	Centre Line
C	Degrees Celsius (Centigrade)	CLA	Clear type of ice formation
C	Centre (Runway)	CLBR	Calibration
CA/GRS	Certified Air/Ground Radio Service	CLD	Cloud
		CLG	Calling
CAO	Civil Aviation Order	CLIAS	Climbing Indicated Airspeed
CASA	Civil Aviation Safety Authority		
		CLR	Clear, Cleared to..., Clearance
CAT	Category		
CAT	Clear Air Turbulence	CLSD	Closed, Close, Closing
CAVOK	Visibility, cloud and present weather better than prescribed values or conditions (pronounced "KAV-OH-KAY")	CM	Centimetre
		CMB	Climb to or Climbing to
		CMPL	Completion, Completed, or Complete
CB	Cumulonimbus	CMSD	Commissioned
CC	Cirrocumulus	CNL	Cancel, Cancelled
CCTS	Circuits	CNS	Communications, Navigation and Surveillance
CDFA	Continuous Descent Final Approach technique	COBT	Calculated Off Blocks Time

COM	Communications	CUF	Cumuliform
CONC	Concrete	CUST	Customs
COND	Condition	CWY	Clearway
CONS	Continuous	D...	Danger Area (followed by identification)
CONST	Construction, Constructed	D	Downward (tendency in RVR during previous 10 minutes)
CONT	Continue(s), Continued	DA	Decision Altitude
COOR	Coordinate, Coordinated	DAH	Designated Airspace Handbook
COORD	Coordinates	DCKG	Docking
COR	Correct, Corrected, Correction	DCMSD	Decommissioned
COS	Conical Surface	DCPC	Direct Controller-Pilot Communications
COT	At the Coast, Coastal	DCT	Direct (in relation to flight plan clearances and type of approach)
COV	Cover, Covered, Covering	DEC	December
CPDLC	Controller-Pilot Data Link Communication	DEG	Degrees
CRZ	Cruise	DEP	Depart, Departure, Departed, Departing, Departure Message
CS	Cirrostratus	DER	Departure End of Runway
CS	Callsign	DEST	Destination
CTA	Control Area	DETRESFA	Distress Phase
CTAF	Common Traffic Advisory Frequency	DEV	Deviation, Deviating
CTC	Contact	DF	Direction Finder/Finding
CTL	Control	DFDR	Digital Flight Data Recorder
CTN	Caution	DH	Decision Height
CTOT	Calculated Take-off Time		
CTR	Control Zone		
CU	Cumulus		

DIF	Diffuse	DZ	Drizzle
DISP	Displaced	E	East, East Longitude
DIST	Distance	EAT	Expected Approach Time
DIV	Diversion, Divert, Diverting	EB	Eastbound
DLE	Delay En route	EET	Estimated Elapsed Time
DLY	Daily	ELEV	Elevation
DME	Distance Measuring Equipment	ELT	Emergency Locator Transmitter
DNG	Danger, Dangerous	EM	Emission
DOC	Documents	EMBD	Embedded in a Layer (to indicate cumulonimbus embedded in layers of other clouds)
DOF	Date of Flight	EMERG	Emergency
DOM	Domestic	ENDCE	Endurance
DP	Dew Point Temperature	ENE	East North-East
DPT	Depth	ENG	Engine
DR	Dead Reckoning	ENR	En Route
DR...	Low drifting (followed by DU=dust, SA=sand or SN=snow)	EOBT	Estimated off Block Time
DRG	During	EPIRB	Electronic Position Indicating Radio Beacon (marine term)
DS	Duststorm	EQPT	Equipment
DTG	Date-Time Group	ERC	En Route Chart
DTHR	Displaced Runway Threshold	ESE	East South-East
DTRT	Deteriorate, Deteriorating	EST	Estimate or estimated or estimate (message type designator)
DU	Dust		
DUC	Dense Upper Cloud		
DUR	Duration		
DVOR	Doppler VOR		

ETA	Estimated Time of Arrival, Estimating Arrival	FBL	Light (used to indicate the intensity of WX phenomena, interference or static reports, e.g. FBL RA = light rain)
ETD	Estimated Time of Departure or Estimating Departure		
ETO	Estimate Time Over significant point	FC	Funnel Cloud (tornado or water spout)
EV	Every	FCST	Forecast
EVS	Enhanced Vision System	FDE	Fault Detection and Exclusion
EXC	Except	FDPS	Flight Data Processing System
EXER	Exercises, Exercising, to exercise	FEB	February
EXP	Expect, Expected, Expecting	FEW	Few (cloud descriptor)
EXTD	Extend, Extending, Extended	FFR	Flood or Fire Relief; Fire Fighting
F	Fixed (chart symbol)	FG	Fog
FAC	Facility, Facilities	FIA	Flight Information Area
FAF	Final Approach Fix	FIR	Flight Information Region
FANS 1/A	The term used to describe the initial future air navigations system	FIS	Flight Information Service
FAP	Final Approach Point	FL	Flight Level
FAS	Final Approach Segment	FLD	Field
FATO	Final Approach and Take-off Area	FLG	Flashing
FAX	Facsimile Transmission	FLR	Flares
		FLT	Flight
		FLTCK	Flight Check For Calibration of Nav aids
		FLUC	Fluctuating, Fluctuation, Fluctuated

FLW	Follow(s), Following	FXD	Fixed
FLY	Fly, Flying	FZ	Freezing
FM	From	FZDZ	Freezing Drizzle
FM...	From (followed by time weather change is forecast to begin)	FZFG	Freezing Fog
FMC WPR	The term used to describe flight management computer waypoint position reporting	FZLVL	Freezing Level (in AIRMET products)
FMS	Flight Management System	FZRA	Freezing Rain
FMU	Flow Management Unit	G	Green
FNA	Final Approach	G	Variation from mean wind speed (gusts) (MET - used in METAR/SPECI and TAF code forms)
FPA	Flight Procedure Authorisation	GA	General Aviation
FPL	Filed Flight Plan Message	GAF	Graphical Area Forecast
FPM	Feet per Minute	GBAS	Ground Based Augmentation System
FR	Fuel Remaining	GEN	General
FREQ	Frequency	GEO	Geographic, true
FRI	Friday	GES	Ground Earth Station
FRNG	Firing	GFY	Glider Flying
FRQ	Frequent	GLD	Glider
FS	Flight Service (in general)	GLONASS	Global Orbiting Navigation Satellite System (pronounced "GLO-NAS")
FSP	Fish Spotting	GLS	GBAS Landing System
FST	First	GND	Ground
FT	Feet	GNDCK	Ground Check
FU	Smoke	GNSS	Global Navigation Satellite System

GP	Glide Path	HDG	Heading
GPS	Global Positioning System	HDS	Hours of Daylight Saving
GPU	Ground Power Unit	HEAD	Head of State
GPWS	Ground Proximity Warning System	HEL	Helicopter
GPWT	Grid Point Wind and Temperature	HF	High Frequency (3,000 to 30,000 kHz)
GR	Hail	HGT	Height, Height Above
GRAD	Minimum Required Climb Gradient	HIAL	High Intensity Approach Lighting
GRASS	Grass Landing Area	HIOL	High Intensity Obstacle Lights
GRIB	Processed meteorological data in the form of grid point values expressed in binary form (meteorological code)	HIRL	High Intensity Runway Lighting
		HJ	Sunrise to Sunset
GRVL	Gravel	HLDG	Holding
GS	Groundspeed	HLP	Heliport
GS	Small Hail and/or Snow Pellets	HLS	Helicopter Landing Site
H	High pressure area or the centre of high pressure (MET)	HN	Sunset to Sunrise
		HO	Service available to meet operational requirements
H24	Continuous day and night service	HOSP	Hospital Aircraft
HH	Time of commencement of a meteorological report validity period	HPA	Hectopascal
		HR	Hours
HAZMAT	Hazardous Material	HRP	Heliport Reference Point
HBN	Hazard Beacon	HS	Homestead
		HS	Service available during hours of scheduled operations
		HSL	Hold Short Lights

HUD	Head-up display	IF	Intermediate Fix or
HUM	Humanitarian		Intermediate
HVY	Heavy		Approach Fix
HVY	Heavy (used to indicate the intensity of WX phenomena, e.g. HVY RA = heavy rain)	IFR	Instrument Flight Rules
		ILS	Instrument Landing System
		IM	Inner Marker
HX	No specific working hours	IMC	Instrument Meteorological Conditions
HZ	Haze	IMG	Immigration
HZ	Hertz (cycle per second)	IMPR	Improve, Improving, Improvement
HZS	Horizontal Surface	INBD	Inbound
IAC	Instrument Approach Chart (followed by name/title)	INCERFA	Uncertainty Phase
		INFO	Information
IAF	Initial Approach Fix	INOP	Inoperative
IAL	Instrument Approach and Landing	INS	Inertial Navigation System
IAP	Instrument Approach Procedure	INSTL	Install, Installed, Installation
IAS	Indicated Airspeed	INSTR	Instrument
IAWP	Initial Approach Waypoint	INT	Intersection
		INTER	Intermittent (ie. lasting less than 30 minutes)
ICAO	International Civil Aviation Organization		Fluctuations from forecast prevailing conditions
ICE	Icing		
ID	Identifier, identify	INTL	International
IDENT	Identification	INTRP	Interrupt, Interruption, Interrupted
IDEP	Instrument Departure (FPA)	INTSF	Intensify, Intensifying
		INTST	Intensity

ISA	International Standard Atmosphere	LAT	Latitude
ISOL	Isolated	LCA	Locally, Location, Located, Local
IVA	Independent Visual Approach	LDA	Landing Distance Available
IWI	Illuminated Wind Indicator	LDG	Landing
JAN	January	LEN	Length
JF	Saturday, Sunday and PH	LGT	Light, Lighting
JO	Monday to Friday except PH	LGTD	Lighted
JTST	Jet Stream	LIH	Light Intensity High
JUL	July	LIL	Light Intensity Low
JUN	June	LIM	Light Intensity Medium
KG	Kilograms	LIOL	Low Intensity Obstacle Lights
kHz	Kilohertz	LIRL	Low Intensity Runway Lights
KIAS	Knots Indicated Airspeed	LJR	Low Jet Route
KM	Kilometres	LL	Lower Limits
KMH	Kilometres per Hour	LLN	Low Level Navigation (by the MIL)
kPa	Kilopascals	LLO	Low Level Operations (by the MIL)
KT	Knots	LMT	Local mean time
KW	Kilowatts	LNAV	Lateral Navigation
L	Left (runway identification)	LOC	Localiser
L	Litre	LOE	Lane of Entry
L	Low pressure area or the centre of low pressure (MET)	LONG	Longitude
LAHSO	Land and Hold Short Operations	LSALT	Lowest Safe Altitude
		LTD	Limited
		LUL	Lowest Usable Level

LV	Light and Variable (relating to wind)	MET	Meteorological, Meteorology
LVL	Level	METAR	Aviation routine weather report (in aeronautical meteorological code)
LVO	Low Visibility Operation(s)		
LVP	Low Visibility Procedure(s)	MET REPORT	Aviation routine weather report
LYR	Layer, Layered	MF	Medium Frequency (300 to 3,000 kHz)
M	Metres (preceded by figures)	MHz	Megahertz
M	Mach number (followed by figures)	MI	Shallow (MET)
MAE	Men and Equipment	MIFG	Shallow Fog
MAG	Magnetic	MIL	Military
MAINT	Maintenance	MIN	Minutes
MAN	Manual	MIOL	Medium Intensity Obstacle Lights
MAP	Aeronautical Maps and Charts	MIRL	Medium Intensity Runway Lights
MAPT	Missed Approach Point	MISC	Miscellaneous
MAR	At Sea	MLJ	Military Low Jet
MAR	March	MLS	Microwave Landing System
MAX	Maximum	MM	Middle Marker
MBST	Microburst	MNM	Minimum
MDA	Minimum Descent Altitude	MNT	Monitor, Monitoring, Monitored
MDH	Minimum Descent Height	MNTN	Maintain, Maintained, Maintaining
MEA	Minimum En Route Altitude	MO	Meteorological Office
MEDEVAC	Medical Evacuation Flight		

MOD	Moderate (used to indicate the intensity of WX phenomena, interference or static reports, e.g. MOD RA = moderate rain)	N	No distant tendency (in RVR during previous 10 minutes)
		N	North, North Latitude
		NAP	Noise Abatement Procedures
MON	Monday	NAT	NAVAID Training
MOPS	Minimum Operational Performance Standards	NAV	Navigation
		NAVAID	Navigation Aid
MOV	Move, Moved, Moving, Movement	NB	Northbound
		NC	No Change
MOWP	Method of Working Plan	NCD	No Cloud Detected (by ceilometer) [<i>used in automated</i> METAR/SPECI]
MS	Minus		
MSA	Minimum Sector Altitude	NDB	Non-Directional Radio Beacon
MSG	Message	NE	North-East
MSL	Mean Sea Level	NEG	Negative, No, permission not granted, or, that is not correct
MSSR	Monopulse Secondary Surveillance Radar		
MT	Mountain		
MTOW	Maximum Take-off Weight	NGT	Night
		NIL	None
MTP	Maximum Tyre Pressure	NM	Nautical Miles
		NML	Normal
MTW	Mountain waves	NN	No name, unnamed
MVA	Minimum Vector Altitude	NNE	North North-East
		NNW	North North-West
MWO	Meteorological Watch Office	NOF	International NOTAM Office
MX	Mixed type of ice formation (white and clear)	NONSTD	Non-Standard

NOSIG	No Significant Change	OBSC	Obscure, Obscured, Obscuring
NOZ	Normal Operating Zone	OBST	Obstacle
NOTAM	Notice to Airmen (A notice containing information concerning the establishment, condition or change in facility, service, procedure or hazard which is essential to personnel concerned with flight operations)	OBSTR	Obstruction
		OCA	Oceanic Control Area
		OCA	Obstacle Clearance Altitude
		OCC	Occulting (light)
		OCH	Obstacle Clearance Height
		OCNL	Occasional, Occasionally
NOTAMC	Cancelling NOTAM	OCT	October
NOTAMN	New NOTAM	OCTA	Outside Control Area
NOTAMR	Replacing NOTAM	OCTR	Outside Control Zone
NOV	November	OFZ	Obstacle Free Zone
NPA	Non-Precision Approach	OHD	Overhead
NR	Number	OK	We agreed, or, It is correct
NS	Nimbostratus	OLS	Obstacle Limitation Surface
NSC	Nil Significant Cloud	OM	Outer Marker
NSW	Nil Significant Weather	OPA	Opaque. White type of ice formation
NTA	No TAF Amendment		
NTL	National	OPMET	Operational Meteorological (information)
NTZ	No Transgression Zone		
NVG	Night Vision Goggles	OPN	Open, Opening, Opened
NW	North-West		
NXT	Next	OPR	Operator, Operate, Operative, Operating, Operational
OBS	Observe, Observed, Observation		
		OPS	Operations

O/R	On Request	PJE	Parachute Jumping Exercise
OT	Other Times		
OVC	Overcast	PL	Ice Pellets
OW	Over Water	PLN	Flight Plan
P....	Prohibited Area (followed by identification)	PN	Prior Notice Required
		PNR	Point of No Return
PA	Precision Approach	PO	Dust Devils
PANS	Procedures for Air Navigation Services	POB	Number of Persons on Board
PAPI	Precision Approach Path Indicator	POSS	Possible
PARL	Parallel	PPI	Plan Position Indicator
PAX	Passengers	PPR	Prior Permission Required
PBN	Performance-based navigation	PPSN	Present Position
PCD	Proceed, Proceeding	PRD	Prohibited, Restricted and Danger Areas
PCL	Pilot Controlled Lighting	PRFG	Aerodrome Partially Covered by Fog (MET code)
PCN	Pavement Classification Number	PRI	Primary
PDC	Pre-Departure Clearance	PRKG	Parking
PEC	Pressure Error Correction	PRM	Precision Runway Monitoring
PER	Performance	PROB	Probability
PERM	Permanent	PROC	Procedure
PH	Public Holiday	PROV	Provisional
PFR	Preferred Route	PS	Plus
PIB	Pre-flight Information Bulletin	PSG	Passing
		PSN	Position
PILS	Practice ILS	PSP	Pierced Steel Plank
		PSR	Primary Surveillance Radar

PTBL	Portable	RCH	Reach, Reaching
PTN	Procedure Turn	RCL	Runway Centre Line
PTT	Press to Talk	RCLL	Runway Centre Line Lights
PVT	Private		
PWR	Power	RDH	Reference Datum Height
QNH	Altimeter subscale setting to obtain elevation or altitude	RDL	Radial
		RDO	Radio
QUAD	Quadrant	RE...	Recent (used to qualify weather phenomena, e.g. RERA = recent rain)
R	Red		
R	Right (runway identification)		
R	Runway (followed by figures in METAR/SPECI)	REC	Receive, Receiver, Received
R...	Radial from VOR (followed by three figures)	REDL	Runway Edge Lights
		REF	Reference to..., Refer to...
R....	Restricted Area (followed by number)	REG	Registration
		RENL	Runway End Lights
RA	Radio Altimeter	REP	Report, Reported, Reporting, Reporting Point
RA	Rain		
RA	Resolution Advisory	REQ	Request, Requested
RA	Restricted Area	RERTE	Re Route
RAD	Radius	RES	Reserve Fuel
RAIM	Receiver Autonomous Integrity Monitoring	RESA	Runway End Safety Area
RASC	Regional AIS System Centre	RESTR	Restrictions
		REV	Review
RCC	Rescue Coordination Centre	RF	Constant Radius Arc to Fix
RCGL	Runway Circling Guidance Lights	RFFS	Rescue and Fire Fighting Services

RHC	Right Hand Circuit	RTHL	Runway Threshold Light(s)
RIF	Reclearance in Flight		
RL	Report Leaving	RTIL	Runway Threshold Identification Lights
RLA	Relay to		
RLLS	Runway Lead-in Lighting System	RTN	Return, Returned, Returning
RMK	Remark	RTS	Return to Service
RNAV	Area Navigation (Navigation Specification prefix)	RTZL	Runway Touchdown Zone Light(s)
RNP	Required Navigation Performance (Navigation Specification prefix)	RVR	Runway Visual Range
		RVSM	Reduced Vertical Separation Minimum
ROC	Rate of Climb	RWS	Runway Strip
ROD	Rate of Descent	RWY	Runway
RP	Remote Pilot	S	South, South Latitude
RPA	Remotely Piloted Aircraft	SA	Sand
RPAS	Remotely Piloted Aircraft System	SA	Special Authorisation
RPT	Regular Public Transport	SALS	Simple Approach Lighting System
RPT	Repeat, I Repeat	SAR	Search and Rescue
RQ	Require(d)	SARPS	Standards and Recommended Practices (ICAO)
RQMNTS	Requirements	SARTIME	Time search action required
RSCD	Runway Surface Condition	SAT	Saturday
RSP	Responder Beacon	SATCOM	Satellite Communication (used only when referring generally to both voice and data satellite communication or only data satellite communication)
RTE	Route		
RTF	Radio Telephone		

SATVOICE	Satellite Voice Communication	SID	Standard Instrument Departure
SB	Southbound	SIGWX	Significant Weather
SBAS	Satellite-Based Augmentation System	SIGMET	Information concerning en route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations
SC	Stratocumulus		
SCT	Scattered		
SDBY	Standby		
SE	South East		
SEA	Sea (used in connection with sea-surface temperature and state of the sea)	SIMUL	Simultaneous, or Simultaneously
SEC	Seconds	SKED	Schedule, Scheduled
SECT	Sector	SLP	Speed Limiting Point
SEP	September	SLW	Slow
SER	Service, Servicing, Served	SMC	Surface Movement Control
SEV	Severe (used e.g. to qualify icing and turbulence report)	SMR	Surface Movement Radar
SFC	Surface	SN	Snow
SFL	Sequenced Flashing Lights	SNOWTAM	A special series NOTAM notifying the presence or removal of hazardous conditions due to snow, ice, slush or standing water associated with snow, slush and ice on the movement area
SG	Snow Grains		
SH...	Showers (followed by RA=rain, SN=snow, PL=ice pellets, GR=hail, GS=small hail and or snow pellets or combinations thereof, e.g. SHRASN = showers of rain and snow)	SOT	Start of TORA (take-off)
		SP	Single Pilot
		SPA	Sport Aviation

SPECI	Aviation Special Weather (in aeronautical meteorological code)	SUN	Sunday
		SUP	Supplement (AIP Supplement)
SPOT	Spotwind	SUPPS	Regional Supplementary Procedures
SQ	Squall		
SQL	Squall Line	SVCBL	Serviceable
SR	Sunrise	SVY	Survey Operations
SRR	Search and Rescue Region	SW	South-West
SRY	Secondary	SWS	Soft Wet Surface
SS	Sandstorm	SWY	Stopway
SS	Sunset	T	Bearing (true)
SSB	Single Sideband	T	Temperature
SSE	South South-East	TA	Traffic Advisory
SSR	Secondary Surveillance Radar	TA	Transition Altitude
		TAC	Terminal Area Chart
SSW	South South-West	TACAN	UHF Tactical Air Navigation Aid
ST	Stratus		
STAR	Standard Instrument Arrival	TAF	Aerodrome Forecast
		TAS	True Airspeed
STD	Standard	TAX	Taxiing, Taxi
STF	Stratiform	TBA	To be advised
STN	Station	TC	Tropical Cyclone
STNR	Stationary	TCAS	(tee-kas) Traffic Alert and Collision Avoidance System
STODA	Supplementary Take-off Distance		
STOL	Short Take-off and Landing	TCH	Threshold Crossing Height
STS	Status	TCU	Towering Cumulus
STWL	Stopway Light(s)	TDA	Temporary Danger Area
SUBJ	Subject to	TDO	Tornado

TDZ	Touchdown Zone	TRA	Temporary Restricted Area
TECR	Technical Reason		
TEL	Telephone	TRANS	Transmits, Transmitter
TEMPO	Temporary, Temporarily	TROP	Tropopause
TFC	Traffic	TS...	Thunderstorm (followed by RA=rain, SN=snow, PE=ice pellets, GR=hail, GS=small hail and/or snow pellets or combinations thereof, e.g. TSRASN = thunderstorm with rain and snow)
TGL	Touch & Go Landing		
THR	Threshold		
THRU	Through		
THU	Thursday		
TIBA	Traffic Information Broadcasts by Aircraft		
TIL	Until	TSO	Technical Standard Order
TKOF	Take-off		
TL...	Till (followed by time by which weather change is forecast to end)	TSUNAMI	Tsunami (used in aerodrome warnings)
		TTF	Trend Forecast
TLW	Time Limited WIP (work in progress)	TUE	Tuesday
		TURB	Turbulence
TMA	Terminal Control Area	T-VASIS	“T” Visual Approach Slope Indicator System (pronounced “TEE-VASIS”)
TN	Indicator for Minimum Temperature (MET - used in TAF code form)		
TNS	Transitional Surface	TW	Tailwind
TODA	Take-off Distance Available	TWR	Aerodrome Control Tower or Aerodrome Control
TOP	Cloud Top	TWY	Taxiway
TORA	Take-off Run Available	TX	Indicator for Maximum Temperature (MET - used in TAF code form)
TOX	Toxic		
TP	Turning Point		
TR	Track	TXL	Taxilane






TYP	Type of Aircraft	VC	Vicinity of the aerodrome (followed by FG=fog, FC=funnel cloud, PO=dust/sand whirls, BLDU=blowing dust, BLSA=blowing sand or BLSN=blowing snow; e.g. VCFG=vicinity fog
TYPH	Typhoon		
U	Upward (tendency in RVR during previous 10 minutes)		
UA	Unmanned aircraft		
UAS	Unmanned aircraft system		
UFN	Until Further Notice	VCY	Vicinity
UHF	Ultra High Frequency (300 to 3,000 MHz)	VFR	Visual Flight Rules
UL	Upper Limits	VHF	Very High Frequency (30 to 300 MHz)
UNA	Unable	VIA	By way of...
UNL	Unlimited	VIP	Very Important Person
UNREL	Unreliable	VIS	Visibility
UP	Unknown Precipitation	VMC	Visual Meteorological Conditions
U/S	Unserviceable	VNAV	Vertical Navigation
UTC	Coordinated Universal Time	VNC	Visual Navigation Chart
V	Variation from mean wind speed (MET - used in METAR/ SPECI code forms)	VOLMET	Meteorological Information for Aircraft in Flight
VA	Volcanic Ash	VOR	VHF Omnidirectional Radio Range
VAAC	Volcanic Ash Advisory Centre	VRB	Variable
VAR	Magnetic Variation	VSA	by Visual reference to the ground
VASIS	Visual Approach Slope Indicator System	VTC	Visual Terminal Chart
		VTOL	Vertical Take-off and Landing
		W	West, West Longitude
		W	White

WAC	World Aeronautical Chart - ICAO 1:1,000,000 (followed by name/title)	WTSPT	Water Spout
WAFS	World Area Forecast System	WWW	World Wide Web
WATIR	Weather and Terminal Information Reciter	WX	Weather
WB	Westbound	WXR	Weather Radar
WDI	Wind Direction Indicator	X	Cross
WDSRP	Widespread	XW	Crosswind
WED	Wednesday	Y	Yellow
WEF	With Effect From, Effective From	YCZ	Yellow Caution Zone
WGS-84	World Geodetic System - 1984	YR	Your/s
WI	Within	Z	Coordinated Universal Time (in meteorological messages)
WID	Width		
WIE	With Immediate Effect, Effective Immediately		
WILCO	Will Comply		
WIP	Work in Progress		
WKN	Weaken, Weakening		
WNW	West North-West		
WO	Without		
WPT	Waypoint		
WRNG	Warning		
WS	Wind Shear		
WSW	West South-West		
WT	Weight		


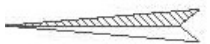


GEN 2.3 CHARTS AND SYMBOLS

1 AERODROMES




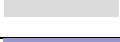


1.1 Charts other than Approach Charts




Civil (land)	
Civil (Unattended)	
Heliport	
Abandoned or closed aerodrome	
Military (land)	

1.2 Approach Charts







The aerodrome on which the procedure is based	
Instrument Landing System (ILS)	
Radio marker beacon	
Final approach fix (FAF)	
Magnetic course	090°
True course	090°T

1.3 Aerodrome Charts


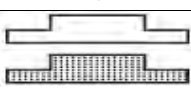







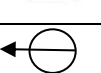
Hard surface runway	
Unpaved runway	
Taxiway	
Roads	
Ocean, Sea	
Rivers and Streams (non perennial)	

Lakes	
Cities, Towns	
Wooded Areas	

1.4 Obstacles

Tree or shrub	
Pole, tower, spire, antenna etc	
Fence	
Obstacles (lighted/unlighted)	
Group obstacles (lighted/unlighted)	
Elevation of top (<i>italics</i>). Height above specified datum (upright type in parentheses).	

