

**AUSTRALIAN DEFENCE FORCE
FLIGHT INFORMATION PUBLICATION
(PLANNING)**



**AERONAUTICAL
INFORMATION PACKAGE
CATALOGUE**

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WARNING

Consult CHAD and NOTAM for latest information

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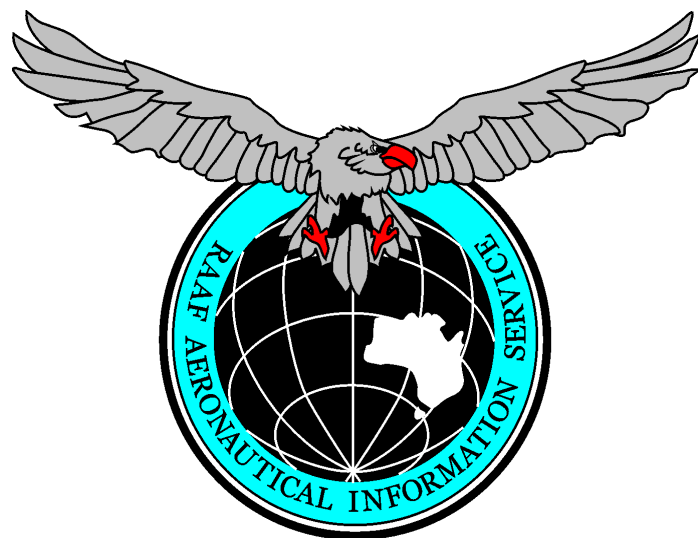
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ADVICE OF ERROR - ADF AIP

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ADF AERONAUTICAL INFORMATION PACKAGE CATALOGUE (CAT)

CAT 0. GENERAL INFORMATION

CAT 0.1 PREFACE

1. NAME OF PUBLISHING AUTHORITY

1.1 CAT is issued by the Director-General Policy and Planning - Air Force.

2. APPLICABLE DOCUMENTS

2.1 CAT is prepared in accordance with the minimum agreed Air Standardization Coordinating Committee standards.

3. ADF AERONAUTICAL INFORMATION PACKAGE (AIP) - DOCUMENTS INVOLVED

3.1 ADF AIP comprises a range of Aeronautical Information (AI) products for planning, en route and terminal phases of flight by Australian state registered aircraft in the Pacific and Australasian regions.

3.2 ADF AIP is designed to be used as a complete package and comprises documents such as ADF Flight Information Publications (FLIP) , various Airservices Australia (AsA) products and aeronautical charts. Any individual component of ADF AIP should not be used without reference to other applicable components of the package.

Note.- ADF FLIP is a component of ADF AIP.

4. PURPOSE

4.1 The CAT provides details of the AI products required by aircrew and planning staff in the Australian Defence Force (ADF) which are available from, or can be acquired by the Royal Australian Air Force Aeronautical Information Service (RAAF AIS). Additionally, some general product information is included.

4.2 The CAT is not intended for airborne use.

5. LANGUAGE

5.1 CAT is published only in the English language.

6. PROCUREMENT AND DISTRIBUTION

6.1 CAT is available from RAAF AIS (CD version), via the Defence Intranet (defweb.cbr.defence.gov.au/raafais) or Internet (raafais.gov.au)

7. ORDERING PUBLICATION AND AMENDMENT SERVICES

7.1 Publications and amendment services can be obtained via Unit AIO/PUBSO through the following (preferred order of contact):

- a. **On-line** - using the on-line Product Order Form at:
[Defence Intranet \(defweb.cbr.defence.gov.au/raafais\)](http://defweb.cbr.defence.gov.au/raafais) or Internet (raafais.gov.au)
- b. **Email** - orders can be placed at any time using:
raaf.ais@defence.gov.au
- c. **Facsimile**** - orders can be placed at any time using:
+61 3 9282 6695
- d. **Mail Order**** - by writing to:
Publishing Liaison Officer
RAAF AIS
VBM-M-2
Victoria Barracks
St Kilda Road
SOUTHBANK VIC 3006
- e. **Telephone** - verbal orders will be accepted under exceptional circumstances only, using:
+61 3 9282 5750

*Note**.-All orders submitted by FAX or mail should be via the Product Order Form located in the Aeronautical Information Order Booklet (AIOB). AIOB is available from RAAF AIS or via the Defence Intranet (defweb.cbr.defence.gov.au/raafais)/Internet (raafais.gov.au).*

7.2 Credit Card Facilities

7.2.1 This section deleted.

7.3 Customer Change of Address

7.3.1 All customers shall promptly advise RAAF AIS of any change of address.

7.3.2 Mail returned "Address Unknown" suspends the address record of the subscriber, and no further mail will be forwarded until advice is received of an address change.

2.3 Any person discovering omissions or errors in ADF AIP products listed in CAT is requested to notify RAAF AIS immediately.

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CAT 0.7 PROCUREMENT AND DISTRIBUTION

1. Issue of ADF AIP Products

1.1 Unit Aeronautical Information Officers (AIO) Responsibilities

1.1.1 Unit Aeronautical Information Officers are to:

- a) be the first point of contact between aircrew/planning staff and RAAF AIS;
- b) in accordance with DI(AF) AAP 5030.004 place orders to replenish their unit's stocks of charts quarterly to a stock level of six months estimated consumption. Quarterly requisitions are to reach RAAF AIS Distribution Centre by the 15th day of January, April, July, and October each year; and
- c) ensure that their unit has sufficient current ADF AIP products for all its personnel, and for distributing them to those personnel. Unit Aeronautical Information Officers are to anticipate numbers of new personnel to be posted into a unit during the currency period for each product, and order ahead accordingly. However, care should be taken to minimise over-ordering; all publications incur a cost to the ADF. RAAF AIS may review unit orders for ADF AIP products.