1.5 Aerodrome Installations and Lights

Aerodrome reference point	
Taxiway and parking areas	
Control tower	
Aeronautical ground light	
Wind direction indicator (unlighted)	
Non-directional radio beacon - NDB	
VHF omnidirectional radio range - VOR	
Distance measuring equipment - DME	
Collocated VOR and DME radio navigation aids	
VOR/DME check point	

GEN 2.4 LOCATION INDICATORS

Location	Indicator
Atauro Island*	WPAT
Baucau*	WPEC
Dili/ Presidente Nicolau Lobatu International airport	WPDL
Lospalos Fuiloro*	WPFL
Maliana*	WPMN
Oecusse*	WPOC
Same*	WPSM
Suai*	WPDB
Viqueque*	WPVQ
*Unattended aerodrome	

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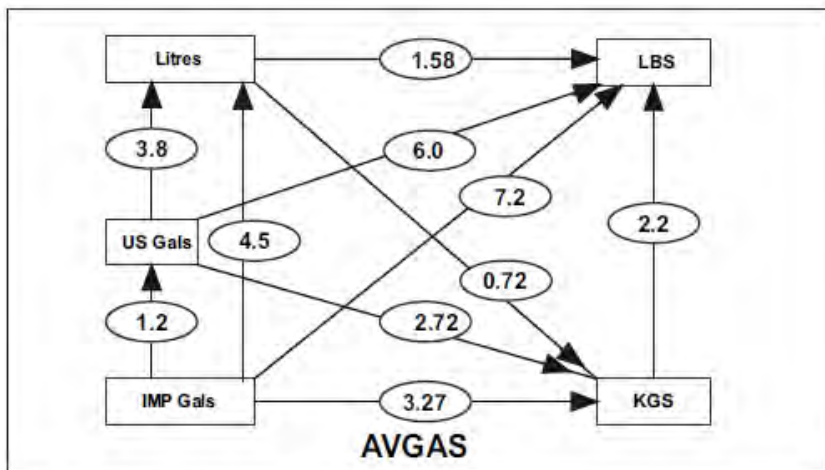
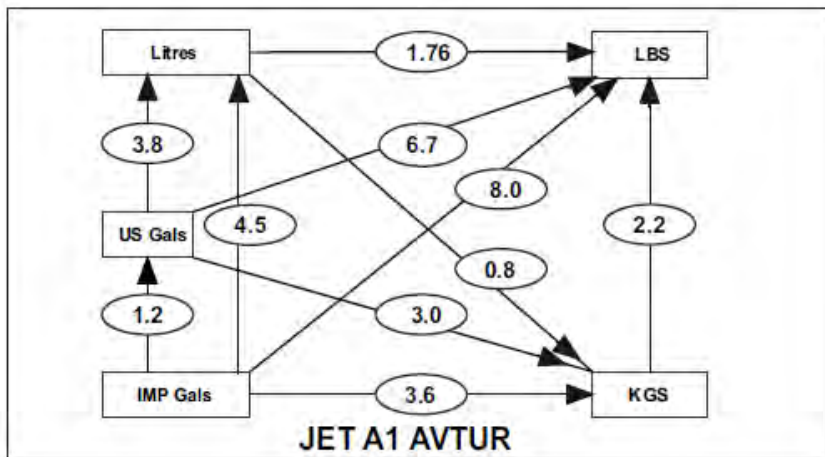
GEN 2.5 LIST OF RADIONAVIGATION AIDS

ID	Station name	Aid	Purpose
DIL	Dili	VOR/DME	AE
SUI	Suai	VOR/DME	AE
OEC	Oecussi	VOR/DME	AE

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GEN 2.6 CONVERSION TABLES

1 FUEL WEIGHT



- To convert:
multiply by the factor in the "balloon" when moving in the direction of the arrow, or
divide by that factor if converting in the opposite direction.
- Fuel SG (0.8 AVTUR and 0.72 AVGAS) is based on ISA temperature at MSL.
 Therefore, fuel weights will be approximate for other than 15DEG Celsius.

2 GENERAL CONVERSIONS

TO CONVERT	INTO	MULTIPLY BY
CELSIUS	Fahrenheit	1.8 and add 32
Centimetres	Inches	0.394
Feet	Metres	0.3048
Fahrenheit	Celsius	Subtract 32 & multiply by 0.555
IMP Gallons	US Gallons	1.200
IMP Gallons	Litres	4.546
Inches	Centimetres	2.540
Kilograms	Pounds	2.2046
Kilometres	Nautical Miles	0.540
Kilometres	Statute Miles	0.621
Kilopascals	Pound/Square Inch	0.145
Litres	IMP Gallons	0.220
Litres	US Gallons	0.264
Metres	Feet	3.281
Metres	Yards	1.094
Pounds	Kilograms	0.4536
Pounds/Square Inch	Kilopascals	6.895
Nautical Miles	Kilometres	1.852
Nautical Miles	Metres	1852
Nautical Miles	Statute Miles	1.151
Statute Miles	Kilometres	1.609
Statute Miles	Nautical Miles	0.868
US Gallons	IMP Gallons	0.833
US Gallons	Litres	3.79
Yards	Metres	0.914

3 FEET TO METRES

FEET TO METRES					
FT	0	100	200	300	400
0	-	30.5	61.0	91.4	121.9
1000	304.8	335.3	365.8	396.2	426.7
2000	609.6	640.1	670.6	701.0	731.5
3000	914.4	944.9	975.4	1006.0	1036.0
4000	1219.0	1250.0	1280.0	1311.0	1341.0
5000	1524.0	1555.0	1585.0	1615.0	1646.0
6000	1829.0	1859.0	1890.0	1920.0	1951.0
7000	2134.0	2164.0	2195.0	2225.0	2256.0
8000	2438.0	2469.0	2499.0	2530.0	2560.0
9000	2743.0	2774.0	2804.0	2835.0	2865.0
FT	500	600	700	800	900
0	152.4	182.9	213.4	243.8	274.3
1000	457.2	487.7	518.2	548.6	579.1
2000	762.0	792.5	823.5	853.4	883.9
3000	1067.0	1097.0	1128.0	1158.0	1189.0
4000	1372.0	1402.0	1433.0	1463.0	1494.0
5000	1676.0	1707.0	1737.0	1768.0	1798.0
6000	1981.0	2012.0	2042.0	2073.0	2103.0
7000	2286.0	2317.0	2347.0	2377.0	2408.0
8000	2591.0	2621.0	2651.0	2682.0	2713.0
9000	2896.0	2926.0	2957.0	2987.0	3018.0

4 METRES TO FEET

METRES TO FEET					
M	0	100	200	300	400
1000	3280.8	3608.9	3937.0	4265.0	4593.1
2000	6561.6	6889.7	7217.8	7545/8	7873.9
3000	9842.4	10170	10499	10827	11155
4000	13123	13451	13779	14107	14436
5000	16404	16732	17060	17388	17716
6000	19685	20013	20341	20669	20997
7000	22966	23294	23622	23950	24278
8000	26246	26574	26903	27231	27559
9000	29527	29855	30183	30511	30840
M	500	600	700	800	900
1000	4921.2	5249.3	5577.4	5905.4	6233.5
2000	8202.0	8530.1	8858.2	9186.2	9514.3
3000	11483	11811	12139	12467	12795
4000	14764	15092	15420	15748	16076
5000	18044	18372	18701	19029	19357
6000	21325	21653	21981	22309	22638
7000	24606	24934	25262	25590	25918
8000	27887	28215	28543	28871	29199
9000	31168	31496	31824	32152	32480

5 NM TO KILOMETRES AND KILOMETRES TO NM

NM	KM
0.1	0.185
0.2	0.370
0.3	0.556
0.4	0.741
0.5	0.926
0.6	1.111
0.7	1.296
0.8	1.482
0.9	1.667
1	1.852
2	3.704
3	5.556
4	7.408
5	9.260
6	11.112
7	12.964
8	14.816
9	16.668
10	18.520
15	27.780
20	37.040
25	46.300
30	55.560

KM	NM
0.1	0.054
0.2	0.108
0.3	0.162
0.4	0.216
0.5	0.270
0.6	0.324
0.7	0.378
0.8	0.432
0.9	0.486
1	0.540
2	1.080
3	1.620
4	2.160
5	2.700
6	3.240
7	3.780
8	4.320
9	4.860
10	5.400
15	8.099
20	10.799
25	13.499
30	16.199

6 WIND COMPONENT

WIND COMPONENT TABLE										
		For crosswind component Angle Between Wind Direction and Runway Heading								
		10	20	30	40	50	60	70	80	90
W	5	1	2	2	3	4	4	4	5	5
i	10	2	3	5	6	7	8	9	9	10
n	15	3	5	7	9	11	13	14	14	15
d	20	3	7	10	13	15	17	18	19	20
	25	4	8	12	16	19	22	23	24	25
s	30	5	10	15	19	23	26	28	29	30
p	35	6	12	17	22	26	30	32	34	35
e	40	7	14	20	25	30	35	37	39	40
e	45	8	15	22	29	34	39	42	44	45
d	50	9	17	25	32	38	43	47	49	50
	55	10	19	27	35	42	48	52	54	55
k	60	10	20	30	38	46	52	56	59	60
n	65	11	22	32	42	50	56	61	64	65
o	70	12	24	35	45	54	60	66	69	70
t	75	13	26	37	48	57	64	70	73	75
s	80	14	27	40	51	60	69	75	78	80
		80	70	60	50	40	30	20	10	0
For Headwind Component Angle Between Wind Direction and Runway Heading										

7 USG AND LITRES TO LBS

US GALLONS			LITRES				
GALS	TO LB AVGAS	TO LB TURBINE FUEL	LITRES	TO KG AVGAS	TO LB AVGAS	TO KG TURBINE FUEL	TO LB TURBINE FUEL
1	6	6.7	1	0.72	1.59	0.8	1.76
10	60	67	10	7.20	15.9	8	17.6
20	120	134	20	14.4	31.7	16	35.3
30	180	201	30	21.6	47.6	24	52.9
40	241	267	40	28.8	63.5	32	70.5
50	301	334	50	36.0	79.4	40	88.2
60	361	401	60	43.2	95.2	48	106
70	421	468	70	50.4	111	56	123
80	481	535	80	57.6	127	64	141
90	541	602	90	64.8	143	72	159
100	602	668	100	72.0	159	80	176
200	1203	1337	200	144	317	160	353
300	1805	2005	300	216	476	240	529
400	2406	2674	400	288	635	320	705
500	3008	3342	500	360	794	400	882
600	3610	4011	600	432	952	480	1058
700	4211	4679	700	504	1111	560	1235
800	4813	5347	800	576	1270	640	1411
900	5414	6016	900	648	1429	720	1587
Note: These figures are approximate only, as temperature and fuel grade will change volume/weight ratio.							

8 FAHRENHEIT TO CELSIUS

DEGREES FAHRENHEIT to DEGREES CELSIUS					
DEG F	0	1	2	3	4
-40	-40.0	-40.5	-41.1	-41.7	-42.3
-30	-34.2	-35.0	-35.5	-36.1	-36.7
-20	-28.9	-29.4	-30.0	-30.6	-31.1
-10	-23.3	-23.9	-24.4	-25.0	-25.5
-0	-17.8	-18.3	-18.9	-19.5	-20.0
0	-17.8	-17.2	-16.7	-16.1	-15.6
10	-12.2	-11.7	-11.1	-10.6	-10.0
20	-6.7	-6.1	-5.6	-5.0	-4.4
30	-1.1	-0.6	0.0	0.6	1.1
40	4.4	5.0	5.6	6.1	6.7
50	10.0	10.6	11.1	11.7	12.2
60	15.6	16.1	16.7	17.2	17.8
70	21.1	21.7	22.2	22.8	23.3
80	26.7	27.2	27.8	28.3	28.9
90	32.2	32.8	33.3	33.9	34.3
100	37.8	38.3	38.9	39.4	40.0
110	43.3	43.9	44.4	45.0	45.6
120	48.9	49.4	50.0	50.6	51.1

DEG F	5	6	7	8	9
-40	-42.8	-43.4	-43.9	-44.4	-45.0
-30	-37.2	-37.8	-38.3	-38.8	-39.4
-20	-31.6	-32.2	-32.8	-33.3	-33.9
-10	-26.1	-26.6	-27.2	-27.8	-28.3
-0	-20.6	-21.1	-21.6	-22.2	-22.8
0	-15.0	-14.4	-13.9	-13.3	-12.8
10	-9.4	-8.9	-8.3	-7.8	-7.2
20	-3.9	-3.3	-2.8	-2.2	-1.7
30	1.7	2.2	2.8	3.3	3.9
-	7.2	7.8	8.3	8.9	9.4
50	12.8	13.3	13.9	14.4	15.0
60	18.3	18.9	19.4	20.0	20.6
70	23.9	24.4	25.0	25.6	26.1
80	29.4	30.0	30.6	31.1	31.7
90	35.0	35.6	36.1	36.7	37.2
100	40.6	41.1	41.7	42.2	42.8
110	46.1	46.7	47.2	47.8	48.3
120	51.7	52.2	52.8	53.3	53.9

Figures (F) above °0 DEG F° are increasing negative values, figures (F) below line are increasing positive values.

9 HPA TO INCHES OF MERCURY

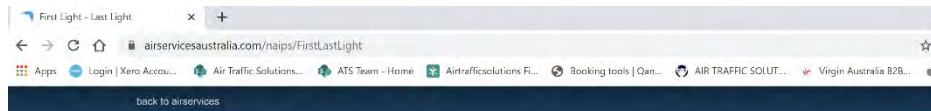
HECTOPASCALS (HPA) TO INCHES OF MERCURY					
HPA	0	1	2	3	4
940	27.76	27.79	27.82	27.85	27.88
950	28.05	28.08	28.11	28.14	28.17
960	28.35	28.38	28.41	28.44	28.47
970	28.64	28.67	28.70	28.73	28.76
980	28.94	28.97	29.00	29.03	29.06
990	29.23	29.26	29.29	29.32	29.35
1000	29.53	29.56	29.59	29.62	29.65
1010	29.83	29.85	29.88	29.91	29.94
1020	30.12	30.15	30.18	30.21	30.24
1030	30.42	30.45	30.47	30.50	30.53
1040	30.71	30.74	30.77	30.80	30.83
1050	31.01	31.04	31.07	31.09	31.12
HPA	5	6	7	8	9
940	27.91	27.94	27.96	27.99	28.02
950	28.20	28.23	28.26	28.29	28.32
960	28.50	28.53	28.56	28.58	28.61
970	28.79	28.82	28.85	28.88	28.91
980	29.09	29.12	29.15	29.18	29.20
990	29.38	29.41	29.44	29.47	29.50
1000	29.68	29.71	29.74	29.77	29.80
1010	29.97	30.00	30.03	30.06	30.09
1020	30.27	30.30	30.33	30.36	30.39
1030	30.56	30.59	30.62	30.65	30.68
1040	30.86	30.89	30.92	30.95	30.98
1050	31.15	31.18	31.21	31.24	31.27

10 INCHES OF MERCURY TO HPA

INCHES OF MERCURY TO HECTOPASCALS (HPA)					
IN	.00	.02	.04	.06	.08
28.00	948	949	949	950	951
28.10	952	952	953	954	954
28.20	955	956	956	957	958
28.30	958	959	960	960	961
28.40	962	962	963	964	964
28.50	965	966	966	967	968
28.60	968	969	970	970	971
28.70	972	973	973	974	975
28.80	975	976	977	977	978
28.90	979	979	980	981	981
29.00	982	983	983	984	985
29.10	985	986	987	987	988
29.20	989	989	990	991	991
29.30	992	993	994	994	995
29.40	996	996	997	998	998
29.50	999	1000	1000	1001	1002
29.60	1002	1003	1004	1004	1005
29.70	1006	1006	1007	1008	1008
29.80	1009	1010	1010	1011	1012
29.90	1012	1013	1014	1015	1015
30.00	1016	1017	1017	1018	1019
30.10	1019	1020	1021	1021	1022
30.20	1023	1023	1024	1025	1025
30.30	1026	1027	1027	1028	1029
30.40	1029	1030	1031	1031	1032
30.50	1033	1033	1034	1035	1035
30.60	1036	1037	1038	1038	1039
30.70	1040	1040	1041	1042	1042
30.80	1043	1044	1044	1045	1046
30.90	1046	1047	1048	1048	1049

GEN 2.7 FIRST AND LAST LIGHT

1. First and last light can be obtained from the Airservices Australia NAIPS Internet Service:
<https://www.airservicesaustralia.com/naips/FirstLastLight> (log in required)



airservices NAIPS Internet Service

Home (Welcome AIRTRAFFICSOLUTIONS) UTC Date Time: 20 05 28 0252 Logout

First Light - Last Light

Enter an authorised aerodrome abbreviation (e.g. YMMML), a location common name (e.g. Parafield) or a latitude and longitude. Latitude and longitude must be entered as follows:

- Degrees only format (e.g. 33S 151E)
- Degrees and Minutes format (e.g. 0530S 14320E)

Domestic Only: ☐

Location or Latitude/Longitude: * WPDL

Date (UTC): 200528

YYMMDD

Submit Reset

Request for Dili

airservices NAIPS Internet Service

Home (Welcome AIRTRAFFICSOLUTIONS) UTC Date Time: 20 05 28 0257 Logout

First Light - Last Light Results

Location: WPDL

Date: 28-May-2020

First-Light: 21:22 UTC

Last-Light: 09:47 UTC

Print Back

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GEN 3

SERVICES

GEN 3.1 AERONAUTICAL INFORMATION SERVICES

1 RESPONSIBLE SERVICES

- 1.1 ANATL is responsible for compiling and disseminating Aeronautical information. ANATL handles the functions of the AIS including NOTAM functions. Services provision is however limited. Enquires should be made to the AACTL at the contact address given in GEN 1-1.

2 AREA OF RESPONSIBILITY

- 2.1 Aeronautical information Services provided covers to the territory of Timor-Leste including the Oecusse enclave.

3 AERONAUTICAL PUBLICATIONS

3.1 Aeronautical Information

- 3.1.1 The integrated Aeronautical information Package consists of the following.
- Aeronautical Information Publication (AIP).
 - Amendment Services to the AIP (AIP AMDT).
 - Supplements to the AIP (AIP SUP).
 - NOTAM and pre-flight Information Bulletins (PIBs).
 - Aeronautical Information Circulars (AIC).
 - Checklist and lists of valid NOTAMs.
- 3.1.2 NOTAM and monthly Checklist are issued via the Aeronautical Fixed Services (AFS). No PIB is available. Other elements will be distributed by mail.
- ###### **3.2 Aeronautical Information Publications**
- 3.2.1 The Timor-Leste AIP is published as three volumes, in English in loose-leaf and online form. It contains permanent aeronautical information and long duration temporary changes essential for air navigation.

3.3 Amendment Services to the AIP

- 3.3.1 Amendments to the AIP will be in a complete replacement of the document:
- Regular AIP Amendment (AIP) at established intervals (to be notified by NOTAM); and
 - AIRAC AIP Amendment (AIRAC AIP AMDT) issued in accordance with the AIRAC system and identified by a pink cover sheet incorporating operationally significant permanent Changes on the indicated AIRAC effective date.
- 3.3.2 Amendment cover sheets will briefly describe the subjects of the Amendment. Vertical line in the left margins will identify new information in the reprinted document.
- 3.3.3 Each AIP page is dated. The date consists of the day, month (by name) and year of the publication date (AIP Edition) or of the AIRAC effective date (AIRAC AIP AMDT) of the information. Each AIP cover sheet includes references to the serial number of those elements, if any, of the integrated Aeronautical Information Package, which have been incorporated into the AIP by the new edition and subsequently cancelled.
- 3.3.4 Each AIRAC AIP AMDT is allocated separate serial numbers, which are consecutive and based on the calendar year. AIP is amended by sequential edition numbers. The year indicated by two digits is part of the serial number of the amendment, e.g. AIRAC AIP AMDT 1/2004.
- 3.3.5 A Checklist of AIP pages containing page number/chart title and the publication or Effective date of the information is reissued with each edition and is an integral part of the AIP.

3.4 Supplement to the AIP (AIP SUP)

- 3.4.1 Temporary Changes of long duration (three months or more) and information of short duration, which consist of extensive text and/or graphics, supplementing the permanent information in the AIP, are published as AIP Supplements (AIP SUP). Operationally significant temporary changes to the AIP are published in accordance With the AIRAC system and are identified by the acronyms AIRAC AIP SUP.

3.4.2 AIP Supplements are organized under each AIP Part and are published in yellow Paper. Each Supplement will contain consecutive serial number based on the Calendar year e.g. AIP SUP 1/2004 AIRAC AIP SUP 1/2004.

3.4.3 AIP SUPs are to be retained in the AIP as long as all or some its contents remain valid. NOTAMs may be issued to indicate changes to the validity period or cancellation. Checklists of Current AIP SUPs will be included in NOTAM checklists.

3.5 NOTAM and Pre-flight Information Bulletins (PIBs)

3.5.1 The NOTAM services is operated by Airservices Australia on behalf of AACTL. Timor-Leste NOTAMs and RAIM information can be accessed via the Airservices Pilot Briefing Centre Website addresses given below:

[Airservices Australia](#).

3.5.2 The AACTL NOTAM office is located at Dili Airport and can be contacted within operation hours as follows.

Tel: +670 3317 110 Ext 124

Fax: +670 3317 111

3.5.3 No Pre-flight Information Bulletins are published.

3.6 Aeronautical Information Circulars (AIC)

3.6.1 Aeronautical Information Circulars (AIC) will contain information on the long-term forecast of any major changes in legislation, regulations, procedures or facilities; information of a purely explanatory or advisory nature liable to affect flight safety; and information of notification of an explanatory or advisory nature concerning technical, legislative or administrative matters.

3.6.2 AICs will be issued under series A and B. Series A will contain information affecting international aviation and will be distributed internationally. Series B will contain information affecting national aviation only and will be distributed domestically only.

3.6.3 Each AIC Series is numbered consecutively on a yearly basis, e.g. AIC A 1/2004 or AIC B 1/2004. A Checklist of current AICs is issued once a year.

3.7 Checklists and List of Valid NOTAMs

- 3.7.1 Monthly NOTAM Checklists are available from [Airservices Australia](#).

3.8 Sale of Publications

- 3.8.1 The AIP is obtainable from the AACTL NOTAM office.

4 AIRAC SYSTEM

- 4.1 Notice concerning operationally significant changes such as amendments to routes, charts, etc. Will be issued in accordance with the Aeronautical Information Regulation and Control (AIRAC) system predetermined dates shown at the web address given below:

<https://www.icao.int/safety/information-management/pages/airacadherence.aspx>

- 4.2 Notices under the AIRAC system will be given to users at least 28 days before the effective date. In case of major changes a notice of 56 days be given.

5 PRE-FIGHT INFORMATION SERVICE AT AERODROMES/HELIPORT

- 5.1 NOTAM checklist and bulletins or NAIP can be accessed at Airservices Australia Pilot briefing website
<http://www.airservicesaustralia.com/flight-briefing/>

GEN 3.2 AERONAUTICAL CHARTS

1 RESPONSIBLE SERVICES

- 1.1 AACTL produces only limited aeronautical charts for aviation use. These are available in the AIP. The charts are produced generally in accordance with DOC 7101.

2 MAINTENANCE OF CHARTS

- 2.1 New Charts and amendments to existing charts will be issued as amendments to the AIP.
- 2.2 Incorrect information of operational significance will be corrected by NOTAM.

3 PURCHASE ARRANGEMENTS

- 3.1 Charts in the AIP may be obtained separately from the AACTL NOTAM office.

4 AERONAUTICAL CHART SERIES AVAILABLE

- 4.1 The following series of aeronautical charts are produced:

- a. Aerodrome Chart-ICAO
- b. Aerodrome Obstacle Chart-ICAO Type A
- c. En-route Chart- ICAO
- d. Instrument Approach Chart-ICAO

4.1.1 General Description of Each Series

- 4.1.2 Aerodrome Chart - ICAO contains detailed aerodrome data to assist flight crews in the ground movement of aircraft from the apron to the runway and from the runway to the apron.
- 4.1.3 Aerodrome Obstacle Chart-ICAO –Type A contains detailed information in plan and profile view on obstacles in the take-off flight path of aerodromes.
- 4.1.4 En-route Chart-ICAO contains aeronautical data on the Timor-Leste airspace to enable flight crew to navigate along ATS routes in compliance with air traffic services Procedures. Currently the chart does not contain data on Timor-Leste PRD areas.

- 4.1.5 Area Chart-ICAO show in more detail aerodrome and terminal routings and the air traffic services system. It provides flight crew with information to facilitate the following phase of instrument flight:
- The transition between the en-route phase and the approach to an aerodrome;
 - The transition between the take-off / missed approach path and the en-route phase of flight; and
 - Flights through areas of complex ATS routes or airspace structure.
- 4.1.6 Instrument approach Chart-ICAO provide information to flight crew to enable them to conduct and approved instrument approach procedure to the runway of intended landing including the missed approach procedure and where applicable associated holding patterns.

5 LIST OF AERONAUTICAL CHARTS AVAILABLE

Type	Location	Date
Aerodrome Charts-ICAO	Atauro Island	25MAR21
	Baucau	25MAR21
	Dili	25MAR21
	Lospalos Fuiloro	25MAR21
	Maliana	25MAR21
	Oecussi	02DEC21
	Same	25MAR21
	Suai	25MAR21
	Viqueque	25MAR21
Aerodrome Obstacle Chart-ICAO Type A	Dili	--MAY12
Aerodrome Obstacle Chart-ICAO Type A	Suai	--MAR17
Aerodrome Obstacle Chart-ICAO Type A and B	Oecussi	NIL
Enroute Chart ICAO	Timor-Leste	Airservices

PRD Areas-Index Chart		25MAR21
Area Chart-Dili CTR	Dili	25MAR21
Instrument Approach Chart-ICAO	Dili	
	VOR	15JAN04
	VOR/DME B, C & D	15JAN04
	RNAV (GNSS) RWY 08 CAT H	12NOV15
	RNAV (GNSS) RWY 26 CAT H	12NOV15
	RNP-Z RWY 08	Reserved
	RNP-Z RWY 26	Reserved
	STAR JEMZE ONE VICTOR	Reserved
		Reserved
Instrument Approach Chart-ICAO	Suai	
	RWY35 VOR/DME	01NOV17
	RWY 35 RNAV (GNSS)	--JUL20
	RNP346 CAT H	--JAN18
	RNP249 CAT H	--JAN18
	RWY 17 DEP	--JAN18

6 INDEX TO THE WORLD AERONAUTICAL CHARTS

6.1 Nil

7 TOPOGRAPHICAL CHARTS

7.1 Nil produced. Maybe obtained from other appropriate mapping agencies.

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GEN 3.3 AIR TRAFFIC SERVICES

1 RESPONSIBLE SERVICES

- 1.1 The AACTL is the responsible authority for the provision of air traffic services (ATS). ATS is provided in accordance with ICAO Annex 2, Annex 11 and PANS-RAC Doc 4444 and Timor-Leste MATS.
- 1.2 ATS are provided only during notified hours of operation.
- 1.3 NOTAM Office and ARO (ATS Reporting Office) are provided at Dili Airport.
- 1.4 Differences are detailed in [GEN 1.7](#).

2 AREA OF RESPONSIBILITY

- 2.1 ATS within Timor-Leste airspace are provided only in Class C airspace and in the lower ATS Routes (Class G airspace-uncontrolled) subject to communication limitation. No services are currently provided outside of the airspace mentioned above.
- 2.2 ANATL provides ATS in the Dili CTR.

3 TYPES OF SERVICES

- 3.1 The following types of air traffic services are provided:
 - Aerodrome Control Services (AD)
 - Approach Control Services (APP)
 - Flight Information Services (FIS)
 - Alerting Services
 - ATS Reporting Office

4 COORDINATION BETWEEN OPERATORS AND ATS

- 4.1 Coordination between ATS and operators is undertaken on an as needs basis.

5 MINIMUM FLIGHT ALTITUDE

- 5.1 No en-route minimum flight altitudes are established. Pilots shall comply with the provisions of Annex 2 with respect to minimum flight altitudes. Minimum Sector Altitudes (MSA) are established within 25NM radius of Dili and Suai radio navigational aids.

6 ATS UNITS ADDRESS LIST

Unit name	Dili Approach/Tower NOTAM/ARO
Postal address	See GEN 1.1
Tel. NO	+ 670 7317 3679
AFS address	TWR: WPDLZTZX NOTAM/ARO:WPDLYNYX
Telex No.	NIL

GEN 3.4 COMMUNICATION SERVICES

1 RESPONSIBLE SERVICE

- 1.1 The ANATL provides communications and radio navigation facilities. ATC communications services are available only during notified hours of operation. Radio navigation services are available H24.

2 AREA OF RESPONSIBILITY

- 2.1 ANATL presently provides communications and navigation services within the Dili CTR, and along lower ATS routes.
- 2.2 High terrain limits the operational coverage of the communications and the radio navigation facilities.

3 TYPE OF SERVICES

3.1 Communication Service

- 3.1.1 The following communication services are provided:
- VHF Radio communications
 - AFTN

3.2 Radio Navigation Service

- 3.2.1 The following types of radio aids to navigation are available:
- VHF- Omni-Directional Radio Range (VOR)
 - Distance Measuring Equipment (DME)
- 3.2.2 Radio navigation aids operate in accordance with ICAO Annex 10.

3.3 Mobile / Fixed Service

- 3.3.1 ATS units maintain a continuous watch on the stated frequencies during published hours of service unless otherwise notified. Aircraft should maintain continuous watch and Communicate with the unit that exercises control in the area the aircraft is flying.
- 3.3.2 AACTL and ANATL,E.P has access to the ICAO AFTN system via the Airservices Australia AFTN Gateway System. ATS messages, flight plans and other messages as appropriate may be sent to the following ANATL, E.P. addresses:
- WPDLTZX-Dili Tower

- WPDLYDYX-Presidente Nicolau Lobato Internacional Aeroporto Managment
- WPDLYAYA-AACTL headquarters

3.4 Broadcasting Services

3.4.1 Not available

4 REQUIREMENTS AND CONDITIONS

- 4.1 Air-ground communications and air-to-air communications including TIBA shall be conducted by VHF radiotelephony in English using standard ICAO phraseologies.
- 4.2 Aircraft shall establish communications on VHF with ATS units at least 10 minutes before entering the respective ATS unit's area of responsibility to enable the ATS units to ensure separation with other aircraft under its control.

5 RADIO COMMUNICATIONS FAILURE PROCEDURES

- 5.1 Pilots shall comply with the following general procedures in the event of Communications failure.
- 5.2 In VMC, continue to fly to destination airport, or land at the nearest suitable aerodrome and report arrival to the nearest ATS unit by the most expeditious means.
- 5.3 In IMC:
- a. proceed according to the current flight plan route to the navigation aid serving the destination aerodrome maintaining the last assigned level or minimum flight altitude of higher;
 - b. commence descent over the facility upon arrival of no expected approach time (EAT) was received and acknowledged, or if an EAT was received and acknowledge commence descent at or as close as possible to the (EAT);
 - c. complete the normal instrument approach procedure specified for the navigation aid; and
 - d. land within 30 minutes of the estimated time of arrival or of the EAT, whichever is later.

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GEN 3.5 METEOROLOGICAL SERVICES

1 RESPONSIBLE SERVICE

- 1.1 No local Meteorological services are available.
- 1.2 Automated MET sensors have been installed at Dili/Presidente Nicolau Lobato International airport. Information on wind direction and speed, cloud base, QNH and temperature as derived from these sensors is provided by air traffic control units during published hours of operation.

2 AREA OF RESPONSIBILITY

- 2.1 WPDL

3 METEOROLOGICAL OBSERVATIONS AND REPORTS

- 3.1 METAR/SPECI/TAF are provided by Bureau of Meteorology (BoM Australia).

4 TYPES OF SERVICES

- 4.1 METAR/SPECI/TAF available for WPDL
- 4.2 NOTAM service available for:
 - WPEC
 - WPDL
 - WPOC
 - WPDB
- 4.3 MET and NOTAM information available from the [Airservices Australia](#) Pilot briefing website.

5 NOTIFICATION REQUIRED FROM OPERATORS

- 5.1 Reserved.

6 AIRCRAFT REPORTS

- 6.1 Reserved.

7 VOLMET SERVICE

- 7.1 Not available.

8 SIGMET AND AIRMET SERVICES

8.1 Not Available.

9 OTHER AUTOMATED MET SERVICES

Nil.

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GEN 3.6 SEARCH AND RESCUE

1 RESPONSIBLE SERVICE

- 1.1 Notification on aviation SAR matters and request for assistance should be made to ANATL, E.P. using the contact details/telephone numbers. Given under [GEN 1.1](#) or telephone numbers stated below:

+670 73635516 (Dili ATSU Opr. Hrs.)

+670 3313 821 (Dili TWR Opr. Hrs)

+670 7737 2707 (Mobile Phone)

Or through AFTN address:

WPDLTZTX – TWR

WPDLYNYX – ARO/NOTAM

2 AREA OF RESPONSIBILITY

- 2.1 The area of responsibility for SAR generally covers the Timor-Leste airspace limits.

3 TYPES OF SERVICES

- 3.1 Reserved.

4 SAR AGREEMENTS

- 4.1 A SAR agreement exists between Timor-Leste and Indonesia.

5 PROCEDURES AND SIGNALS USED BY AIRCRAFT

- 5.1 Procedures for pilots observing an accident or intercepting a distress call /message and signals and transmission of distress messages are outlined in Annex 12 and Annex 10 Volume 2 Respectively.
- 5.2 The Emergency frequency 121.5MHz is guarded at the control towers during notified hours of Service.

6 GROUND/AIR VISUAL SIGNAL CODES FOR USE BY SURVIVORS

6.1 Ground/Air visual signal codes for use by survivors are given below:

	Message	Code Symbol
1.	Required assistance	V
2.	Required Medical assistance	X
3.	No or Negative	N
4.	Yes or Affirmative	Y
5.	Proceeding in this direction	↑
If in doubt use International symbol		SOS
Instructions for use: <ol style="list-style-type: none">1. Make signals not less than 8ft (2.5M)2. Lay signals exactly as shown3. Provide as much colour contrast as possible between signals and background4. Make every effort to attract attention by other means such as radio, flares, smoke and reflected light.		

GEN 4

CHARGES FOR AERODROMES, HELIPORTS AND AIR NAVIGATION

GEN 4.1 AERODROME/HELIPORT CHARGES

1 LANDING OF AIRCRAFT

- 1.1 The fee payable is based on aircraft manufacturer's certified maximum Take-off weight (MTOW) specified in the flight Activity Report (See further below). If the Maximum Take-off Weight is not known, the weight of the heaviest known aircraft of the same type will be Applied to calculate the fee.
- 1.2 The applicable fee rates are given in the table below. The charges are applicable only at Dili/Presidente Nicolau Lobato International airport for the time being.
- 1.3 Helicopters and fixed wing are charged at the applicable weight.

Maximum Take-off Weight in Kg	International flight (USD)	Domestic flight (USD)
<5,000	60.00	20.00
5,001-10,000	200.00 + 5.00 per ton or part thereof	100.00 + 3.00 per ton or part thereof
10,001-30,000	250.00 + 5.00 per ton or part thereof	125.00 + 3.00 per ton or part thereof
30,001-50,000	355.00 + 5.00 per ton or part thereof	185.00 + 3.00 per ton or part thereof
50,001-80,000	455.00 + 5.00 per ton or part thereof	245.00 + 3.00 per ton or part thereof
>80,000	615.00 + 5.00 per ton or part thereof	345.00 + 3.00 per ton or part thereof

2 PARKING, HANGARAGE AND LONG-TERM STORAGE OF AIRCRAFT

2.1 Parking of Aircraft

- 2.1.1 Operators must obtain prior approval for parking arrangements from the aerodrome Authority due to limited apron space. Parking fee may be charged at the discretion of the ANATL, E.P.

2.2 Hangar Charges

- 2.2.1 Nil.

2.3 Long-term Storage

- 2.3.1 Not Available.

3 PASSENGERS SERVICES

- 3.1 Departure tax fees are integrated into the air ticket.

4 SECURITY

- 4.1 Security tax fees are integrated into the air ticket. All aircraft are parked at owners' risk.

5 NOISE-RELATED ITEMS

- 5.1 Not Applicable.

6 OTHERS

- 6.1 Nil.

7 EXEMPTIONS AND REDUCTIONS

- 7.1 Nil.

8 METHOD OF PAYMENT

- 8.1 Fees are payable by the person nominated at the time the approval is given for a flight and must be paid before departing Dili airport unless other arrangements have been agreed to. In the case of regular users, payment shall be made on demand at the end of each calendar Month of fees accrued during the month. All payment shall be in USD.

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GEN 4.2 AIR NAVIGATION SERVICES CHARGES

Presently no separate air navigation service charge is imposed.

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PART 2 - EN ROUTE (ENR)

ENR 0

ENR 0.1 PREFACE – Not applicable

ENR 0.2 RECORD OF AIP TIMOR-LESTE AMENDMENTS – Not applicable

ENR 0.3 RECORD OF AIP TIMOR-LESTE SUPPLEMENTS – Not applicable

ENR 0.4 CHECKLIST OF AIP TIMOR-LESTE PAGES – Not applicable

ENR 0.5 LIST OF HAND AMENDMENTS TO AIP TIMOR-LESTE – Not applicable

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GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

1 INTRODUCTION

- 1.1 The rules and procedures applicable for the management of air traffic in Timor-Leste conform to the provisions of ICAO Annexes 2 and 11 and PANS-OPS Doc 4444 except for differences listed at GEN 1.7.
- 1.2 Aircraft in flight or operating in the movement area of an aerodrome shall comply with the General Rules as defined in Annex 2. Additionally, aircraft in flight shall comply with the Instrument Flight Rules (IFR) or Visual Flight Rules (VFR). Aircraft operating between the hours of sunset and sunrise shall comply with IFR unless specifically authorized by ANATL to conduct the flight under VFR.
- 1.3 All flights intending to operate into Timor-Leste airspace/aerodromes require AACTL approval except operators who have AACTL authorisation to operate regular commercial flights.
- 1.4 Requests for flight approval should be made to the AACTL Prior to operation a flight plan must be submitted unless approval to operate without a plan has been granted by ANATL.

2 AIR TRAFFIC CONTROL CLEARANCE

- 2.1 An air traffic control clearance is authorisation for an aircraft to conduct flight under conditions specified by an air traffic services unit based on known air traffic. Air traffic clearances are applicable only within controlled airspace.
- 2.2 An air traffic control clearance does not absolve the pilot from complying with statutory requirements nor from the responsibility for the ultimate safety of his/her aircraft.
- 2.3 The pilot-in-command of an IFR, VFR or Special VFR flight shall obtain an air traffic control clearance before operating in controlled airspace.
- 2.4 A pilot may request for an alternative clearance if the clearance

issued is not satisfactory or in the pilot's opinion would endanger his/her aircraft.

- 2.5 The pilot-in-command having acknowledged an air traffic control clearance shall not deviate from that clearance unless an amended air traffic control clearance has been obtained.
- 2.6 ATC clearances authorize flight in the manner specified to the first point at which the flight would leave controlled airspace and, in the case of arriving aircraft, from the first point at which the flight enters controlled airspace.
- 2.7 Procedures permitting, ATS units will clear departing international IFR flights for the entire route to the aerodrome of first intended landing.
- 2.8 When prior coordination with Australian and Indonesian ATS units is not possible, ATS units will clear departing international flights to a level not above FL240 and will request aircraft to establish HF communications with Brisbane Radio or Ujung Pandang FIS on the frequencies stated below and, forward departure time and estimates for the designated reported points and, obtain airways clearance.
 - Brisbane Radio:
 - 3470, 6556, 11396, 13318, 17907
 - Ujung Pandang FIS:
 - 3470, 6556, 11396

3 LEVEL CHANGE & REPORTING

- 3.1 In controlled airspace the pilot-in- command shall:
 - a. Commence a level change as soon as possible but not later than one (1) minute after receiving instruction from ATC unless the instruction includes a time or place/point at which the level change is to be effected;
 - b. Report vacating a level which has been maintained for a period immediately prior to changing level;
 - c. Report reaching an assigned level; and

- d. Report any other level requested by ATC.

4 VISUAL APPROACHES

- 4.1 The pilot of an IFR flight may request clearance to execute a visual approach provided the following conditions can be met:
 - a. The prevailing weather conditions will enable the pilot to maintain continuous visual reference to terrain;
 - b. The reported ceiling at the aerodrome is at or above the approved initial approach level for the facility; and
 - c. The pilot has reasonable assurance that the visual approach and landing can be completed.
- 4.2 Visual approaches are subject to ATC approval and ATS units may issue level restrictions to aircraft making visual approaches for the purpose of separation with other arriving and departing aircraft.

5 ENGINE START UP AND TAXI PROCEDURE

- 5.1 Pilots shall request approval from ATS units prior to starting engines to enable the ATS units to coordinate ATC clearance with neighbouring ATS units or to be advised of delay.
- 5.2 When operating from controlled aerodrome a pilot in command must obtain a taxi clearance prior to taxiing.
- 5.3 A pilot wishing to use less than the full length of runway should nominate the intention to the ATC.

6 CHANGE TO TOWER FREQUENCY

- 6.1 Domestic Aircraft should change to the tower frequency close to, or at the holding point of the nominated runway when ready to take-off.

7 RUNWAY ENTRY AND CLEARANCE FOR TAKE-OFF

- 7.1 Aircraft must not enter an active runway unless a specific clearance to take off, line up or backtrack has been received or a clearance to enter for other purposes has been received from ATC.
- 7.2 An Aircraft must not take-off unless the specific clearance "CLEARED FOR TAKE-OFF" has been received.

8 SEPARATION

- 8.1 Separation of aircraft operating within controlled airspace is applied in accordance with the minima specified in ICAO Doc 4444.
- 8.2 Separation between aircraft operating in the vicinity of an aerodrome may be reduced by ATS units under the following circumstances:
- a. The controller has the aircraft concerned in sight and can ensure adequate separation; or
 - b. Aircraft concerned are continuously visible to the pilots concerned and the pilots report that they can maintain their own separation; or
 - c. The pilot of a following aircraft reports that he/she can keep the preceding aircraft continuously in sight and can maintain his/her own separation with the preceding aircraft.
- 8.3 Separation of aircraft is based on:
- a. Pilot's estimated or actual times over designated reporting points;
 - b. DME distance readings; and
 - c. Visual sightings.
- 8.4 Pilots shall notify ATS units of revisions of two (2) minutes or more to estimates

9 ESSENTIAL TRAFFIC INFORMATION

- 9.1 Essential traffic is that controlled traffic to which the provision of separation by an ATS unit is applicable, but which, in relation to a particular flight is not, or will not be separated from other controlled flight by the appropriate separation minimum.
- 9.2 When passing essential traffic information ATC will provide details of the aircraft concerned including:
- a. Flight direction and cruising level;
 - b. Estimated or actual position;
 - c. Relative bearing in terms of the 12-hour clock; and

- d. If relevant, the wake turbulence category.

10 RUNWAY IN USE

- 10.1 ATC will nominate the runway in use based on prevailing weather conditions.
- 10.2 Notwithstanding the runway direction nominated by ATC, the pilot-in-command shall ensure that there is sufficient length of run available and that the crosswind or downwind component is within the operational limits of each operation.
- 10.3 A pilot may request for an alternative runway on safety or other grounds. ATC may approve the request, but such approval may be subject to delays due to other aircraft using the nominated runway.
- 10.4 Unless approved by ATC, the pilot of an aircraft that has been cleared for take-off shall not hold on the runway-in-use.
- 10.5 The decision to take-off or land on water affected runway or when the presence of birds has been advised by ATC rests solely with the pilot-in-command.

11 RADIO COMMUNICATION FAILURE PROCEDURE

- 11.1 Pilots shall adopt the general procedures specified under GEN 3.4.5 and shall take note of circuit procedures established at the aerodromes.

12 TRAFFIC INFORMATION BROADCAST BY AIRCRAFT (TIBA)

- 12.1 Pilots operating in Class G airspace are required to monitor the following frequencies and make traffic information broadcasts (TIBA) in accordance with ICAO procedures to maintain flight safety. Frequency monitoring and broadcasts shall be conducted as follows:
 - a. Below 10,000 ft Timor Common on 127.1MHZ.

13 COMMUNICATION LIMITATIONS

- 13.1 VHF coverage over the Timor-Leste landmass is limited at low levels due to terrain and this is likely to affect two-way radio communications between ATC and aircraft. Pilots are encouraged to transmit blind position reports and intentions to ATC when two-way communications cannot be established.

- 13.2 The terrain also limits the operational coverage of the radio navigation facilities.

ENR 1.2 VISUAL FLIGHT RULES

1 GENERAL

- 1.1 VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to greater than that specified below for that Class of airspace.

Airspace Class	Distance from Cloud	Flight Visibility
Class C		
	1,500M horizontally and 1,000FT vertically.	8KM at or above 10,000FT AMSL 5KM below 10,000FT AMSL
Class G		
Above 3,000FT AMSL or 1,000FT above terrain whichever is higher.	3,000FT horizontally and 1,000ft vertically.	8KM at or above 10,000 ft AMSL 5KM below 10,000ft AMSL.
At or below 3,000FT AMSL or 1,000FT above terrain whichever is higher.	Clear of clouds and in sight of the surface.	5km.

- 1.2 VFR flights shall not be conducted above FL200 in all airspace or at transonic and supersonic speeds unless approved by ANATL.
- 1.3 VFR flights between sunset and sunrise are not permitted in all airspace
- 1.4 Except when necessary for take-off or landing or except by permission by the ANATL, a VFR flight shall not be flown:
- at a height less than 1,000ft above the highest obstacle within a radius of 600m from the aircraft over congested areas of cities, towns or settlements or over an open-air assembly of persons;
 - At a height less than 500ft above the ground or water elsewhere.

- 1.5 Pilots of VFR flights flight planned to operate at a specific height above ground level (example 500ft AGL) shall, before operating in controlled airspace, request clearance to maintain a specific altitude for that portion of the flight that will be conducted within controlled airspace to enable ATC to ensure separation with IFR aircraft unless authorized by ATC to operate otherwise.
- 1.6 ATC will suspend VFR operations within an ATZ / CTR when visibility falls below 5 Km, or the reported cloud ceiling is below 1500ft.
- 1.7 The pilot-in-command of an aircraft operating under VFR in controlled airspace shall not enter instrument meteorological conditions without first obtaining air traffic control clearance to:
- a. Operate as a Special VFR flight if operating within a control zone; or
 - b. Change to comply with instrument flight rules provided the pilot holds a current instrument rating and the aircraft is appropriately equipped.
- 1.8 Until such time clearance is given, the pilot in 1.7 above must remain in visual meteorological conditions. If change to IFR is approved the pilot shall communicate changes to the current flight plan and proceed in accordance with air traffic control clearance.
- 1.9 VFR flights shall comply with the provisions of Annex 2, para 3.6 when:
- a. Operated within Class C airspace;
 - b. Forming part of the aerodrome traffic at controlled aerodromes; or
 - c. Operated as special VFR flights.

2 SPECIAL VFR FLIGHTS

- 2.1 By day when VMC does not exist, ATC may upon pilot request authorize Special VFR flights to enter, leave or operate within a CTR provided such authorisation does not unduly delay an IFR flight.
- 2.2 Special VFR is not permitted for fixed-wing aircraft when visibility falls below 5Km and for helicopters when visibility falls below 2Km.

- 2.3 Special VFR flights will be provided with separation with IFR flights and with other Special VFR flights. ATC will normally approve only one Special VFR flight at any one time.
- 2.4 Special VFR flights where authorized will not normally be assigned a specific altitude and will be instructed to remain clear of cloud and in sight of the surface. For separation purposes however ATC may instruct a Special VFR flight to operate not above a specified altitude.
- 2.5 Before requesting clearance to operate under Special VFR clearance the pilot shall take into consideration prevailing weather conditions including visibility, terrain and any restrictions of his/her license.
- 2.6 A pilot authorized to fly under a Special VFR clearance shall remain clear of cloud and in sight of the surface at all times.

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ENR 1.3 INSTRUMENT FLIGHT RULES

1 COMPLIANCE

- 1.1 IFR flights shall be conducted in compliance with the provisions of ICAO Annex. 2 Rules of the air.
- 1.2 Cruising levels shall be selected in accordance with [ENR 1.7 para 7](#).
- 1.3 The pilot-in-command of an aircraft shall not operate that aircraft under IFR unless he/she holds a valid instrument rating appropriate for the class of aircraft being flown issued by a civil aviation authority and the aircraft is fitted with suitable communication and radio navigation equipment.

2 MINIMUM LEVELS

- 2.1 Aerodrome operating minima are not established at aerodromes. Minimum Sector Altitudes (MSA) are established within 25NM radius of a radio navigation aid serving an airport. No minimum IFR altitudes/levels are established for the Lower ATS routes.
- 2.2 Except when necessary for take-off or landing or except by permission from the ANATL, E.P. an IFR flight shall not be flown below the minimum flight altitude where established, or where no such minimum flight altitude has been established:
 - a. At a level which is at least 2,000ft above the highest obstacle within a radius of 8Km of the estimated position of the aircraft over high terrain or in mountainous areas;
 - b. At a level which is at least 1,000ft above the highest obstacle located within 8Km of the estimated position of the aircraft.

3 CHANGE FROM IFR FLIGHT TO VFR FLIGHT

- 3.1 A pilot operating under instrument flight rules may elect to change from IFR to comply with visual flight rules in which case the pilot shall notify the appropriate ATS unit that IFR flight is cancelled and communicate to ATC any changes to the current flight plan. ATC will acknowledge the time IFR was cancelled and will then onwards treat the flight as a VFR flight. Before the pilot decides to cancel flight under IFR and proceed VFR, he/she shall ensure that the flight can

be continued in uninterrupted visual meteorological conditions.

4 RULES APPLICABLE WITHIN CONTROLLED AIRSPACE

4.1 IFR flights shall comply with the provisions of Annex 2 para 3.6.

5 RULES APPLICABLE OUTSIDE CONTROLLED AIRSPACE

5.1 When operating outside of controlled airspace but within or into designated areas or along designated air routes, IFR flights shall establish and maintain a listening watch on the appropriate radio frequency to facilitate the provision of flight information, alerting and search and rescue services and, shall report position as specified in Annex 2 para 3.6.3.

ENR 1.4 ATS AIRSPACE CLASSIFICATION

1 CLASSIFICATION OF AIRSPACE

- 1.1 The ICAO ATS airspace classification system is adopted. Timor-Leste airspace is classified and designated as follows:

Class C

IFR and VFR flights are permitted. All flights are subject to air traffic control service and are separated from each other.

Class G

IFR and VFR flights are permitted and receive flight information service where facilities allow.

- 1.2 Airspace Class C is designated as controlled airspace. Controlled airspace is defined as airspace of defined dimensions within which air traffic control service is provided. The Dili CTR is designated Class C airspace.
- 1.3 The remaining Timor-Leste airspace is designated Class G airspace and is uncontrolled airspace. In Class G airspace flight information service may be provided subject to communications limitations.
- 1.4 The requirements for each class of airspace are shown in the following table.

Class	Type of flight	Separation provided	Service provided	Speed limitation	Radio communications requirements	ATC clearance
C	IFR	IFR from IFR IFR from VFR	Air traffic control service	Not applicable	Continuous two-way	YES
	VFR	VFR from IFR	1. Air traffic control service for separation from IFR 2. VFR/IFR traffic information (and traffic avoidance advice on request).	250kt IAS below 10,000ft AMSL	Continuous two-way	YES
G	IFR/ VFR	Nil	Flight Information Service	250kt IAS below 10,000ft AMSL	YES	NO

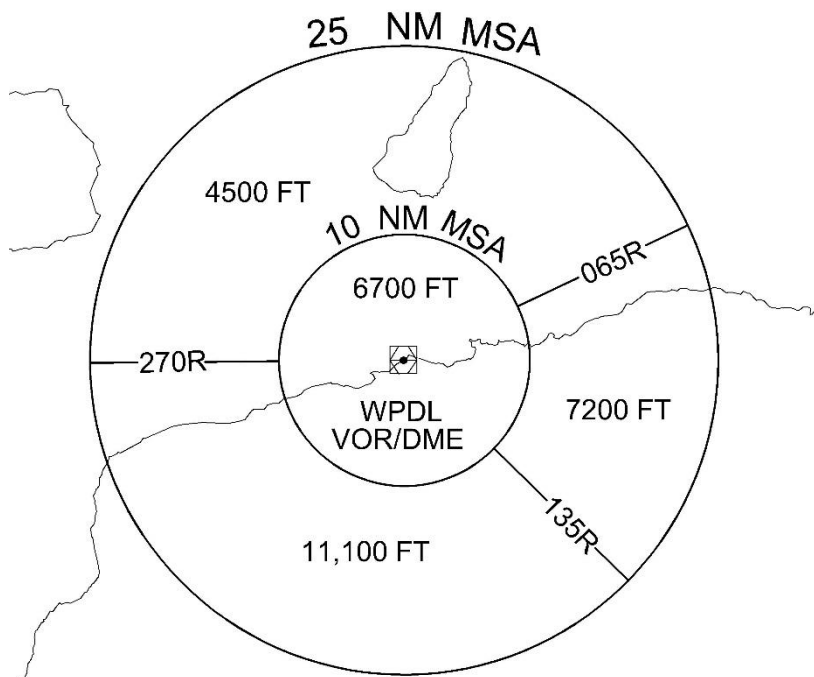
ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

1 GENERAL

- 1.1 Instrument Holding and Approach procedures for radio navigation aids are designed and published in accordance with the provisions of Doc 8168.
- 1.2 No STARs are published.
- 1.3 Where published in AIP a SID may be flown by authorised operators.
- 1.4 Pilots operating flights under IFR into aerodromes shall conduct instrument approaches in accordance with the published procedures for that aid(s) serving the airport. Pilots shall not use “user-defined” GPS procedures in place of published procedures to conduct instrument approaches.
- 1.5 Instrument approaches shall not be conducted when local QNH is not available. Approach and landing shall be conducted only under VMC when local QNH is not available.

2 ARRIVING FLIGHTS

- 2.1 ATC will normally clear an arriving IFR flight to the radio navigational aid associated with the destination aerodrome upon first contact. This will be the clearance limit. When the aid is unavailable the clearance limit will be the aerodrome.
- 2.2 An arriving IFR flight making an approach into an aerodrome and conforming to a published instrument procedure shall not descend below the MSA published within 25NM and 10NM for the facility until it has arrived over the facility except when complying with the requirements for a visual approach.
- 2.3 The MSAs published within 25NM and 10NM provide at least 1,000ft obstacle clearance. Aircraft within 25NM and 10NM may use the applicable MSA. Pilots shall however take note that some Sector MSAs are lower than the 10NM MSA.



- 2.4 An aircraft which is not required to hold or to lose height in a holding pattern may commence the approach without entering the holding pattern provided the pilot has notified ATC and has been cleared by ATC.
- 2.5 Aircraft intending to conduct an abbreviated VOR/DME arc procedure must join the procedure at or before the IAF at an altitude not below the published MSA provided cleared to do so by ATC.
- 2.6 Pilots must ensure that no visual circling is conducted within sectors annotated as "No Circling" in instrument approach charts. Spot heights shown on IAL charts must be treated with caution and pilots are advised to familiarize themselves with the location and altitudes of obstacles in the circling area by studying an appropriate topographic map.
- 2.7 ATC may offer arriving aircraft visual approaches to expedite traffic

subject to prevailing weather and traffic conditions. The decision to accept or decline visual approaches rests with pilots.

3 DEPARTING FLIGHTS

- 3.1 ATC may specify any or all the following when issuing a departure clearance to a departing aircraft for the purposes of separation:
- a. direction of turn after take-off;
 - b. track to make good before turning on to desired heading; and
 - c. initial altitude or level to maintain or levels to cross at specified points.
- 3.2 The pilot-in-command shall notify ATC if the departure instructions cannot be complied with and shall request for alternative instructions.

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ENR 1.6 SURVEILLANCE SERVICES

1. Surveillance services are not available.

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ENR 1.7 ALTIMETER PROCEDURES

1 INTRODUCTION

- 1.1 Altimeter setting procedures conform to the provisions of Doc 8168.
- 1.2 ATC provides pilots with aerodrome QNH in Hectopascals derived from automated sensors. QNH values are given as whole units, rounded down. QNH values to decimal points may be given upon request.

2 GENERAL

- 2.1 The Transition Altitude is 11,000ft and the Transition Level is FL130 throughout Timor-Leste.
- 2.2 Vertical displacement of aircraft based on QNH datum is expressed in feet, e.g. "Three Thousand". Vertical displacement based on 1013.2 Hpa (29.92 in) datum shall be expressed as "Flight Level".
- 2.3 Vertical position of aircraft shall be expressed in terms of altitudes at or below the Transition Altitude and in terms of flight levels at or above the Transition Level. While passing through the Transition Layer vertical position shall be expressed in terms of flight levels when climbing and in altitudes when descending.
- 2.4 ATC will provide QNH whenever a change is observed. No Area QNH is available.

3 TAKE-OFF AND CLIMB

- 3.1 ATC provides QNH altimeter setting at engine start up/or with taxi clearance to departing aircraft.

4 APPROACH AND LANDING

- 4.1 ATC provides QNH altimeter setting upon initial contact to arriving aircraft. QFE is not provided.

5 DESCRIPTION OF ALTIMETER SETTING REGION

- 5.1 Not applicable.

6 PROCEDURES APPLICABLE TO OPERATORS (INCLUDING PILOTS)

6.1 Flight plans shall specify levels as follows:

- a. in terms of flight levels if the flight is to be conducted at or above the transition level; and
- b. In terms of altitudes if the flight is to be conducted in the vicinity of an aerodrome and at or below the transition altitude.

7 TABLE OF CRUISING LEVELS

7.1 Cruising altitudes and levels for IFR and VFR flights shall be selected in accordance with table below whether operating within controlled or outside controlled airspace.

7.2 The use of flight levels 115, 120 and 125, which are within the Transition Layer, is not permitted.

7.3 Cruising or holding within the transition layer is not permitted.

000°-179°				180°-359°			
IFR		VFR		IFR		VFR	
FL	Alt (ft)	FL	Alt (ft)	FL	Alt (ft)	FL	Alt (ft)
-	1,000	-	1,500	-	2,000	-	2,500
-	3,000	-	3,500	-	4,000	-	4,500
-	5,000	-	5,500	-	6,000	-	6,500
-	7,000	-	7,500	-	8,000	-	8,500
-	9,000	-	9,500	-	10,000	-	10,500
-	11,000	-		140		125	
130		115		160		145	
150		135		180		165	
170		155		200		185	
190		175		220		205	
210		195		240		225	
230		215		260			
250		235		280			
270				310			

000°-179°				180°-359°			
IFR		VFR		IFR		VFR	
FL	Alt (ft)	FL	Alt (ft)	FL	Alt (ft)	FL	Alt (ft)
290				350			
330				390			
370				430			
410				470			
450							
490							

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ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES

1 NOTIFIABLE REGIONAL PROCEDURES

- 1.1 There are no notifiable regional supplementary procedures in Timor-Leste.

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ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT (ATFM)

1. Reserved

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ENR 1.10 FLIGHT PLANNING

1 RESPONSIBILITY

- 1.1 It is the responsibility of the pilot-in-command to ensure prior to commencement of flight, that he/she has all the necessary information appropriate for the intended operation including the condition of the departure, destination and alternate aerodrome(s) and, availability of facilities and services to ensure that the flight can be conducted in a safe manner.

2 PROCEDURE FOR SUBMISSION OF FLIGHT PLANS

- 2.1 IFR and VFR flights intending to operate in Timor-Leste airspace shall submit to the appropriate ATS unit a flight plan in accordance with Annex 2 and Doc 4444 prior to operating unless specifically exempted by ANATL for submitting flight plans.
- 2.2 Unless approved by the ATS unit flight plans must be submitted at least 60 minutes before the estimated time of departure (ETD).

3 REPETITIVE FLIGHT PLAN SYSTEM

- 3.1 The repetitive flight plan system is not applied presently in Timor-Leste.

4 CHANGES TO FLIGHT PLAN

- 4.1 Changes to a flight plan that has been submitted including a delay of 30 minutes or more to the ETD, shall be notified to the ATS unit concerned.
- 4.2 When a flight is cancelled, the appropriate ATS unit shall be informed immediately.

5 FLIGHT PLANNING BETWEEN TIMOR-LESTE AND AUSTRALIA

- 5.1 To facilitate flights between Australia and Timor-Leste ATS routes Z10, Z69 and Z86 have been established and, Z12 extended from BACAU to ELBIS below FL245.
- 5.2 Flights between Australian aerodromes and Timor-Leste shall route via Darwin VOR in accordance with the table below. Pilots shall take note of the one-way routings within Timor-Leste airspace and shall

not flight plan in the opposite direction. Routings other than that specified herein is subject to specific approval by the Australian and Timor-Leste ATS units.

- 5.3 Notwithstanding that segments of these ATS routes are in uncontrolled airspace, aircraft entering/leaving Timor-Leste airspace shall flight plan along these routes only for separation and safety purposes

	Sector	Planned FL	Route	Remarks
Timor-Leste to Darwin	WPDL-YPDN	Above FL240	DIL-Z12-ELBIS-M768-DN	One way DIL-ELBIS
	WPDL-YPDN	At or below F240	DIL-TAPON-Z10-TODOT-JULIE-M768-DN	One way DIL-TAPON-TODOT
	WPEC-YPDN	All	WPEC- Z12-ELBIS-M768-DN	NIL
	WPDB-YPDN	All	UAI-KIKEM-J61-DN	NIL
Darwin to Timor-Leste	YPDN-WPDL	Above FL240	DN-J61-IKUMA-Z86-DIL	One way IKUMA-DIL
	YPDN-WPDL	At or below FL240	DN-JULIE-Z69-METAN-DIL	One way METAN-DIL
	YPDN-WPEC	All	DN-M768-ELBIS-Z12-WPEC	NIL
	YPDN-WPDB	All	DN-J61-IKUMA-KIKEM-UAI	NIL

6 FLIGHT PLANNING BETWEEN TIMOR-LESTE AND OECUSSI

- 6.1 A two-way flight plan route defined below for domestic flights

operating between Timor-Leste and its territory the Oecussi enclave has been established, flights shall be operated VFR.

	Sector	Planned FL	Route	Remarks
WPDL-WPOC-WPDL	WPDL-WPOC	Not above 7,000	DIL-MUBRA-ABM BATUGADE-ABM WINI-WPOC	
	WPOC-WPDL	Not above 7,000	WPOC-ABM WINI-ABM BATUGADE-MUBRA-DIL	
WPDB-WPOC-WPDB	WPDB-WPOC		SUI- DIL-MUBRA-ABM BATUGADE-ABM WINI-WPOC	Not above 7,000 FM MUBRA
	WPOC-WPDB		WPOC-ABM WINI-ABM BATUGADE-MUBRA-SUI	Not above 7,000 till MUBRA

- 6.2 Flights planned to operate between Suai aerodrome and Oecussi aerodrome shall join above route to MUBRA and flight planned between Oecussi aerodrome and Suai Aerodrome shall leave above route at MUBRA.
- 6.3 Aircraft operating between Timor-Leste and the Oecussi enclave shall establish and maintain communications with Kupang FIS on HF 8882 while transiting Indonesian airspace.

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ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

1. All flight movement related messages shall be addressed to WPDLTZX.

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ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

1 APPLICATION

1.1 Principles observed by the Democratic Republic of Timor-Leste

- Interception of civil aircraft will be undertaken only as a last resort to prevent airspace infringement;
- If undertaken, an interception will be limited to determining the identity of the aircraft, unless it is necessary to return the aircraft to its planned track, direct it beyond the boundaries of national airspace, or instruct it to effect a landing at a designated aerodrome;
- Navigational guidance and related information will be given to an intercepted aircraft by radiotelephony, whenever radio contact can be established;
- In the case where an intercepted civil aircraft is required to land, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned; and
- In the time being, practice interception of civil aircraft will not be undertaken;

2 INTERCEPTION OF CIVIL AIRCRAFT

2.1 When intercepted by a military or government aircraft, each pilot-in-command of an intercepted aircraft shall comply with the rules of interception set out in Annex 2 to the Convention on International Civil Aviation -- Rules of the Air, Appendix 2 INTERCEPTION OF CIVIL AIRCRAFT, sections 2 and 3, as set out in Schedule I of this Notice.

2.2 The pilot-in-command of an intercepted aircraft shall comply with SIGNALS FOR USE IN THE EVENT OF INTERCEPTION set out in Annex 2 to the Convention on International Civil Aviation – Rules of the Air, Appendix 1, section 2, as set out in Schedule II of this Notice.

2.3 No pilot shall conduct an international flight unless the procedures and signals relating to interception of aircraft, as specified in this section, are readily available on the flight deck.

- 2.4 The following procedures and visual signals shall apply over the territory and territorial waters of the Democratic Republic of Timor-Leste in the event of interception of an aircraft.

3 SCHEDULE I

3.1 Action by intercepted aircraft

- 3.1.1 An aircraft which is intercepted by another aircraft shall immediately:
- a. follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Schedule II;
 - b. notify, if possible, the appropriate air traffic services unit;
 - c. attempt to establish radio communication with intercepting aircraft or with the appropriate intercept control unit by making a general call on the emergency frequency 121.5 MHz giving the identity of the intercepted aircraft and the nature of the flight;
- 3.1.2 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.
- 3.1.3 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

3.2 Radio communication during interception

- 3.2.1 If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using phrases and pronunciations in the Table below and transmitting each phrase twice.

Phrases for use by INTERCEPTING aircraft			Phrases for use by INTERCEPTED aircraft		
Phrase	Pronunciation ¹	Meaning	Phrase	Pronunciation ¹	Meaning
CALL SIGN	<u>KOL</u> SA-IN	What is your call sign?	CALL SIGN	<u>KOL</u> SA-IN	My call sign is (call sign)
FOLLOW	<u>FOL</u> -LO	Follow me	(call sign) ²	(call sign)	
DESCEND	DEE- <u>SEND</u>	Descend for landing	WILCO	<u>VILL</u> -KO	Understood
YOU LAND	<u>YOU</u> LAAND	Land at this aerodrome	Will comply		
PROCEED	PRO- <u>SEED</u>	You may proceed	CAN NOT	<u>KANN</u> NOTT	Unable to comply
			REPEAT	REE- <u>PEET</u>	Repeat your instruction
			AM LOST	<u>AM</u> LOSST	Position unknown
			MAYDAY	MAYDAY	I am in distress
			HIJACK ³	<u>HI</u> -JACK	I have been hijacked
			LAND	LAAND	I request to land at
			(place name)	(place name)	(place name)
			DESCEND	DEE- <u>SEND</u>	I require descent

1. In the second column, syllables to be emphasized are underlined.

2. The call sign required to be given is that used in radiotelephony communications with air traffic services units and corresponding to the aircraft identification in the flight plan.

3. Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

4 SCHEDULE II

4.1 Signals for use in the event of interception

4.1.1 Upon observing or receiving any of the signals given in table below, aircraft shall take such action as may be required by the interpretation of the signal given in that table.

4.1.2 The signals of table below shall, when used, have the meaning indicated therein. They shall be used only for the purpose indicated and no other signals likely to be confused with them shall be used.

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
1	DAY or NIGHT — Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position	You have been intercepted. Follow me.	DAY or NIGHT — Rocking aircraft, flashing navigational lights at irregular intervals and following.	Understood, will comply

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
	<p>slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left (or to the right in the case of a helicopter) on the desired heading.</p> <p>Note 1.— Meteorological conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn given above in Series 1. Note 2.— If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of racetrack patterns and to rock the aircraft each</p>			

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
	time it passes the intercepted aircraft			
2	DAY or NIGHT — An abrupt breakaway manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT — Rocking the aircraft.	Understood, will comply.
3	DAY or NIGHT — Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT — Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood, will comply.

Series	INTERCEPTED Aircraft Signals	Meaning	INTERCEPTING Aircraft Responds	Meaning
6	DAY or NIGHT — Irregular flashing of all available lights.	In distress.	DAY or NIGHT — Use Series 2 signals prescribed for intercepting aircraft.	Understood.

5 PROCEDURES FOR AIRCRAFT OPERATING IN AN AIR DEFENCE IDENTIFICATION ZONE

5.1 Reserved

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ENR 1.13 UNLAWFUL INTERFERENCE

1 GENERAL

The following procedures are intended for use by aircraft when unlawful interference occurs, and the pilot is unable to notify an ATS unit.

2 PROCEDURES

- 2.1 Unless considerations aboard the aircraft dictate otherwise, the pilot-in-command should attempt to continue flying on the assigned track and at the assigned cruising level until able to notify an ATS unit.
- 2.2 When an aircraft must depart from its assigned track or its cruising level without being able to advise an ATS unit, the pilot-in-command should whenever possible:
 - a. attempt to broadcast warnings on the VHF emergency frequency or other appropriate frequencies, unless considerations aboard the aircraft dictate otherwise; and
 - b. proceeds in accordance with applicable special procedures for in-flight emergencies, where such procedures have been established and promulgated in ICAO Doc 7030.

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ENR 1.14 AIR TRAFFIC INCIDENTS

1 GENERAL

- 1.1 Timor-Leste complies with the ICAO definition for air traffic incidents. Air traffic incident generally means a serious occurrence associated with the provision of air traffic services such as:
- a. aircraft proximity (AIRPROX)
 - b. serious difficulty resulting in a hazard caused as example by:
 - i. Faulty procedures,
 - ii. Non-compliance with procedures, or
 - iii. Failure of ground facilities

2 DEFINITIONS

- 2.1 The following definitions are applicable for aircraft proximity and AIRPROX:

Aircraft proximity: A situation in which, in the opinion of the pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed has been such that the safety of the aircraft involved may have been compromised. Aircraft proximity is classified as follows:

Risk of collision: The risk classification of aircraft proximity in which serious risk collision existed.

Safety not assured: The risk classification of aircraft proximity in which the safety of the aircraft may have been compromised.

No risk of collision: The risk classification of aircraft proximity in which no risk of collision existed.

Risk not determined: The risk classification of aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

AIRPROX. The code word used in an air traffic incident report to designate aircraft proximity.

3 USE OF THE AIR TRAFFIC INCIDENT REPORT FORM

3.1 The Air Traffic Incident Report Form is intended for use:

- a. By a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio; or
- b. By air traffic services personnel.

Aviation Accident or Incident Notification

Indicates information required for a wildlife strike.

Personal particulars of reporter:

Your name Today's date Role of reporter in relation to the aircraft: ☐ Crew ☐ Air Traffic Controller ☐ AACTL
☐ Owner ☐ Rescue/fire service ☐ Aerodrome operator
☐ Operator ☐ LAME ☐

Contact address State Code

Telephone Facsimile Email

Crew and operator particulars:

Name of pilot in command Nationality Type of licence held Licence number Telephone

Name of pilot flying at the time of occurrence Nationality Type of licence held Licence number Telephone

Name of additional crew (if applicable) Nationality Crew position Telephone

Aircraft registration Flight number Aircraft manufacturer and model

Name of aircraft owner Aircraft operator (e.g. AOC holder/flying school) If under hire name of aircraft renter/hirer

Operator's telephone Facsimile Email

Accident/incident details:

Date of occurrence Local time Location e.g. name of airport or 27 NM west of Dili (include latitude & longitude if possible)

Last departure point Departure time First point of intended landing Actual point of landing (if different)

Number of persons on board: If known, names and nationalities of all serious injuries and fatalities, please enclose additional page/s as necessary.

Total crew on board	No. with no injuries	No. of minor injuries	No. of serious injuries	No. of fatalities	Nationality	Name/s
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total passengers	No. with no injuries	No. of minor injuries	No. of serious injuries	No. of fatalities	Nationality	Name/s
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		No. of minor injuries	No. of serious injuries	No. of fatalities	Nationality	Name/s
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Persons injured on the ground:

Aircraft damage: ☐ Destroyed ☐ Substantial ☐ Minor ☐ Nil **Damage description**

Effect on light: ☐ None ☐ Rejected takeoff ☐ Precautionary landing ☐ Engine/s shut down ☐ Other

Weather conditions:

Wind (speed, direction and gusts) Visibility Precipitation Cloud (type, amount and base) Temperature

Other information relevant to the event:

Flight rules: ☐ VFR ☐ IFR ☐ VMC ☐ IMC **Light conditions:** ☐ Daylight ☐ Night ☐ Dawn ☐ Dusk
☐ Aircraft standing ☐ Taxiing ☐ Takeoff ☐ Climb ☐ Enroute
☐ Manoeuvring ☐ Descent ☐ Approach ☐ Landing ☐ Other

Airspace designation Height/altitude of occurrence Runway number

Type of operation:

☐ Flying training – solo ☐ Flying training – dual ☐ Military ☐ Sports aviation ☐ Gliding ☐ Air transport – passenger
☐ *Charter ☐ *Private ☐ *Agricultural ☐ *Aerial work ☐ *Other ☐ Air transport – cargo

*Purpose of flight

Please turn over



Wildlife strike:

Was a bird or animal involved

No ☐Yes ☐

No. of birds

☐ Small☐ Medium☐ Large

Species

No. of animals

☐

Species

Please fully describe the accident or incident:

All relevant documentation should be forwarded to ATSB. Include your suggestions as to how this type of occurrence could be prevented.

Please include additional pages as necessary

Factors contributing to the occurrence:

Did this occurrence involve a false indication

No ☐Yes ☐

e.g. instrument, warning, gear, fuel, engine

Do you think that maintenance of the aircraft was a factor

No ☐Yes ☐

Did an aircraft component fail

No ☐Yes ☐

Do you think aircraft design was a factor in this occurrence

No ☐Yes ☐

Are there any human performance issues or deficiencies in the aviation system that may have contributed to this occurrence?

No ☐Yes ☐☐ Distracting events/interruptions☐ Interpersonal problems at work☐ High workload☐ Other☐ Environment (noise, visibility)☐ Knowledge or experience☐ Pre-occupation☐ Equipment design☐ Medical/physiological factors☐ Training☐ Fatigue☐ Recency

Results of operator's technical and/or operational investigation at time of submitting report or Chief Pilot /CFI comments where applicable

Action carried out by operator to prevent recurrence

Please include additional pages as necessary

For accidents only:

For accidents (occurrences involving fatalities or serious injuries to any person in the aircraft or on the ground, substantial damage or destroyed aircraft) only, please include the following information:

Additional pilot in command details:

Date of birth:

Total flying hours

Total hours last 90 days

Hours on type

Hours on type last 90 days

ELT information:

ELT manufacturer and model

☐ Fixed☐ Portable☐ Manual activation☐ Automatic☐ Did not activate (why?)

ELT location

☐ Cockpit☐ Cabin☐ Rear/tail☐ Other

Information may be disclosed to other organisations or individuals in the interests of safety. Where possible, AACTL will remove information that directly identifies an individual (i.e. names, licence numbers and addresses). However, other indirect identifiers (i.e. times, dates and locations for the occurrence of incidents) will usually be disclosed in the interests of safety.

4 REPORTING PROCEDURES

- 4.1 Air traffic incidents shall be reported using the AACTL form above and submitted to the AACTL which will investigate and make known its findings. Pilots involved in an incident should follow the reporting procedures below:
- a. during flight report the incident particularly if it involves another aircraft, to the appropriate ATS unit to permit the facts to be ascertained immediately; and
 - b. as soon as possible after landing submit the incident reporting form as confirmation or, to make the initial report if it was not reported by radio as in (a) above or, to report an incident which did not necessitate immediate notification at the time of occurrence.

5 ACCIDENT REPORTING

- 5.1 The pilot in command, the owner and the operator are responsible to notify the AACTL and ANATL of an aircraft accident by the quickest means available.
- 5.2 AACTL and ANATL will conduct investigations of aircraft accidents in accordance with the provisions of ICAO Annex 13.

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ENR 1

AIR TRAFFIC SERVICES AIRSPACE

ENR 2.1 TIMOR-LESTE AIRSPACE

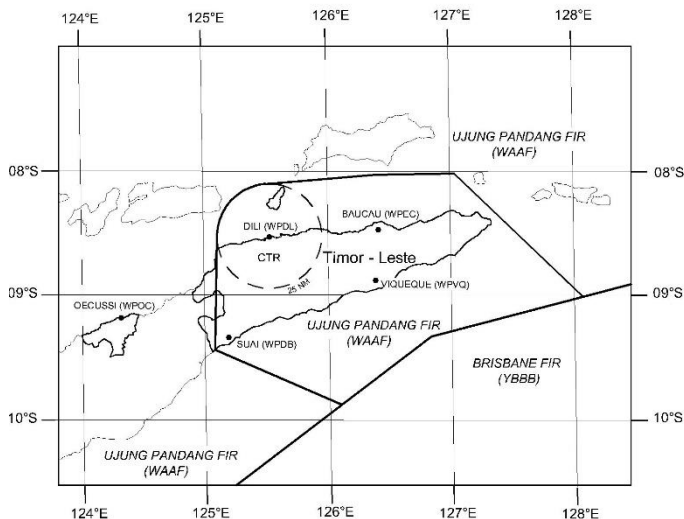
1. The Timor-Leste airspace is established below the Ujung Pandang UIR with limits as follows:

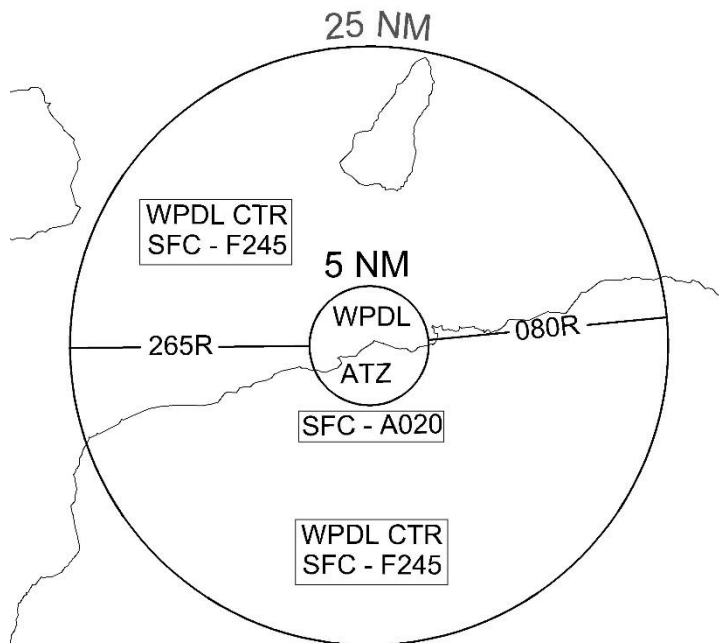
Lateral limits:

A straight line from 09 27 00.0S 125 06 00.0E northwards to 08 32 27.7S 125 06 25.5E thence along an arc radius 25NM centered on the Dili VOR/DME (08 32.6S 125 31.7E) to 08 07 37.0S 125 29 28.9E thence eastwards to 08 02 54.0S 126 22 09.0S then to 08 02 00.0S 127 00 00.0E thence southeastwards to 09 00 00.0S 128 02 38.0E then westwards along the Brisbane FIR boundary to 09 20 00.0S 126 50 00.0E thence to 09 52 54.0S 126 07 24.0E to 09 27 00.0S 125 06 00.0E.

Vertical limits:

Ground / Sea level to below FL245.





2. Much of the Timor-Leste airspace is uncontrolled airspace and no ATS is presently provided within this airspace. Pilots operating within uncontrolled airspace are required to broadcast traffic information (TIBA) as stated in [ENR 1.1-10](#) to provide information on collision hazard to other pilots.
3. Mountainous terrain and limited VHF communications facilities restrict two-way air-ground communications particularly at low levels over the main land mass. To facilitate the provision of Alerting Service, aircraft shall be equipped with an appropriate and serviceable ELT and additionally, pilots shall guard the emergency frequency 121.5 Mhz when able.

ENR 2.2 OTHER REGULATED AIRSPACE

1 DELEGATED AIRSPACE

- 1.1 Portions of Timor-Leste sovereign and high seas airspace have been delegated to other states for the provision of ATC services

2 INDONESIA

- 2.1 Indonesia provides ATC services above F245 within the portion of Timor-Leste sovereign and high seas airspace within the Ujung Pandang FIR.
- 2.2 In addition, Indonesia provides FIS within the portion of Timor-Leste sovereign and high seas airspace surrounding the enclave of Oecussi.

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ENR 2 ATS ROUTES

ENR 3.1 LOWER ATS ROUTES

1 ROUTES BELOW FL245

- 1.1 The routes shown in the table below are established for the facilitation of traffic flow within Timor-Leste airspace.
- 1.2 Outside of the DIL CTR, below F245 all of these routes are Class G airspace.
- 1.3 Notwithstanding that these routes are in Class G airspace, they shall be planned in accordance with [ENR 1.10 5.3](#) as they have been established for segregation and safety purposes.
- 1.4 Timor-Leste administered airspace is designated as RNP2 for all IFR aircraft. RNP1 SIDs and STARs are currently being designed.

Route Name	Waypoints	Remarks
W37	DIL-DOVIK	Inbound and Outbound To/From MKS
W42	DIL-MUBRA	Inbound and Outbound To/From DPS, KPG
Z86	ISMUD-DIL	Inbound from DN (high)
Z10	TAPON-TODOT	Outbound to DN (low)
Z12	DIL-BACAU-ELBIS	Outbound to DN (high)
Z69	METAN-DIL	Inbound from DN (low)

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ENR 3.2 UPPER ATS ROUTES

1 F245 AND ABOVE

- 1.1 Upper ATS routes are established above the upper vertical limit of the Timor-Leste airspace. These routes are controlled as appropriate by the Bali and Ujung Pandang ATS units.

Route Name	Waypoints
W37	DIL-DOVIK
W42	DIL-MUBRA
M774	KIKEM-POVOT
Z86	ISMUD-DIL
Z12	DIL-BACAU-ELBIS
Z10	TAPON-TODOT
W55	BACAU-VALGO
M768	ADNAT-ELBIS
A339	ELBIS-PINIR

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ENR 3.3 AREA NAVIGATION ROUTES

1 RNAV ROUTES

1.1 Reserved

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ENR 3.4 HELICOPTER ROUTES

1 WPDB TO TIMOR OIL RIG

- 1.1 A specific Helicopter IFR routes and Way points has been established for Helicopter Operating between Presidente Nicolau Lobato International Airport and Timor Oil Rig as follows:
 - a. Way Point ARADU, track via 131R at 27NM from DIL VOR/DME A 7000ft/8000ft.
 - b. Way Point RUMAX, track via 147R at 51NM from DIL VOR/DME A 7000ft/8000ft.
 - c. MHS route to Oil Rig waypoint SAMUB.
- 1.2 Other VFR routes for Helicopter from/to Dili International Airport shall track via following reporting points:
 - a. Departing westbound via WHISKEY.
 - b. Departing eastbound via JULIET.
 - c. Arriving from west via HOTEL.
 - d. Arriving from east via TANGO.
- 1.3 Departing/arriving to/from south via SIERRA/ZULU as appropriate.

1.4 The above waypoints are shown below:



ENR 3.5 OTHER ROUTES

1. Reserved

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ENR 3.6 EN ROUTE HOLDING

1. Reserved

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ENR 3

RADIO NAVIGATION AIDS/SYSTEMS

ENR 4.1 RADIO NAVIGATION AIDS-EN ROUTE

1. The following navigation aids are established for air navigation in Timor-Leste.

Name of Station	ID	Frequency	HRS	Co-ordinates	RMKS
Dili DVOR/ DME	DIL	113.4MHz CH81X	H24	083238.18S 1253139.84E	The VOR / DME coverage is limited over terrain in the southern sector.
Suai VOR/DME	SUI	114.1Mhz CH88X	H24	091746.27S 1251713.85E	Coverage restricted in following sectors:R080-R260 below A040 outside 40NM R030-R080 below A100 outside 40NM R350-R020 below F140 outside 40NM R270-R350 below F150 outside 40NM

Oecussi VOR/DME	OEC	113.6MHz CH83X	H24	091149.89S 1241950.22E	Coverage restriceted in the following sectors:R250- 090 below A030 outside 40NM R220-250 below A100 outside 40NM R190-220 below F140 outside 40NM R150-190 below F120 outside 40NM R090-150 below F150 outside 40NM
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ENR 4.2 SPECIAL NAVIGATION SYSTEMS

1. Reserved

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ENR 4.3 NAME-CODE DESIGNATORS FOR SIGNIFICANT POINTS

1. Co-ordinates for significant waypoints used within Timor-Leste airspace are shown below:

Name	Latitude	Longitude
ABM BATUGADE*	085800.0S	1245700.0E
ABM WINI*	091100.0S	1242900.5E
ADNAT	080251.7S	1264626.9E
ARADU	085106.6S	1255133.9E
DOVIK	082012.9S	1250944.7E
ELBIS	090518.0S	1274342.0E
HOTEL*	083509.6S	1252920.4E
ISMUD	093746.5S	1262659.5E
JULIET*	083113.2S	1253628.8E
KIKEM	095254.0S	1260724.0E
METAN	092707.4S	1264047.3E
MUBRA	083337.3S	1250630.0E
OVWTR*	082153.4S	1255746.2E
PINIR	084636.0E	1274806.0E
POVOT	092351.9S	1250625.5E
RUMAX	091627.5S	1255802.2E
SIERRA*	083542.0S	1253149.8E
TANGO*	083407.8S	1253730.0E

TAPON	082654.0S	1255036.0S
TODOT	091758.5S	1265724.5E
TURN*	084040.8S	1260554.6E
VALGO	080335.7S	1263449.9E
WHISKEY*	083324.0S	1252548.0E
ZULU*	083602.4S	1253530.0E

*Points used for local operators only, not defined ICAO ICARD

ENR 4.4 AERONAUTICAL GROUND LIGHTS

1. Reserved

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ENR 4

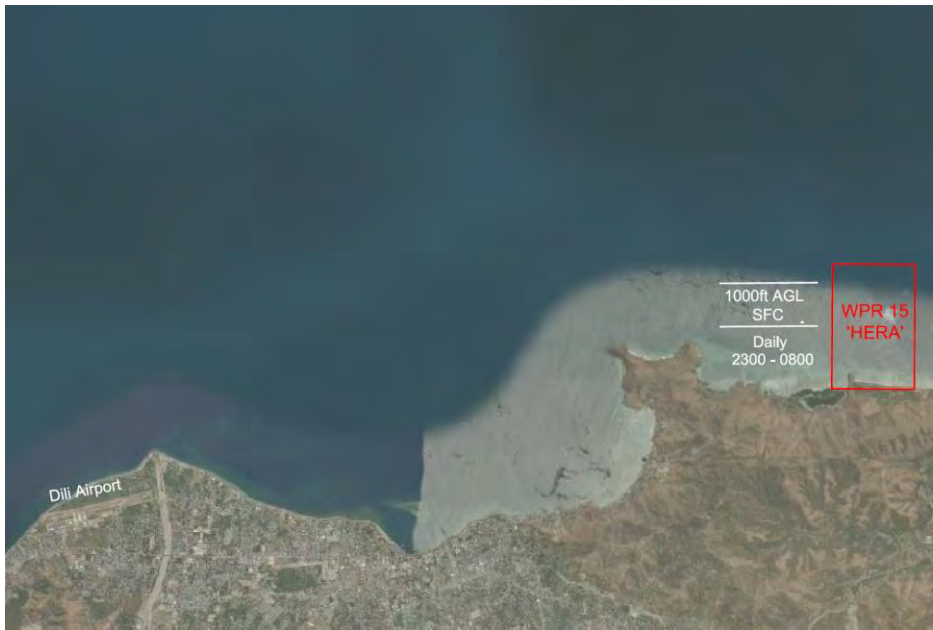
NAVIGATION WARNINGS

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS

1. Restricted Area has been established in Timor-Leste. Restricted Areas are airspace of defined dimensions, above the land areas or territorial waters of a State, within which flight of aircraft is restricted in accordance with prescribed conditions.
2. The lateral and vertical limits, the type of activity, hours of activity, controlling authority and contact details are shown below:

RESTRICTED AREA			
Identification, Name and Lateral Limits	Upper Limit	Activity Period	Activity Type & Controlling Authority
	Lower Limit		
1	2	3	4
WPR 15 'HERA' Within area bounded by coords: S08 30.4 E125 38.6, S08 30.4 E125 39.4, S08 31.6 E125 39.4, S08 31.6 E125 38.6.	<u>1,000ft AGL</u> SFC	Daily 2300- 0830	Small arms firing. Controlling authority Ministry of Defense

3. Pilots shall take note that because of communications limitations and difficulties ATC may not be able to issue warnings to an aircraft that is reported by a controlling authority as having strayed into a Restricted Area.
4. No Danger or Prohibited Areas are established in Timor-Leste.
5. The lateral limits of WPR 15 'HERA' are shown below:



ENR 5.2 MILITARY EXERCISE AND TRAINING AREAS

1. Reserved

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ENR 5.3 OTHER ACTIVITIES OF A DANGEROUS NATURE AND OTHER POTENTIAL HAZARDS

1. Reserved

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ENR 5.4 AIR NAVIGATION OBSTACLES

1. Detailed surveys of potential air navigation obstacles have not been conducted in Timor-Leste.

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ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

1. Reserved

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ENR 5.6 BIRD MIGRATION AND AREAS WITH SENSITIVE FAUNA

1. Information on bird migration and areas with sensitive fauna is not yet available.
2. Bird strikes shall be reported to the airport management or ANATL using the Incident Form at [ENR 1.13 para 3](#).

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ENR 5

EN ROUTE CHARTS

ENR 6.1 PUBLICATION OF CHARTS

1. Timor-Leste currently does not publish en-route charts for national airspace.
2. Charts for air routes transiting Timor-Leste national airspace can be downloaded from Airservices Australia at:
<https://www.airservicesaustralia.com/aip/aip.asp>

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PART 3 – AERODROMES (AD)

AD 0

AD 0.1 PREFACE – Not applicable

AD 0.2 RECORD OF AIP TIMOR-LESTE AMENDMENTS – Not applicable

AD 0.3 RECORD OF AIP TIMOR-LESTE SUPPLEMENTS – Not applicable

AD 0.4 CHECKLIST OF AIP TIMOR-LESTE PAGES – Not applicable

AD 0.5 LIST OF HAND AMENDMENTS TO AIP TIMOR-LESTE – Not applicable

AD 0.6 TABLE OF CONTENTS TO PART 3 (AD)

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AD 1

AERODROMES/HELIPORTS - INTRODUCTION

AD 1.1 AERODROMES/HELIPORTS AVAILABILITY

1 INTRODUCTION

- 1.1 Information regarding aerodromes within Timor-Leste is published in AIP and the standards for aerodromes and heliports are published under CASR Pt139 and associated MOS.
- 1.2 All aerodromes in Timor-Leste are owned by the government.
- 1.3 The aerodrome and heliport directory are published in Part 3 of the AIP.

2 GENERAL

- 2.1 Aeroportu international Presidente Nicolau Lobatu and Baucau are designated as International Aerodromes and other aerodromes as authorised by government resolutions may be used as international aerodromes. However, Presidente Nicolau Lobato International Airport presently is the only aerodrome authorised by AACTL for regular commercial operations on a charter basis.
- 2.2 Operators intending to operate international flights to Baucau aerodrome must obtain prior approval from AACTL which will consider requests on a case-by-case basis. Operators must conduct operations in accordance with the approved slot time, and are responsible for making their own arrangements with and obtain prior approval of the relevant Timor-Leste border control agencies.
- 2.3 Several airstrips and helicopter landing sites exist throughout Timor-Leste that have not been assessed as suitable for civil aircraft operations. Inclusion of an aerodrome in this AIP does not necessarily mean that it is either certified or suitable for use by an operator.
- 2.4 Due to lack of taxiways at aerodromes, pilots may be required after landing to backtrack and taxi on the runway to proceed to aprons and, likewise, it may be required to position for takeoff.
- 2.5 Visual signs may not be available at all aerodromes.

- 2.6 No friction measuring devices are available for measuring runway surface friction.
- 2.7 Timor-Leste has high and rugged terrain. High terrain and obstructions exist close to the aerodromes. Most obstructions are unmarked or unlit. Pilots must exercise caution especially when conducting circling approaches or operating in low visibility conditions. Details of known obstructions are provided respectively for the listed aerodromes under Section [AD 2](#).
- 2.8 Aerodrome operating minima are not established. Operators shall establish aerodrome operating minima for each of the aerodromes to which they operate into in accordance with the provisions of Annex 6, Part 1.

3 LANDINGS MADE AT OTHER THAN DILI AERODROME.

- 3.1 If a landing is made other than Dili aerodrome or a designated alternate aerodrome, the pilot-in-command shall report the landing as soon as practicable to the immigration, customs, and health authorities. This notification may be through any available communication facility.
- 3.2 The pilot-in-command shall ensure that:
 - a. if permission has not been granted to the aircraft at the previous landing, contact between passengers/crew, and other persons is avoided;
 - b. Cargo, baggage, and mail are not removed from the aircraft.

4 TRAFFIC OF PERSONS AND VEHICLES ON AERODROMES.

- 4.1 The grounds at aerodromes are divided into two zones as follows:
 - a. Public zone comprising that part of the aerodrome opened to public; and
 - b. Restricted zone comprising the rest of the aerodrome.

5 MOVEMENT OF PERSONS

- 5.1 Movement of vehicles in the restricted zone is strictly confined to vehicles driven or used by persons issued with a special permit. Persons so authorized must respect traffic direction, traffic signs and speed limits.

6 SECURITY AND POLICING

- 6.1 Security, care, and protection of aircraft, vehicles, equipment, and goods at aerodromes are not the responsibility of the State or of the aerodrome operator and they cannot be held responsible for any loss or damage.

7 OPERATIONS OUTSIDE OF PUBLISHED HOURS (NIGHT OPERATIONS)

- 7.1 Night operations generally are not permitted at the aerodromes. However, the ANATL, E.P. or the Regional Authority of Oé-Cusse Ambeno may permit night operations for emergency purposes only, such as for urgent medical evacuation or mercy flights and training flights at Presidente Nicolau Lobato International Airport or Aeroporto Internacional de Oé-Cusse Ambeno “Rota do Sândalo”.
- 7.2 Night operations where permitted are undertaken at the sole discretion of the operator and ANATL nor the Regional Authority of Oé-Cusse Ambeno shall not be held liable for any incident or an accident arising from such operations.
- 7.3 Emergency/Mercy Flight-Any operator intending to conduct emergency night operations should give as much prior notification as possible to ANATL or the Regional Authority of Oé-Cusse Ambeno of their intentions including stating any requirement for air traffic control and aerodrome services and obtain approval.
- 7.4 When circumstances do not permit prior notification to AACTL, operators shall notify ANATL or the Regional Authority of Oé-Cusse Ambeno prior to the flight, and AACTL the following day of any emergency flight operations including positioning flights conducted the previous night.
- 7.5 Operators/pilots shall comply with the following requirements appropriate with respect to airways clearance for departing international flights when arrangements have not been made for local air traffic services:
- a. Contact Brisbane Radio on HF before departure providing flight details and obtain airways clearance; or

- b. Contact Ujung Pandang ATSU on telephone number +62 411 553053 or +62 411 4813225 for airways clearance to enter Ujung Pandang FIR before departure.

7.6 Operators/pilots shall comply as appropriate with the regulations of the State of the Operator when conducting emergency night operations at Dili aerodrome. The pilot-in-command should preferably have previous experience in daytime operations into Dili aerodrome and be familiar with the routes and terrain conditions. Additionally, the following must be complied with:

- a. Flights shall be flown under IFR;
- b. ICAO requirements for lowest safe altitudes;
- c. Adequate fuel for diversion purposes;
- d. Runway inspection prior to take-off and landing; and
- e. Arrangements with the border control agencies for approval.

7.7 Operators and/or pilots-in-command are responsible to assess and ensure that each emergency night operation can be conducted in a safe manner.

7.8 Night Training-ANATL may approve night training flights in the Dili CTR/aerodrome to enable flight crew to maintain their proficiency. Operators wishing to conduct night training shall make a request to ANATL and comply with all conditions stated in the approval.

8 PARKING

8.1 Aircraft parking space at aerodromes is limited. Overnight parking at Presidente Nicolau Lobato International Airport is subject to specific approval from ANATL. Requests for overnight parking shall be included in the request for flight approval.

9 CLOSURE OF AERODROMES

9.1 Aerodromes will be closed under the following conditions:

- a. Whenever the landing area is unfit or is unsafe; or
- b. At such other times as notified by NOTAM.
- c. Unregistered or uncertified aerodromes may not be notified as closed even when the landing area is unsafe or unfit for use, see [AD 2.1](#).

- 9.2 Aerodromes will not be closed because of adverse weather conditions or unavailability of essential services. The pilot-in-command is responsible to decide whether to take-off or land during adverse weather conditions or when advised of unavailability of services
- 9.3 Aircraft experiencing an emergency will be permitted to land regardless whether the aerodrome is closed, or conditions are unsafe. When ATC is operating, the pilot will be advised if conditions are unsafe. Outside of ATC operating hours the pilot will receive no advice

10 LOW VISIBILITY OPERATIONS

- 10.1 Low visibility operations are not approved in Timor-Leste.

11 AERODROME MARKERS AND MARKINGS

- 11.1 Where possible, aerodrome markers and markings are in accordance with ICAO DOC 9157.

12 LIGHTING

- 12.1 Lighting provided at aerodromes in Timor-Leste (except WPOC) may not necessarily be in accordance with ICAO standards. Clarification of lighting at intended aerodromes should be confirmed with ANATL to ensure that it meets individual operational needs.

13 VISUAL DOCKING GUIDANCE SYSTEMS

- 13.1 VDGS are not currently used in Timor-Leste.

14 PAVEMENT STRENGTH LIMITATIONS

- 14.1 Aerodrome pavement strength limitations (where known) are published at AIP [AD 2](#).

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AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN

1 RESCUE AND FIRE FIGHTING SERVICES

- 1.1 Information on Rescue and Fire Fighting Services is given on the relevant page for each aerodrome at AD 2.
- 1.2 No facilities are available for removal of disabled aircraft.

2 LEVELS OF EMERGENCY RESPONSE AT AERODROMES

- 2.1 ARFFS will respond at the appropriate airport category for all emergencies.

3 LOCAL STANDBY

- 3.1 Where a Local Standby is declared, on airport services will respond for the emergency.

4 FULL EMERGENCY

- 4.1 Where a Full Emergency is declared, on and off airport services will respond for the emergency.

5 AERODROMES WHERE NO RFFS ESTABLISHED

- 5.1 Limited or no support may be provided by local fire services remote from aerodromes.

6 SNOW PLAN

- 6.1 Due to the tropical climate in Timor-Leste there is no national snow plan.

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AD 1.3 INDEX TO AERODROMES AND HELIPORTS

1 INDEX

- 1.1 A list of aerodromes included in AIP is shown below. Aerodromes marked with * do not have a NOTAM service, and information provided in AIP may not be representative of current aerodrome conditions and may be inaccurate.

Aerodrome/Heliport Name and Location Indicator	Type of Traffic permitted to use the Aerodrome/Heliport			Reference to AD Section and RMKS
	International (INTL)/ National (NTL)	IFR VFR	S=Scheduled NS=Non Scheduled P=Private	
Aerodromes				
WPAT-Atauro Island*	NTL	VFR	NS P	AD 2.2 Unmanned
WPEC-Baucau	INTL NTL	VFR	NS P	AD 2.3 Unmanned
WPD-L-Dili	INTL NTL	VFR IFR	S NS P	AD 2.4
WPFL-Lospalos Fuloro*	NTL	VFR	NS P	AD 2.5 Unmanned
WPMN-Maliana*	NTL	VFR	NS P	AD 2.6 Unmanned
WPOC-Oecussi	INTL NTL	VFR	NS P	AD 2.7 PPR
WPSM-Same*	NTL	VFR	NS P	AD 2.8 Unmanned
WPDB-Suai	INTL NTL	VFR IFR	NS P	AD 2.9 Unmanned
WPVQ-Viqueque*	NTL	VFR	NS P	AD 2.10 Unmanned
Heliports				Reserved

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AD 1.4 GROUPING OF AERODROMES/HELIPORTS

1 PRIMARY/MAJOR INTERNATIONAL AERODROME

- 1.1 The aerodrome of entry and departure for international air traffic where all formalities concerning customs, health, immigration, animal and plant quarantine and similar procedures are carried out and where air traffic services are available during published hours of operation.

2 SECONDARY/OTHER INTERNATIONAL AERODROME

- 2.1 An aerodrome available for entry and departure of international air traffic where air traffic services and the formalities concerning customs, health, immigration, animal and plant quarantine and similar procedures are made available on a restricted basis only to flights with prior approval.

3 NATIONAL AERODROME

- 3.1 An aerodrome available only for domestic air traffic where civil air traffic are permitted under conditions specified by ANATL.
- 3.2 Nomination as an aerodrome as a national aerodrome does not necessarily mean that the aerodrome is certified or registered.

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AD 1.5 AERODROME HANDLING SERVICE PROVIDERS

1 PRESIDENT NICOLAU LOBATO INTERNATIONAL AIRPORT

- 1.1 Contact details of aircraft fuel and ground handling service providers at Presidente Nicolau Lobato International Airport are listed below.
- 1.2 The provision of any firm or corporation name is for the information and convenience of aircraft operators and pilots only and in no manner constitutes an endorsement or recommendation by ANATL.

2 AVIATION FUEL/OIL

ETO MOVING ENERGY

Tel: +670 3322 793

Mobile: +670 7738 3270 +670 7757 1385

Email: jose.gusmao@eto.tl info@eto.tl pedro.costa@eto.tl

Website: www.eto.tl

PERTAMINA INTERNATIONAL TIMOR SA

Tel: +670 3321 760

Mobile: +670 7310 6060 +670 7760 2222

E-mail: roni.viera@pitsa.tl

Website: www.pitsa.tl

3 GROUND HANDLING

Bollore

Tel: +670 3324 212

Mobile: +670 7723 0522 (H24)

Fax: +670 3324 077

E-mail: manuel.soares@bollore.com

STAT

Tel: +670 3321 025

Mobile: +670 7733 8725

Fax: +670 3310 917

E-mail: stat_j@yahoo.com

E-mail: statdil@gmail.com

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AD 2

AERODROMES

AD 2.1 AERODROME LOCATION INDICATOR AND NAME

1 GENERAL

- 1.1 Full details of all international and national aerodromes in Timor-Leste are provided in AIP.
- 1.2 Details of uncertified and unregistered aerodromes may also be included in AIP. It is the sole responsibility of a pilot intending to use any uncertified or unregistered aerodrome to obtain current information on that aerodrome from the owner/operator prior to flight planning and to assess the suitability of the aerodrome for the intended operation.
- 1.3 Inclusion of aerodrome information in AIP is based upon the information available at the time of publication and will not be updated by NOTAM for uncertified or unregistered aerodromes.

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2 WPAT-ATAURO ISLAND

Name: Atauro Island

- a. ICAO Code: WPAT
- b. IATA Code: AUT
- c. Airport Authority: ANATL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR

ARP: 081435S 1253622E

Elevation: 10'

Runways:

- a. RWY 01/19
- b. Length: 700m
- c. Gravel

Declared Distances: Not available

Airport Lighting: NIL

Air Traffic Control: NIL

Navigation Aids: NIL

ARFFS: NIL

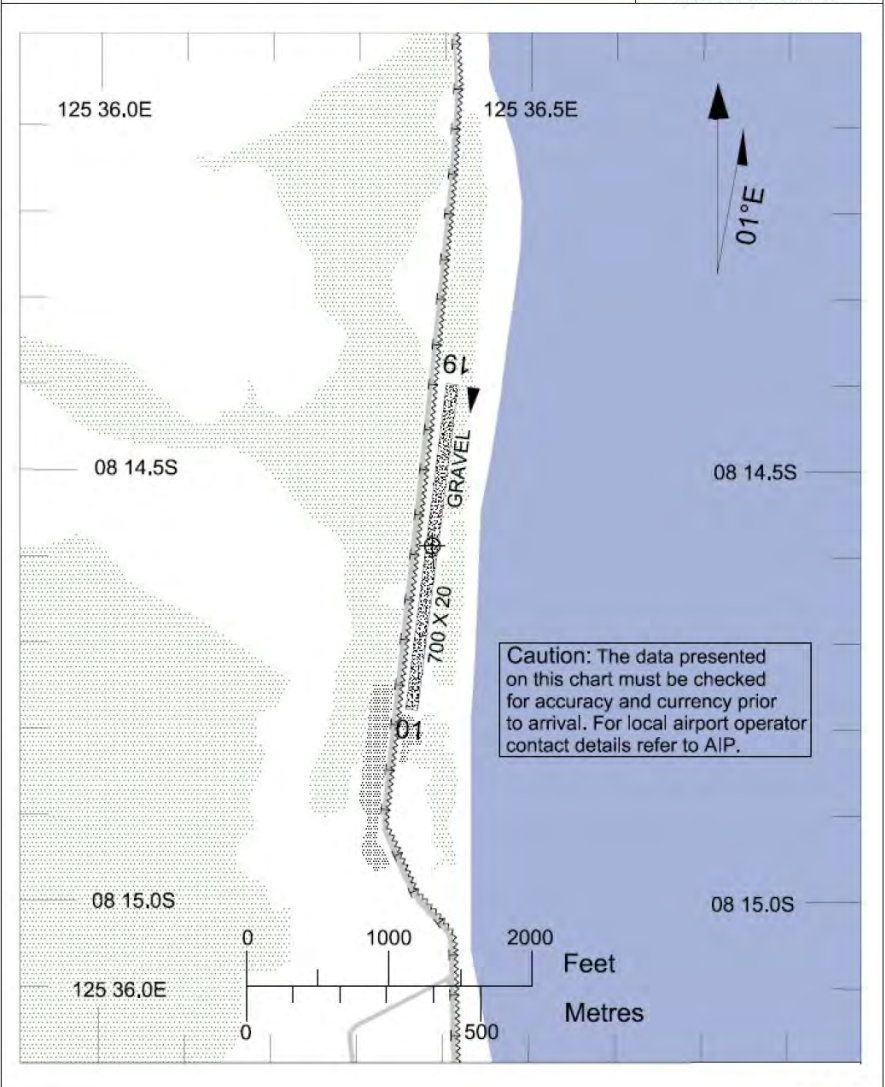
Fuel: NIL

Local Traffic Regulations:

- a. Traffic shall use Timor Common Freq 127.10MHz
- b. Airport available HJ only
- c. VFR Traffic only
- d. Right hand circuits RWY 01

2.1 Atauro Aerodrome Chart

AERODROME	AD ELEV 10	ATAURO (WPAT)
CHART AD 2-2	08 14 35S 125 36 22E	TIMOR-LESTE
TIMOR COMMON 127.1		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES



AERODROME
CHART AD 2-2AD ELEV 10
08 14 35S 125 36 22EATAURO (WPAT)
TIMOR-LESTE

TIMOR COMMON 127.1		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	
01	006°	
19	186°	

NOTES

CAUTION: HOUSES, TREES AND FENCES LOCATION IMMEDIATELY PRIOR
TO THR RWY 01.

ANIMAL HAZARDS EXIST.
AIRPORT AVAILABLE HJ ONLY
RIGHT HAND CIRCUITS RWY 01
VFR TRAFFIC ONLY

INTENTIONALLY BLANK

3 WPEC-BAUCAU**Name:** Baucau Airport

- a. ICAO Code: WPEC
- b. IATA Code: BCH
- c. Airport Authority: ANATL
- d. Flight Approvals: AACTL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR-7 business days

ARP: 082907.70S 1262357.60E**Elevation:** 1777'**Runways:**

- a. Asphalt PCN: 49/F/A/W/T
- b. THR 14 Co-Ordinates 082835.31S 1262332.36E
 - i. Elevation: 1692'
- c. THR 32 Co-Ordinates 082939.85S 1262422.64E
 - i. Elevation: 1777'
- d. RWY Bearing: 139°/319°M
- e. Length: 2509m
- f. Width: 56m
- g. Shoulders: Nil
- h. RWS: 2629x300m
- i. RESA: Nil
- j. CWY: Nil

Declared Distances:

- a. TORA: 14/32 2509m
- b. TODA 14/32: 2509m
- c. ASDA 14/32: 2509m
- d. LDA 14/32: 2509m

Taxiways:

- a. Asphalt PCN: 49/F/A/W/T
- b. TWY width: 37m

Apron Information:

- a. Asphalt PCN: 49/F/A/W/T
- b. 100x108m

Airport Lighting: Nil

Air Traffic Control: Nil

Navigation Aids: Nil

ARFFS: Nil

Fuel: Nil

Local Traffic Regulations:

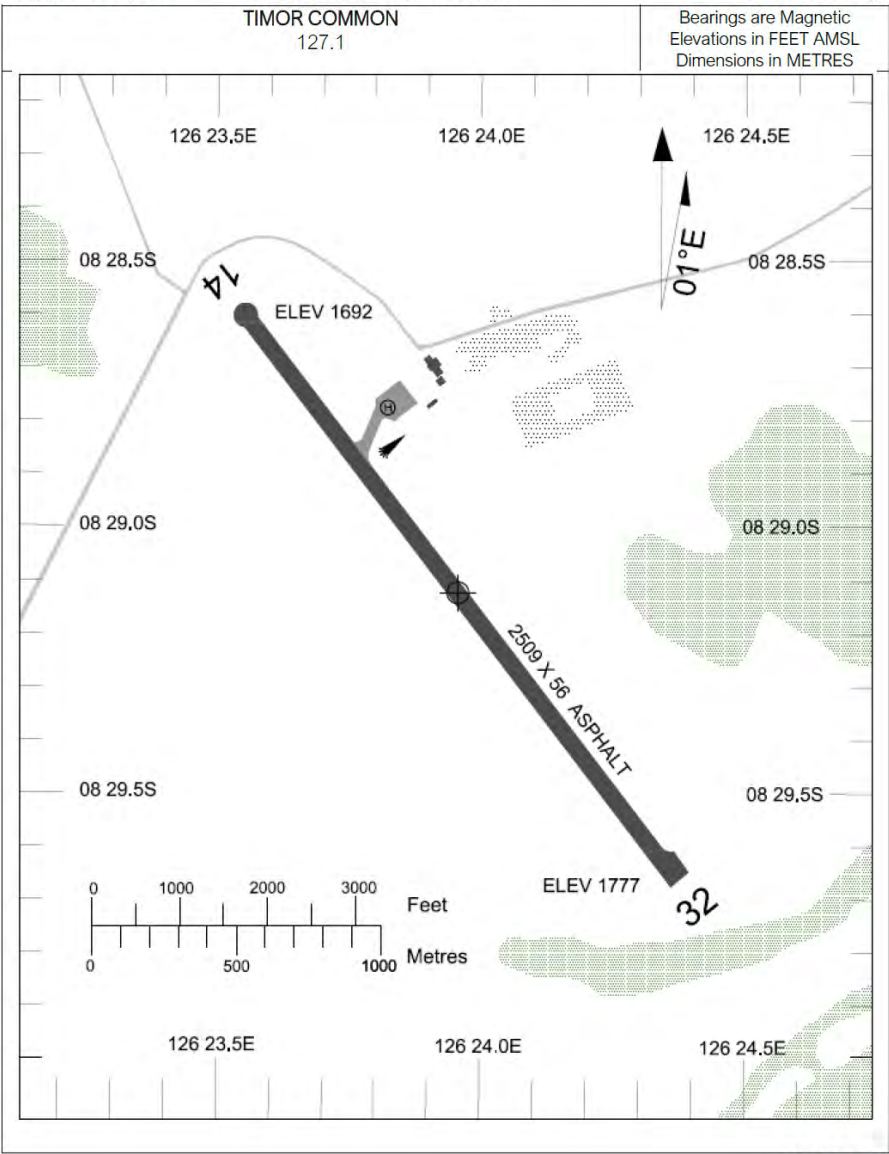
- a. Traffic shall use Timor Common Freq
127.10MHz
- b. Pilots must overfly aerodrome to observe prior
to making an approach
- c. Airport available HJ only
- d. VFR traffic only

3.1 Baucau Aerodrome Chart

AERODROME
CHART AD 2-3

AD ELEV 1777
08 29 07.7S 126 23 57.6E
TIMOR COMMON
127.1

BAUCAU (WPEC)
TIMOR-LESTE



AERODROME
CHART AD 2-3

AD ELEV 1777
08 29 08S 126 23 58E

BAUCAU (WPEC)
TIMOR-LESTE

TIMOR COMMON 127.1				Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	THR	RWS	BEARING STRENGTH
14	139º	08 28 35.3S 126 23 32.4E	2629 X 300	PCN 49/F/A/W/T
32	319º	08 29 39.9S 126 24 22.6E		

NOTES

ANIMAL HAZARDS EXIST.
PILOTS MUST OVERFLY AD TO OBSERVE PRIOR TO MAKING AN APPROACH
AIRPORT AVAILABLE HJ ONLY

4 WPDL-DILI

Name: President Nicolau Lobato International Airport Dili

- e. ICAO Code: WPDL
- f. IATA Code: DIL
- g. Airport Authority: ANATL
- h. Flight Approvals: AACTL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. WPDLYDYX, WPDLTZTX
 - iv. PPR

ARP: 083248.88S 1253129.89E

Elevation: 29'

Runways:

- a. Asphalt/Concrete
 - i. PCN: 42/F/B/X/U
- b. THR 08 Co-Ordinates 083254.128S 1253059.06E
 - i. Elevation: 21'
- c. THR 26 Co-Ordinates 083240.73S 1253158.04E
 - i. Elevation: 29'
- d. RWY Bearing: 075°/255°M
- e. Length: 1850m
- f. Width: 30m
- g. Shoulders: Not provided
- h. RWS: 1970x150m
- i. RESA: Not provided
- j. CWY: Not provided

Declared Distances:

- a. TORA 08/26: 1850m
- b. TODA 08/26: 1850m

- i. Fence 5' ABV THR and 40m right of centreline not assessed for TODA RWY 26
- c. ASDA 08/26: 1850m
- d. LDA 08/26: 1850m

Taxiways:

- a. TWY D width: 23m
- b. TWY A width: 15m
- c. TWY B width: 15m
- d. TWY C width: 15m
- e. TWY E width: 23m

Apron Information:

- a. Asphalt/Concrete:
 - i. PCN: 42/F/B/X/U

Parking Stands:

- a. International Apron
 - i. Bays D1-D3 Code C
- b. Other Aprons
 - i. Apron A-Rotary and fixed wing up to 3C
 - ii. Apron B- Rotary and fixed wing up to 3C
 - iii. Apron C- Rotary and fixed wing up to 3C
 - iv. Apron E-Rotary and General Aviation

Airport Lighting:

- a. PAPI
- b. ABN GW

Air Traffic Control:

- a. Dili Approach: 122.90MHz
 - i. TX/RX located at Dili and Talabela, Hohonaro Liquilibato
- b. Dili Tower: 133.90MHz
- c. ATC Hrs 2130-0900 UTC daily

- d. TIBA: 127.10MHz
- i. TX/RX located at Dili and Talabela, Hohonaro Liquilibato

Navigation Aids:

- a. VOR/DME: 113.40 MHz/CH81X (DIL)
 - i. 083238.18S 1253139.84E
 - ii. VOR/DME has limited range due terrain to the south

Standby Power:

- a. Available for critical systems, max switchover time 15 seconds

ARFFS:

- a. Category 6
- b. Water rescue service navbl

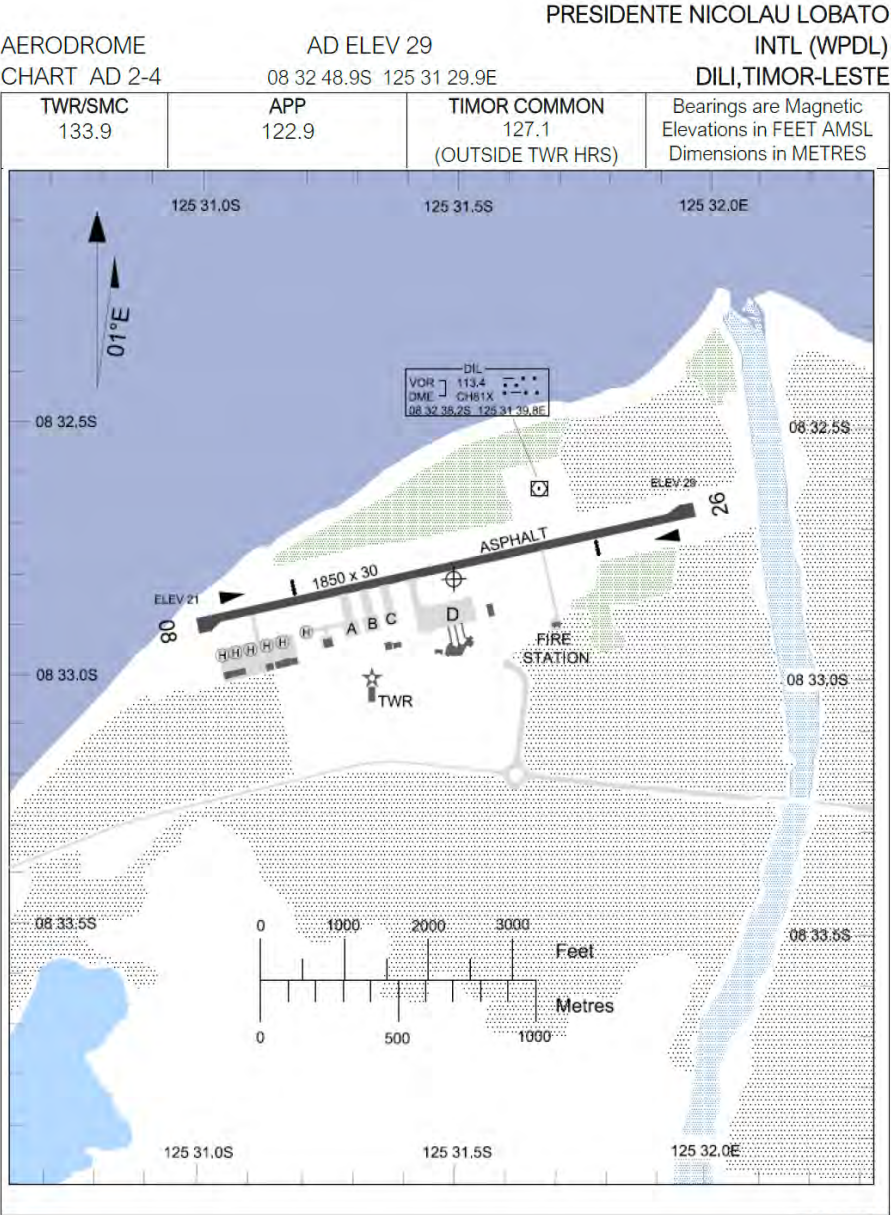
Fuel:

- a. Jet Fuel available
- b. AVGAS not available

Local Traffic Regulations:

- a. Right hand circuits RWY 26
- b. Helicopters must use runway for ARR and DEP and shall ground taxi to/from aprons
- c. Obstacles infringing OLS may not be lit
- d. Penetration of VSS by telecommunications mast, 526' AMSL, BRG 248M/2.59NM from DIL VOR, unlit. VSS penetrated by 44.9m.

4.1 Dili Aerodrome Chart

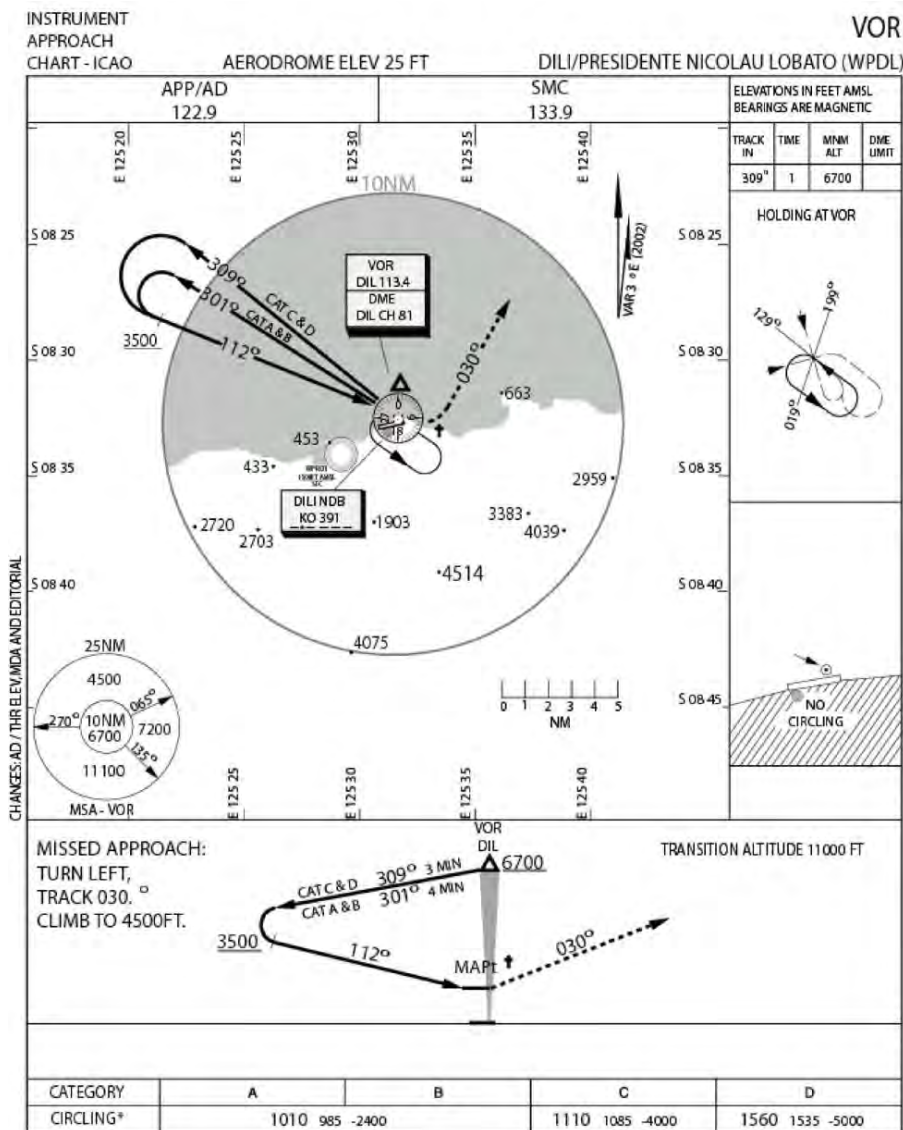


PRESIDENTE NICOLAU LOBATO**AERODROME****AD ELEV 29****INTL (WPDL)****CHART AD 2-4****08 32 48.9S 125 31 29.9E****DILI, TIMOR-LESTE**

TWR/SMC 133.9		APP 122.9		TIMOR COMMON 127.1 (OUTSIDE TWR HRS)		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES	
RWY	DIRECTION	THR		RWS	BEARING STRENGTH		
08	075°	08 32 54.1S		1970 X 150	PCN 42/F/B/X/U		
		125 30 59.1E					
26	255°	08 32 40.7S					
		125 31 58.0E					
RWY	AERODROME LIGHTING						
08	PAPI LEFT SIDE 3°			ABN GW			
26	PAPI LEFT SIDE 3°						
NOTES							
CAUTION: HILLS WEST AND EAST NEAR BOTH ENDS OF RWY. CAUTION: BIRD AND ANIMAL HAZARDS EXIST.							
RWY 26 RH CIRCUITS AIRPORT AVAILABLE HJ ONLY PRIOR PERMISSION REQUIRED FOR NGT OPS (EMERGENCY ONLY). ACFT WITH MTOW GREATER THAN 7000KG MUST ROLL TO RWY END AFTER LANDING AND BACKTRACK TO PREVENT DAMAGE TO RWY. HELICOPTERS MUST USE RWY FOR ARR AND DEP AND TAXI TO/FROM APRONS							

25MAR21

4.2 Dili VOR Chart

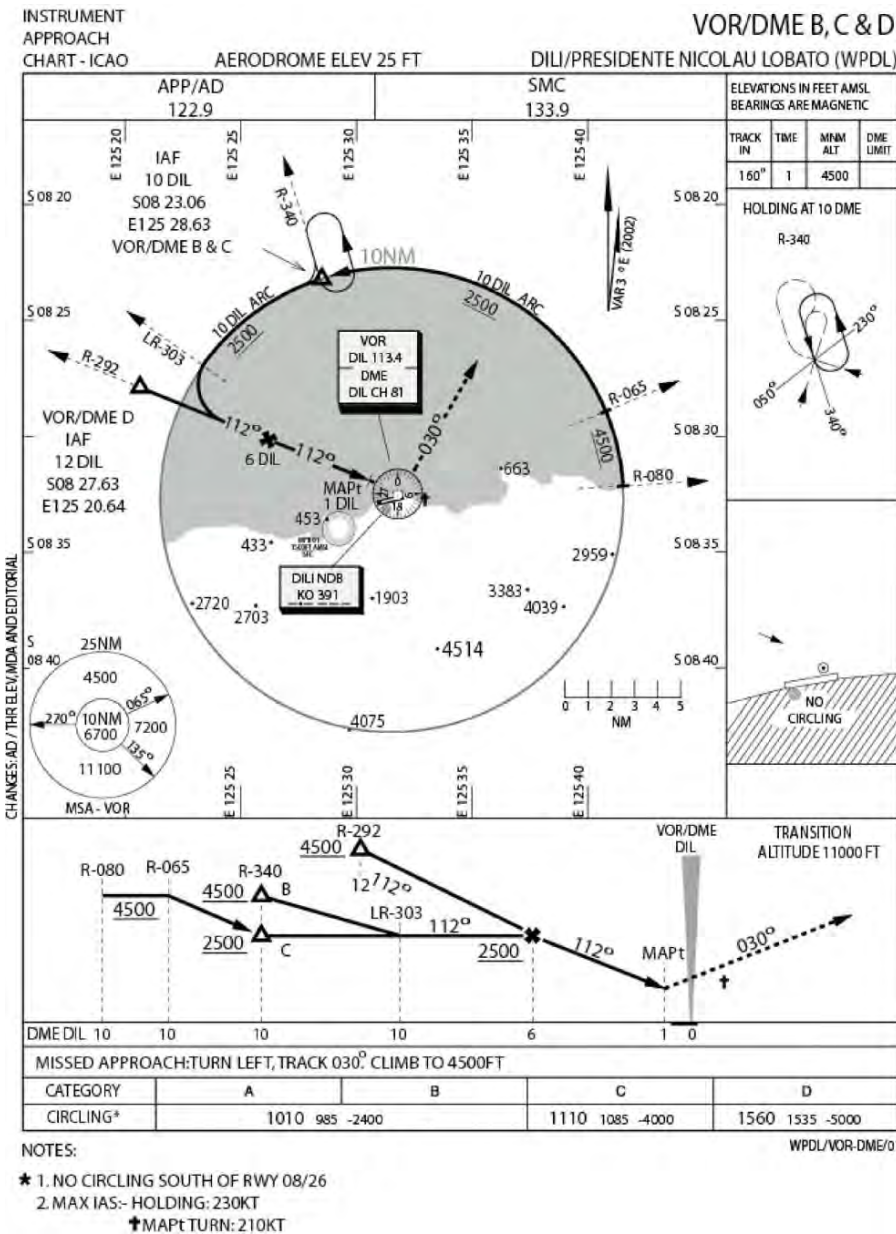


NOTES:

WPDL/VOR/01

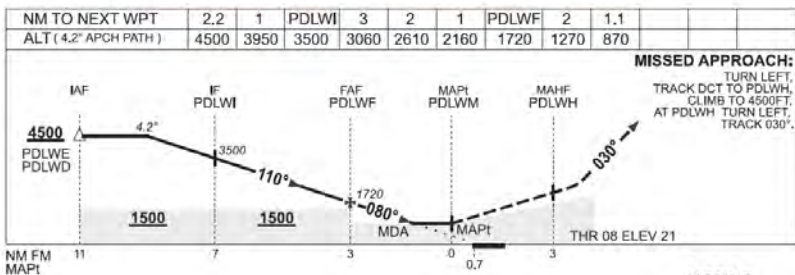
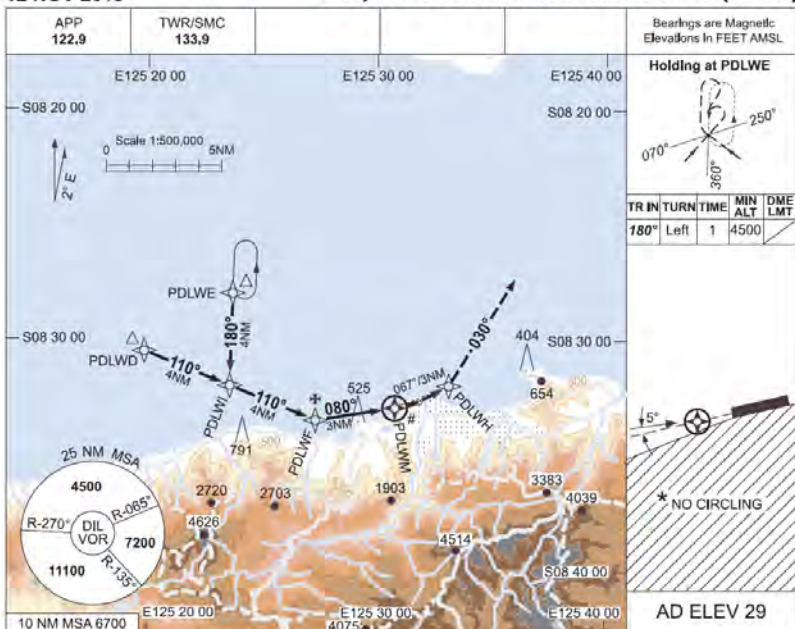
- * 1. NO CIRCLING SOUTH OF RWY 08/26
- 2. MAX IAS:- HOLDING, INITIAL & MAPt TURN: 210KT

4.3 Dili VOR/DME B, C & D Chart



4.4 Dili RNAV (GNSS) RWY 08 CAT H Chart

CAD APPROVED OPERATORS ONLY
USE QNH
DILI, PRESIDENTE NICOLAU LOBATO (WPDL)



CATEGORY	H
S-I GNSS	870 (849-3.5)
	NOT AUTHORISED

Changes: NEW PROC.

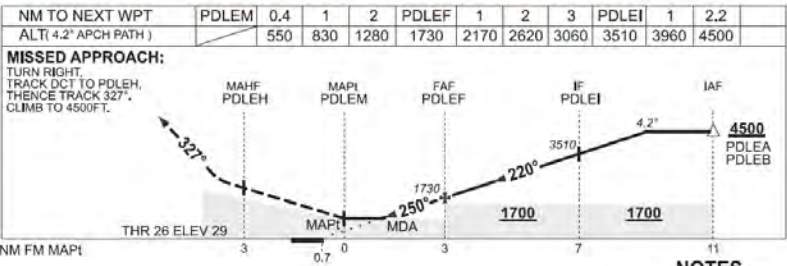
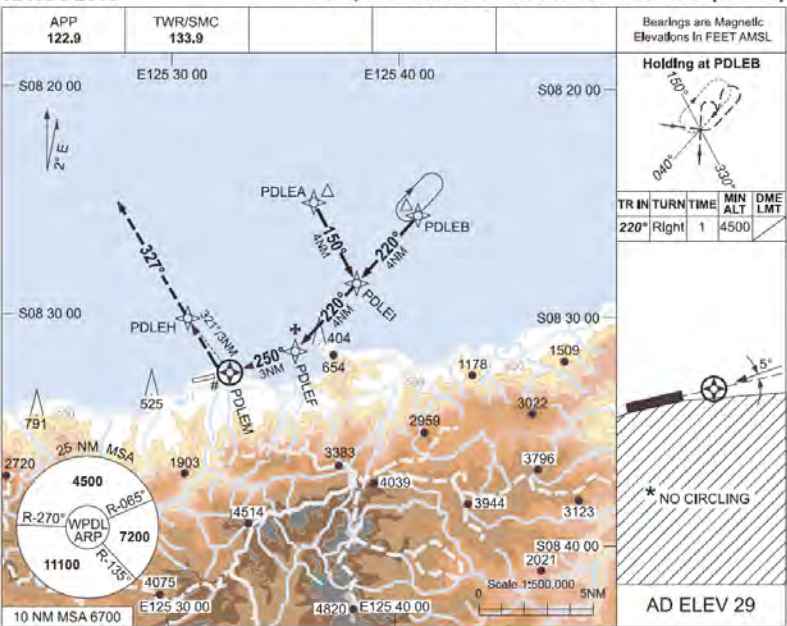
NOTES

1. WPDL QNH REQUIRED.
2. MAX IAS:
HOLDING : 100KT
INITIAL : 100KT
3. APCH PATH ANGLE DOES NOT COINCIDE WITH PAPI ON GLIDE SLOPE INDICATION.



4.5 Dili RNAV (GNSS) RWY 26 CAT H Chart

CAD APPROVED OPERATORS ONLY
USE QNH
12 NOV 2015
RNAV (GNSS) RWY 26
DILI, PRESIDENTE NICOLAU LOBATO (WPDL)



NOTES

1. WPDL QNH REQUIRED.
2. MAX IAS:
HOLDING: 100KT
INITIAL : 100KT
MAP TURN: 90KT.
3. APCH PATH ANGLE
DOES NOT COINCIDE
WITH PAPI ON GLIDE
SLOPE INDICATION.

CATEGORY	H
S-I GNSS	550 (521-2.2)
	NOT AUTHORISED

Changes: NEW PROC.



4.6 Dili RNP Z RWY 08 Chart-Reserved

4.7 Dili RNP Z RWY 26 Chart-Reserved

4.8 Dili STAR JEMZE ONE VICTOR ARRIVAL Chart-Reserved

4.9 Dili STAR JEMZE ONE QUEBEC ARRIVAL Chart-Reserved



PRESIDENTE NICOLAU LOBATO INTERNATIONAL AERODROME - DILI

TYPE A OPERATING CHART - OBSTACLE DATA

SURVEYED: P.FITZGERALD

DATE: APRIL 2012

SHEET 3 OF 3 SHEETS



Point ID	Dist from SOT	Offset (-ve is L, +ve is R)	WGS84 Zone 51		MSL Elev (m)	MSL Elev (ft)	Description
			Easting	Northing			
0808	1856.5	74.1	778838.0	9054502.6	11.2	37	Perimeter Fence
0801	1877.6	-93.5	778822.4	9054670.9	23.6	77	Tree
0802	1920.8	-95.1	778864.3	9054681.8	28.0	92	Tree
0803	1926.1	-73.7	778874.1	9054662.0	24.5	80	Tree
0807	1987.5	89.0	778969.2	9054516.4	24.3	80	Tree
0804	2013.5	-70.1	778960.3	9054677.4	25.2	83	Tree
0805	2254.9	-136.2	779181.8	9054794.2	35.9	118	Tree
0806	2294.9	-76.6	779233.8	9054744.6	28.5	93	Tree
0809	2411.7	-118.1	779338.9	9054810.4	35.1	115	Tree
6413	2942.5	-87.1	779864.2	9054894.8	32.3	106	Tree
6415	2947.0	17.9	779891.2	9054793.2	33.5	110	Tree
6414	3026.5	-97.8	779943.9	9054923.5	23.5	77	Tree
6416	3092.2	48.7	780039.8	9054794.5	28.5	94	Tree
6417	3216.4	117.0	780175.9	9054754.7	33.5	110	Tree
6418	3307.0	159.6	780273.6	9054732.6	33.7	111	Tree
6407	10564.4	-743.2	787168.3	9057183.6	123.2	404	Cristo Rei Statue
6408	10795.9	-213.1	787509.1	9056715.7	160.0	525	Tree
6412	11180.3	477.9	788034.0	9056123.7	109.7	360	Tree
6411	11334.0	348.9	788156.3	9056282.9	195.9	643	Tree
6410	11369.5	256.8	788171.1	9056380.6	199.3	654	Tree
6409	11393.1	-42.6	788129.4	9056678.2	190.0	623	Terrain
6422	11535.3	816.0	788453.9	9055870.2	178.3	585	Tree
6419	11728.1	754.9	788629.1	9055971.5	243.5	799	Tree
6420	11738.6	900.0	788670.7	9055832.0	308.4	1012	Tree
6421	11758.6	830.2	788675.2	9055904.5	251.1	824	Tree
2601	1851.7	43.8	776997.3	9054216.1	8.5	28	Perimeter Fence
2602	1887.2	27.9	776966.0	9054192.9	8.5	28	Perimeter Fence
2604	1947.2	-40.9	776922.3	9054112.7	7.8	26	Sign
2603	2008.7	-85.8	776871.9	9054055.5	10.2	34	Tree
6000	5274.7	-495.5	773769.9	9052949.2	159.9	525	Comms Tower
6403	13491.2	-367.7	765716.3	9051298.1	216.8	711	Tree
6404	14122.2	-900.1	765215.0	9050641.7	355.7	1167	Tree
6405	14636.8	-596.2	764646.7	9050827.3	307.3	1008	Tree
6402	14646.4	-516.4	764620.1	9050903.2	285.8	938	Tree
6400	14730.3	-8.1	764428.2	9051381.5	241.0	791	Comms Tower

5 WPFL-LOSPALOS FUILORO

Name: Lospalos Fuiloro

- a. ICAO Code: WPFL
- b. Airport Authority: ANATL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR

ARP: 082651S 1265916E

Elevation: 1350'

Runways:

- a. RWY 02/20
- b. Length: 750m
- c. Grass

Declared Distances: Not available

Airport Lighting: NIL

Air Traffic Control: NIL

Navigation Aids: NIL

ARFFS: NIL

Fuel: NIL

Local Traffic Regulations:

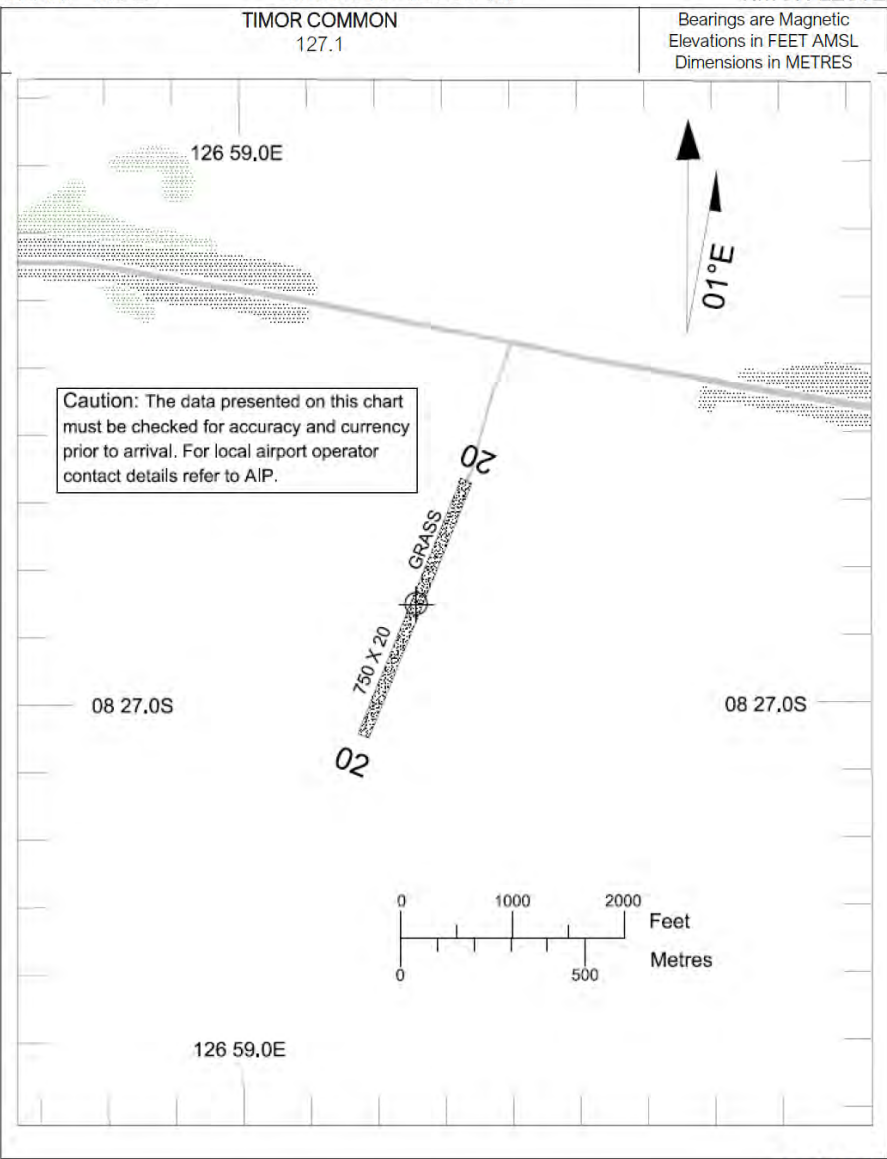
- a. Traffic shall use Timor Common Freq
127.10MHz
- b. Airport available HJ only
- c. VFR traffic only

5.1 Lospalos Fuiloro Aerodrome Chart

AERODROME
CHART AD 2-5

AD ELEV 1350
08 26 51S 126 59 16E

LOSPALOS FUILORO (WPFL)
TIMOR-LESTE



AERODROME
CHART AD 2-5

AD ELEV 1350
08 26 51S 126 59 16E

LOSPALOS FUILORO (WPFL)
TIMOR-LESTE

TIMOR COMMON 127.1		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	
02	021°	
20	201°	

NOTES

ANIMAL HAZARDS EXIST.
VEHICLES USE RWY AS A ROADWAY.
RWY CONDITION DETERIORATES AFTER HEAVY RAIN.
AIRPORT AVAILABLE HJ ONLY.
VFR TRAFFIC ONLY.

6 WPMN-MALIANA**Name:** Maliana

- a. ICAO Code: WPMN
- b. IATA Code: MPT
- c. Airport Authority: ANATL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR

ARP: 085820S 1251254E**Elevation:** 700'**Runways:**

- a. RWY 11/29
- b. Length: 860m
- c. Gravel/Grass

Declared Distances: Not available**Airport Lighting:** NIL**Air Traffic Control:** NIL**Navigation Aids:** NIL**ARFFS:** NIL**Fuel:** NIL**Local Traffic Regulations:**

- a. Traffic shall use Timor Common Freq 127.10MHz
- b. Airport available HJ only
- c. VFR traffic only

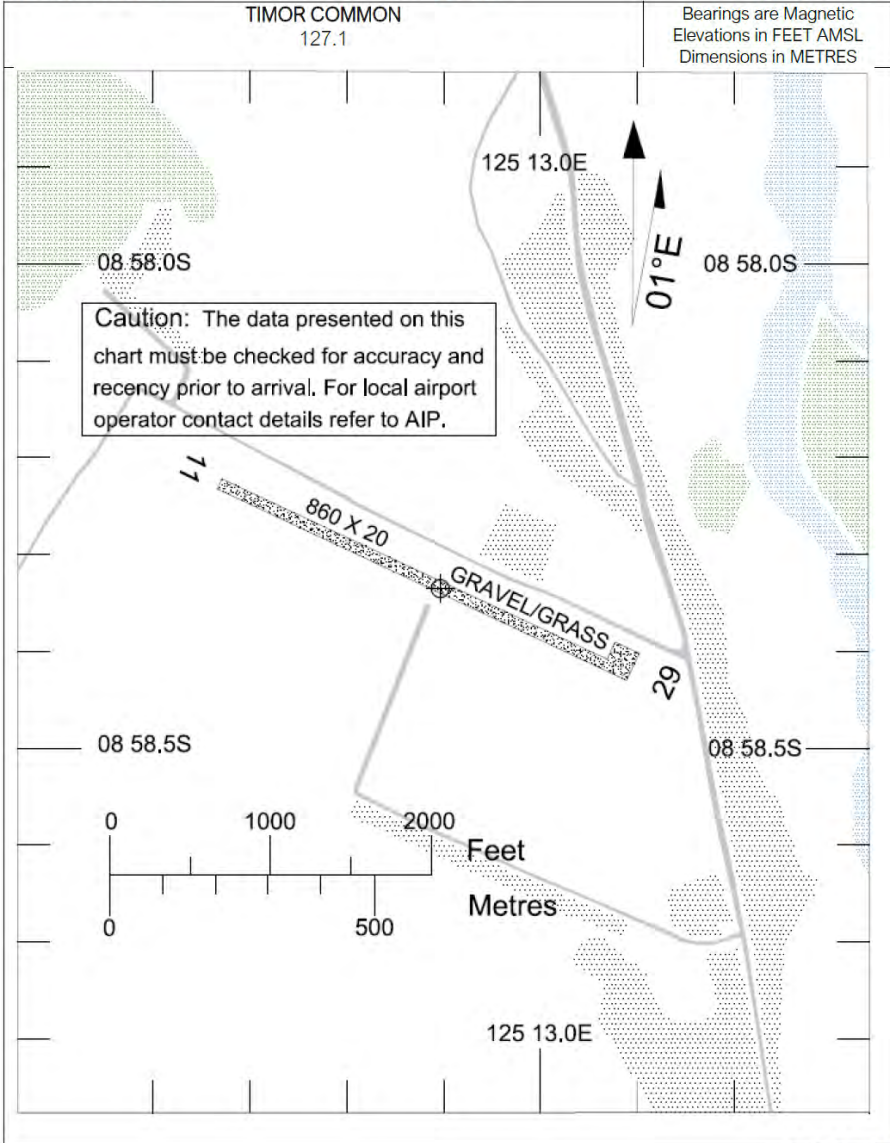
6.1 Maliana Aerodrome Chart

AERODROME
CHART AD 2-6

AD ELEV 700
8 58 20S 125 12 54E
TIMOR COMMON
127.1

MALIANA (WPMN)
TIMOR-LESTE

Bearings are Magnetic
Elevations in FEET AMSL
Dimensions in METRES



AERODROME
CHART AD 2-6

AD ELEV 700
8 58 20S 125 12 54E

MALIANA (WPMN)
TIMOR-LESTE

TIMOR COMMON 127.1		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	
11	114°	
29	294°	
NOTES ANIMAL HAZARDS EXIST. AIRPORT AVAILABLE HJ ONLY VFR TRAFFIC ONLY		

INTENTIONALLY BLANK

7 WPOC-OECUSSI

Name: Rota Do Sandalo International Airport Oecussi

- a. ICAO Code: WPOC
- b. IATA Code: OEC
- c. Airport Authority: President Da RAEOA/ZEESM
- d. Flight Approvals: AACTL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR-7 business days

ARP: 091154.05S 1242020.49E

Elevation: 15'

Runways:

- a. Asphalt flexible pavement PCN: 120/F/A/W/T
- b. THR 27 Co-Ordinates 091152.272S
1242053.178E
 - i. Elevation: 14'
- c. THR 09 Co-Ordinates 091156.165S
1241941.242E
 - i. Elevation: 14'
- d. RWY Bearing: 266/086°M
- e. Length: 2200m
- f. Width: 45m
- g. Shoulders: 7.5m (asphalt)
- h. RWS: 2440x300m
 - i. Note: Last 75m of RWS are flyover not graded
- i. RESA 27/09: 90x90m (compacted gravel)
- j. CWY 27/09: 300m

Declared Distances:

- a. TORA: 27/09 2200m
- b. TODA: 27/09: 2410m

- c. ASDA: 27/09; 2260m
- d. LDA: 27/09: 2200m

Turning Pads:

- a. Turning nodes approved for Code E with max wheelbase of 25.6m

Taxiways:

- a. Asphalt flexible pavement PCN: 120/F/A/W/T
- b. TWY A width: 23m
- c. TWY B width: 23m
- d. TWY Shoulders: 10.5m (asphalt)

Apron Information:

- a. Rigid concrete, 138x250m
- b. Flexural strength 615.25psi/4.242MPa

Parking Stands:

- a. Remote stands 1A/1B for turboprop aircraft
- b. Stands 2/3 aerobridges for Code C aircraft
- c. Remote stands 4A/B nose in for Code C aircraft
- d. Remote stand 4 nose in for Code E aircraft

Airport Lighting:

- a. SALS
- b. HIRL
- c. RTIL
- d. PAPI
- e. Turn Pads CTR line insets
- f. Taxiway A, B and Apron Taxi Lane
- g. ABN GW

Air Traffic Control:

- a. Primary Freq 122.30MHz
- b. Secondary Freq 133.60 MHz
- c. ATIS 126.80MHz

- d. NOTE: ATC services currently not manned

Navigation Aids:

- a. DVOR/DME: 113.60 MHz/CH83X
- b. 091149.89S 1241950.22E
- c. DVOR unusable as follows:
 - i. Radial 090 CCW 250 beyond 40NM below A030
 - ii. Radial 250 CCW 220 beyond 40NM below A100
 - iii. Radial 220 CCW 190 beyond 40NM below F140
 - iv. Radial 190 CCW 150 beyond 40NM below F130
 - v. Radial 150 CCW 090 beyond 40NM below F150

Standby Power

- a. Available max switchover time 15 seconds
- b. UPS for critical systems max 30 min

ARFFS:

- a. Category 7 provided including ambulance
- b. Pante Macassar City Fire Fighting Station information:
 - i. Contact Number: +670 2530039
 - ii. Person in Charge: Fidelio da Cunha (+670 75833234)
 - iii. Distance: 5 km from Airport
 - iv. Vehicle Operation: 1 vehicle
 - v. Capacity: 5000 ltrs /water
 - vi. Consist of (3 shift operation): 21 personnel

c. Pante Macassar Regional Hospital information:

- i. Contact Number: +670 2530027
- ii. Person in Charge: (+670 78526100) Manuel da Cunha
- iii. Distance: 6 km from Airport
- iv. Max available beds: 48

Fuel:

- a. Jet Fuel not available
- b. AVGAS not available

Local Traffic Regulations:

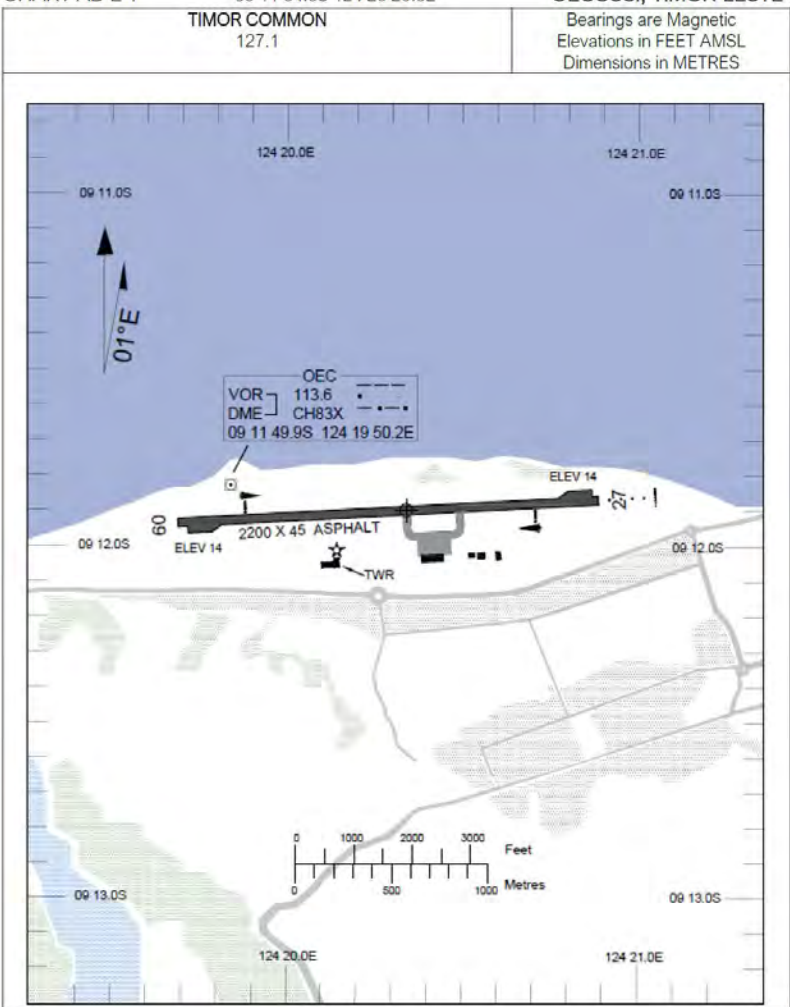
- a. Traffic shall use Timor Common Freq 127.10MHz
- b. Airport available HJ only
- c. VFR traffic only
- d. RWY 27 left hand traffic pattern only
- e. RWY 09 right hand traffic pattern only

7.1 Oecussi Aerodrome Chart

AERODROME
CHART AD 2-7

AD ELEV 15
09 11 54.0S 124 20 20.5E

ROTA DO SANDALO
INTL (WPOC)
OECUSSI, TIMOR-LESTE



Changes: CORRECTED RWY DIRECTIONS

02DEC21

ROTA DO SANDALO

AERODROME		AD ELEV 15		ROTA DO SANDALO	
CHART AD 2-7		09 11 54.0S 124 20 20.5E		INTL (WPOC)	
				OECUSSI,TIMOR-LESTE	
TIMOR COMMON 127.1				Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES	
RWY	DIRECTION	THR	RWS	BEARING STRENGTH	
09	086°	09 11 56.2S 124 19 41.2E	2320 X 300	PCN 120/F/A/W/T	
27	266°	09 11 52.3S 124 20 53.2E			
RWY	AERODROME LIGHTING				
09	SALS HIRL RTIL PAPI LEFT SIDE 3°		TWY B ABN GW		
27	SALS HIRL RTIL PAPI LEFT SIDE 3°				
NOTES					
AIRPORT AVAILABLE HJ ONLY					

8 WPSM-SAME**Name:** Same

- a. ICAO Code: WPSM
- b. Airport Authority: ANATL
- v. +670 78579932
- vi. +670 78579284
- vii. PPR

ARP: 090002S 1254102E**Elevation:** 1100'**Runways:**

- a. RWY 18/36
- b. Length: 820m
- c. Grass

Declared Distances: Not available**Airport Lighting:** NIL**Air Traffic Control:** NIL**Navigation Aids:** NIL**ARFFS:** NIL**Fuel:** NIL**Local Traffic Regulations:**

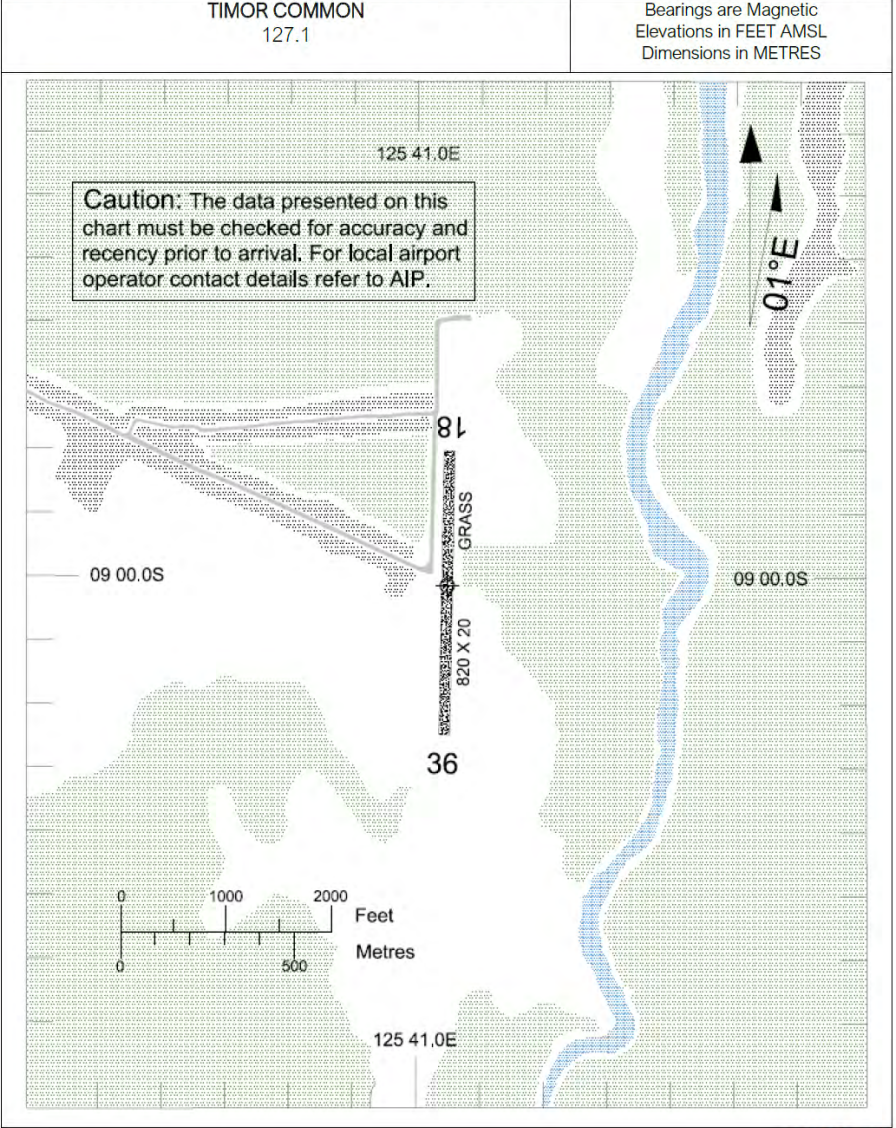
- a. Traffic shall use Timor Common Freq
127.10MHz
- b. Airport available HJ only
- c. VFR traffic only

8.1 Same Aerodrome Chart

AERODROME
CHART AD 2-8

AD ELEV 1100
09 00 02S 125 41 02E

SAME (WPSM)
TIMOR-LESTE



AERODROME
CHART AD 2-8AD ELEV 1100
09 00 02S 125 41 02ESAME (WPSM)
TIMOR-LESTE

TIMOR COMMON 127.1		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	
18	180°	
36	360°	
<div>NOTES</div> <div>ANIMAL HAZARDS EXIST. AIRPORT AVAILABLE HJ ONLY VFR TRAFFIC ONLY</div>		

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9 WPDB-SUAI

Name: Xanana Gusmao International Airport Suai

- a. ICAO Code: WPDB
- b. IATA Code: UAI
- c. Airport Authority: ANATL
- d. Flight Approvals: ANATL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR-7 business days

ARP: 091742.68S 1251705.66E

Elevation: 120'

Runways:

- a. Asphalt
 - i. PCN: 20/F/C/Y/T
- b. THR 35 Co-Ordinates 091826.49S 1251715.54E
 - i. Elevation: 57'
- c. THR 17 Co-Ordinates 091738.87S 1251704.80E
 - i. Elevation: 119'
- d. RWY Bearing: 166°/346°M
- e. Length: 1500m
- f. Width: 30m
- g. Shoulders: NIL
- h. RWS: 1620x150m
- i. RESA: 90x60m
- j. CWY: NIL

Declared Distances:

- a. TORA: 17 1500m
- b. TODA: 17 1500m
- c. ASDA: 17 1500m
- d. LDA: 17 Not available for landing

- e. TORA: 35 Not available for take off
- f. TODA: 35 Not available for take off
- g. ASDA: 35 Not available for take off
- h. LDA: 35 1500m

Taxiways:

- a. PCN: 20/F/C/Y/T
- b. TWY width: 15m

Apron Information:

- a. PCN: 20/R/C/Y/T
- b. 297x97m

Airport Lighting:

- a. SALS
- b. MIRL
- c. PAPI RWY 35 ONLY
- d. TWY
- e. ABN

Air Traffic Control:

- a. AFIS: "Kayrala Info" 129.70MHz
- b. Available DLY 2200-0500

Navigation Aids:

- a. VOR/DME: 114.10 MHz/CH89X
- b. 091746.27S 1251713.85E
- c. DVOR unusable as follows:
 - i. Radial 080-260 outside 40NM below A040
 - ii. Radial 030-080 outside 40NM below A100
 - iii. Radial 350-020 outside 40NM below F140
 - iv. Radial 270-350 outside 40NM below F150

ARFFS:

- a. Category 5
- b. DLY 2200-0500

Fuel:

- a. Jet Fuel not available
- b. AVGAS not available

Local Traffic Regulations:

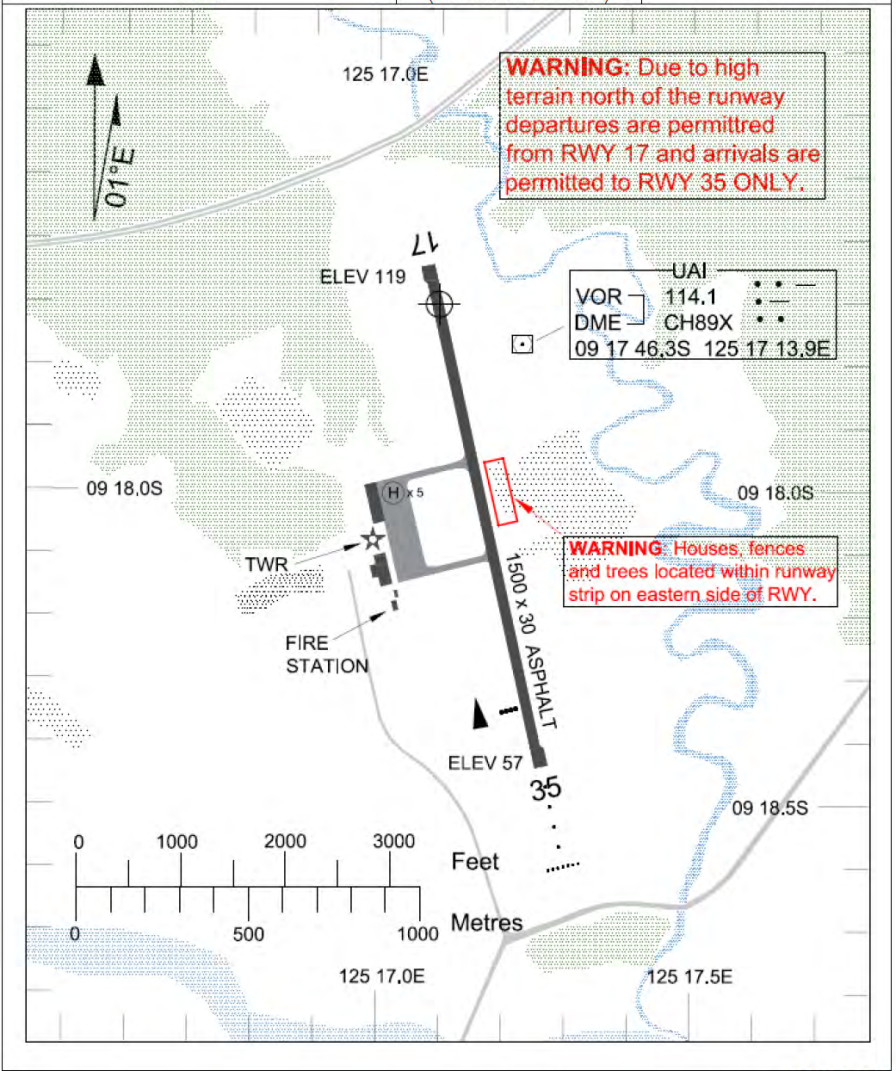
- a. Traffic shall use Timor Common Freq 127.10MHz outside AFIZ hours
- b. Airport available HJ only
- c. VFR traffic only
- d. Except for approved GNSS approach operators
- e. Departures RWY 17 only
- f. Arrivals RWY 35 only

9.1 Suai Aerodrome Chart

AERODROMEAD ELEV 120XANANA GUSMAO INTL (WPDB)

CHART AD 2-909 17 42.7S 125 17 05.7ESUAI, TIMOR-LESTE

AFIZ KAYRALA INFO (2200-0500) 129.7	TIMOR COMMON 127.1 (OUTSIDE AFIZ HRS)	Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
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AERODROME
CHART AD 2-9AD ELEV 120
09 17 42.7S 125 17 05.7EXANANA GUSMAO INTL (WPDB)
SUAI, TIMOR-LESTE

AFIZ KAYRALA INFO (2200-0500) 129.7			TIMOR COMMON 127.1 (OUTSIDE AFIZ HRS)	Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	THR	RWS	BEARING STRENGTH
17	166°	09 17 38.9S 125 17 04.8E	1620 X 150	PCN 20/F/C/Y/T
35	346°	09 18 26.5S 125 17 15.5E		
RWY	AERODROME LIGHTING			
17	MIRL		TWY ABN	
35	SALS MIRL PAPI LEFT SIDE 3°			
NOTES				
PILOTS MUST OVERFLY AD TO OBSERVE PRIOR TO MAKING AN APPROACH IF NOT IN COMMS WITH AFIZ AIRPORT AVAILABLE HJ ONLY				

9.2 Suai RWY 17 Departures Chart

**INSTRUMENT
DEPARTURE
CHART - ICAO**

**AD ELEV 120 FT
THR RWY 17 ELEV 119 FT
TRANSITION ALT 11000**

**TWR / SMC
129.7 MHZ**

**SUAI / (WPDB)
RWY 17
DEPARTURES**

**DEPARTURE ROUTE DESCRIPTION**

SUAI 1A : After Take-off passing 500FT, Turn Left Intercept SUI VOR/DME R-150 at 10 DME SUI Turn Right Join 12 DME Arc. On Crossing R-221 SUI VOR Turn Right Track Inbound Via R-228 to SUI VOR/DME. PDG 4.5% until reaching 11000FT.

KIKEM 1A : After Take-off passing 500FT, Turn Left 093° Intercept R-123 SUI VOR Outbound to KIKEM

ISMUD 1A : After Take-off passing 500FT, Turn Left 059° Intercept R-104 SUI VOR Outbound to ISMUD

9.3 Suai RWY 35 VOR/DME Chart

**INSTRUMENT
APPROACH
CHART - ICAO**

AD ELEV 120 FT
THR RWY 35 ELEV 57 FT
TRANSITION ALT 11000

TWR / SMC
129,7 MHz

SUAI / (WPDB)
RWY 35
VOR/DME (12 DME ARC)



DATE OF REVISION: 01 NOV 2017

TIMOR-LESTE

1 NOV 2017

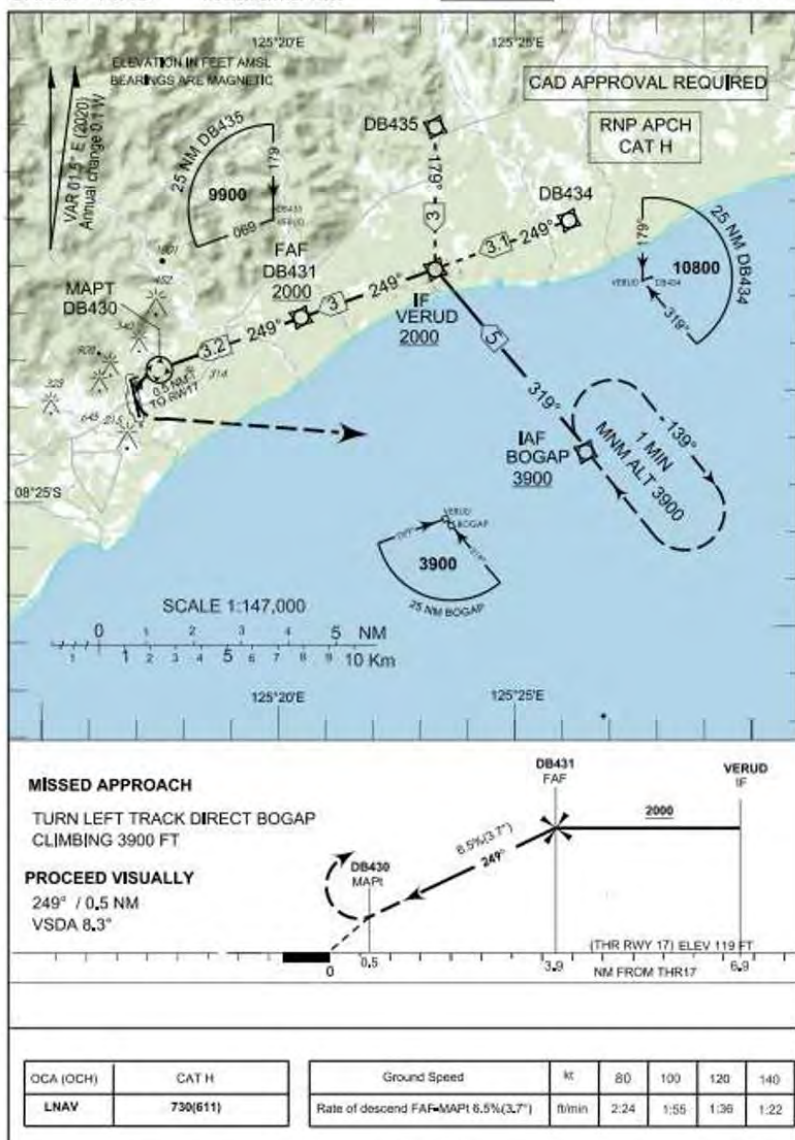
9.5 Suai RNP 249 Chart

INSTRUMENT
APPROACH
CHART - ICAO

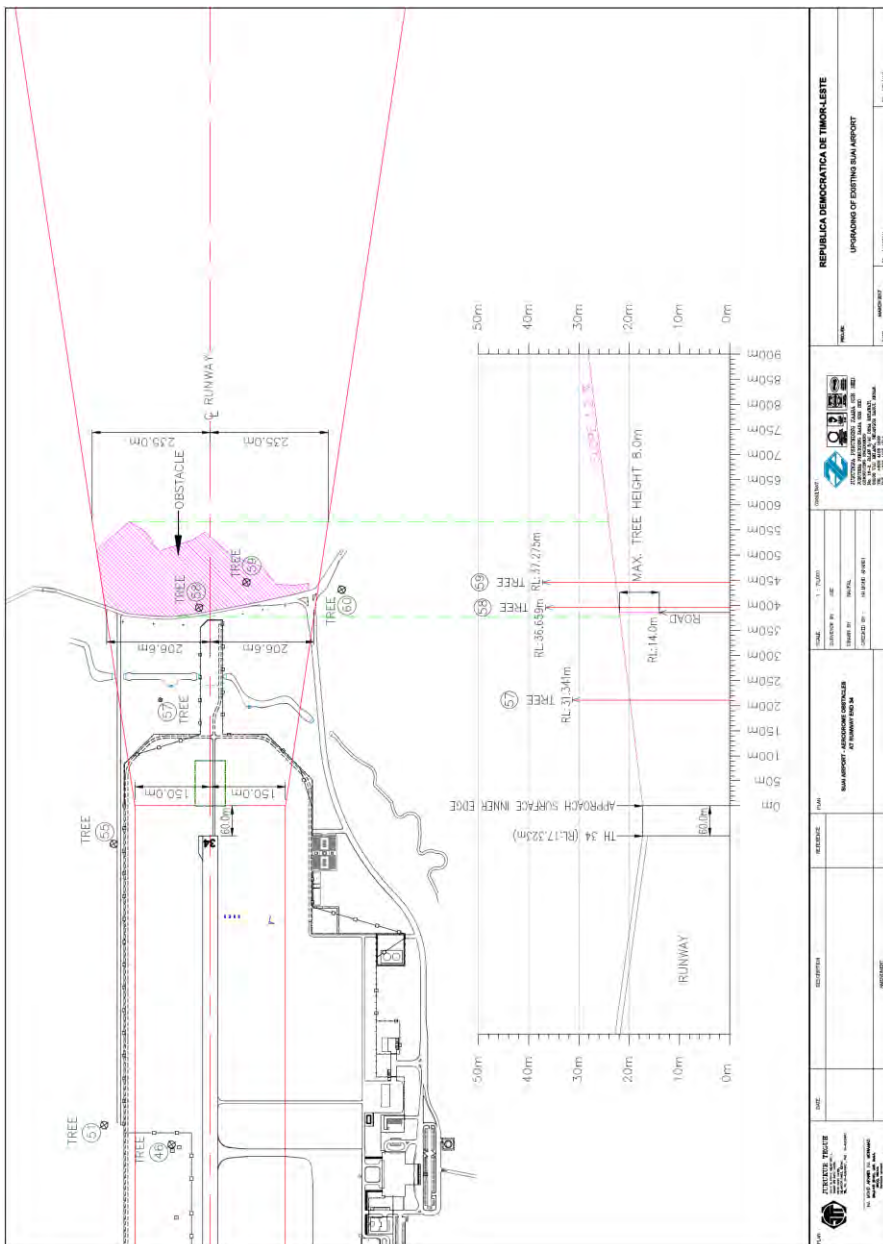
AD ELEV 120 FT
THR RWY 17 ELEV 119 FT
TRANSITION ALT 11000

TWR / SMC
129.7 MHZ

SUAI (WPDB)
RNP 249



9.7 Suai Type A Chart



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10 WPVQ-VIQUEQUE**Name:** Viqueque

- a. ICAO Code: WPVQ
- b. Airport Authority: ANATL
 - i. +670 78579932
 - ii. +670 78579284
 - iii. PPR

ARP: 085300S 1262223E**Elevation:** 100'**Runways:**

- a. RWY 15/33
- b. Length: 960m
- c. Gravel

Declared Distances: Not available**Airport Lighting:** NIL**Air Traffic Control:** NIL**Navigation Aids:** NIL**ARFFS:** NIL**Fuel:** NIL**Local Traffic Regulations:**

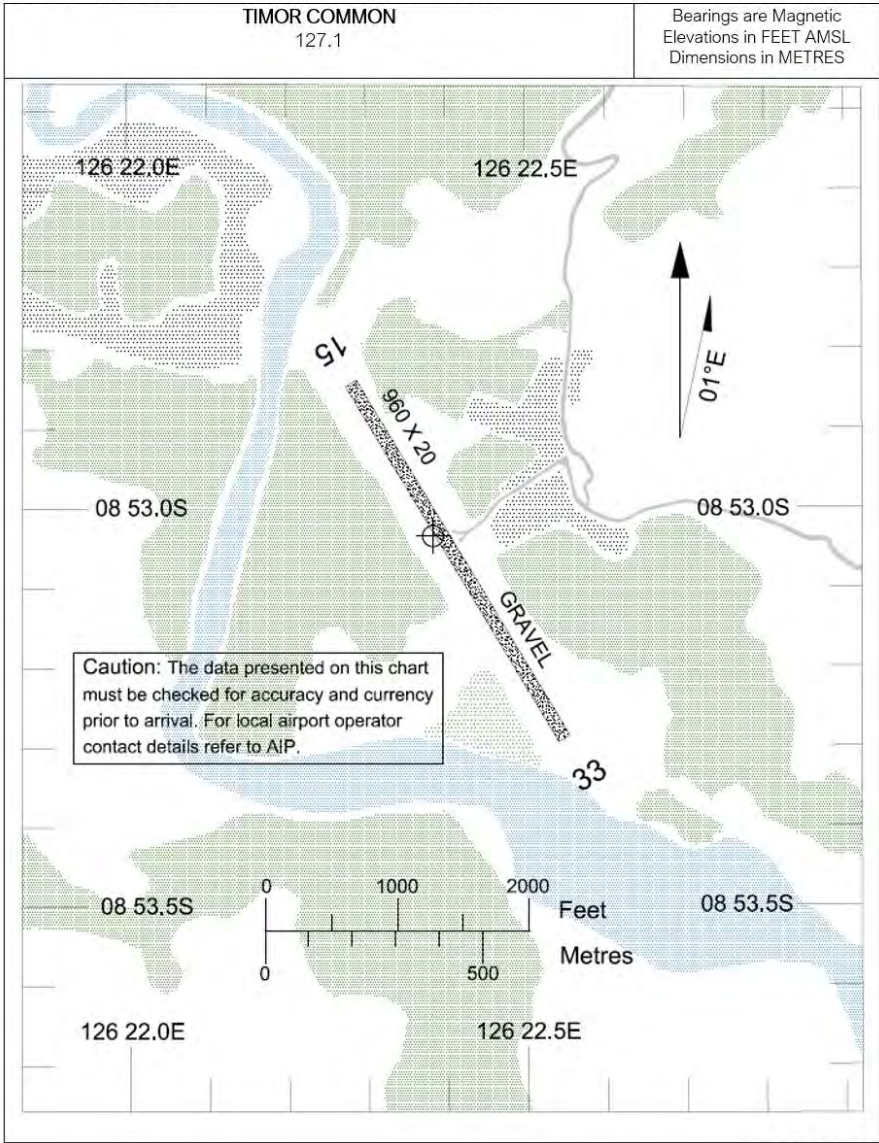
- a. Traffic shall use Timor Common Freq 127.10MHz
- b. Airport available HJ only
- c. VFR traffic only
- d. RWY 15 right hand traffic pattern only
- e. RWY 33 left hand traffic pattern only
- f. RWY 15 THR displaced 250m due obstacles, not marked

10.1 Viqueque Aerodrome Chart

AERODROME
CHART AD 2-10

AD ELEV 100
08 53 00S 126 22 23E

VIQUEQUE (WPVQ)
TIMOR-LESTE



AERODROME

AD ELEV 100

VIQUEQUE (WPVQ)

CHART AD 2-10

08 53 00S 126 22 23E

TIMOR-LESTE

TIMOR COMMON 127.1		Bearings are Magnetic Elevations in FEET AMSL Dimensions in METRES
RWY	DIRECTION	
15	148°	
33	328°	
<div>NOTES</div> <div>ANIMAL HAZARDS EXIST. RWY CONDITION DETERIORATES AFTER HEAVY RAIN. AIRPORT AVAILABLE HJ ONLY. VFR TRAFFIC ONLY.</div>		

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AD 3

HELIPORTS

AD 3.1 HELIPORT LOCATION INDICATOR AND NAME

1 RESERVED

See [AD 1.3.](#)

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