Note.- Any orders for ADF AIP products which are additional to the standing order must be accompanied by a written justification. Such orders will only be met in the case of unforeseen circumstances and/or if stock levels permit. Shortfalls on original orders which failed to anticipate requirements reasonably must be paid for by the requesting unit if further print runs are required. Non-routine procurement is resource depleting.

1.2 Initial Issue

1.2.1 For initial issue of AsA Publications to RAAF, RAN and exchange aircrew, the unit AIO should complete and submit the Product Order Form located in AIOB. For initial issue of other ADF AIP products, contact the Unit AIO who will issue the required documents.

Note.- Publications for exchange aircrew will only be issued to the unit (i.e. not to the individual). The exchange officer filling the position (or unit AIO) is responsible for the upkeep of the publications, and is to pass them to back to the unit AIO who will forward them to his/her successor. If the position is vacant, the responsibility for the publications rests with the unit AIO.

1.2.2 For foreign military agencies and other personnel in Defence command and support areas, such as AFHQ, contact the Distribution Officer for issue of ADF AIP products.

1.3 Returning of Products

1.3.1 Users are to liaise with Defence Publishing Service (DPS) when returning products. Refer CAT 0.1 paragraph 9.3 for DPS contact information.

1.4 Replacement of Products

1.4.1 Replacement costs for lost, damaged, stolen or poorly maintained documentation is the responsibility of the individual or unit.

1.5 Overseas Postings

1.5.1 ADF personnel posted overseas are to contact RAAF AIS through their unit AIO before departing Australia to cease amendment services for AsA publications. ADF AIP should be handed to the losing unit AIO for issue to other personnel. A new set of publications will be issued upon return to Australia by the gaining unit.

2. Mission Planning

2.1 To ensure sufficient time for thorough mission planning, requests for AI products for overseas tasking should reach RAAF AIS 14 days prior to departure. Requests for overnight delivery of publications will only be met in exceptional circumstances. Also refer to paragraph 3.2 below.

3. Exercise Requirements

3.1 The majority of RAAF AIS products are only produced to meet current ADF demands. Exercise planners, especially those with overseas participants, should contact RAAF AIS at the planning stage with their requirements to enable products to be produced or acquired, and distributed before the exercise dates.

3.2 Exercise planners are reminded of their responsibility for ensuring that the products supplied are received by those who require them. Any short notice requests for unplanned orders, replacements for misplaced stock, or stock misdirected after receipted delivery, must be paid for by the ordering unit.

4. Overseas Deployments for Exercises

4.1 Crews deploying overseas for exercises are to contact the Exercise Coordinator for their charting and documentation requirements while in country. RAAF AIS will supply charting and documentation for the transit flights and **limited** quantities for planning purposes.

5. Special Requirements

5.1 Requests for AI products not listed in CAT, AIOB or special AI product requirements, such as foreign FLIP, are to be forwarded to RAAF AIS.

5.2 Requests for all non-aeronautical topographical charts (e.g. Scale 1:100 000, 1:50 000) should be faxed to:

Address: DIGO (DEFENCE IMAGERY AND GEOSPATIAL ORGANISATION)
FAX: +61 2 6265 1135
Stating: Product Identification;
Quantity Required;
Justification;
Date Required; and
Unit Point of Contact.

6. Chart Quantities

6.1 Most charts listed in CAT are normally available in reasonable quantities except those annotated 'ss' (small stocks only). Charts annotated as such are normally obtained from non-RAAF sources including foreign agencies and demands for these charts should be kept to the minimum required for operations. 'ss' means that there is 25 copies or less of that particular chart.

6.2 Some foreign source aeronautical charts are not available to RAAF AIS. Due to exchange agreements existing between foreign countries the publishing authority will not give permission to issue the products to a third party (i.e. RAAF AIS).

7. Sale of Products to Non-ADF Organisations

7.1 Charting and other products compiled or procured by RAAF AIS are primarily for ADF needs. Written requests for aeronautical charts by non-ADF organisations must be addressed to Geoscience Australia and will be considered in accordance with Geoscience Australia/RAAF policy, third party agreements and available stocks.

7.2 Written requests for ADF FLIP by non-ADF organisations must be addressed to RAAF AIS and will be considered in accordance with ADF policy and available stocks.

8. Disposal

8.1 Units are to recycle charts and FLIP when they are superseded by new editions. If a unit is disbanded, disposal action for charts and FLIP is to be promulgated in the relevant disbandment directive. RAAF AIS can be contacted for advice regarding the disposal from disbanded units.

CAT 1. ADF AERONAUTICAL INFORMATION PACKAGE DESCRIPTION

CAT 1.1 INTRODUCTION

1. AI which is provided by RAAF AIS in the form of the ADF AIP contains documents, charts and other products as listed in the following categories:

1.1 Planning Products

- a) General Planning Australia (GPA).*
- b) Designated Airspace Handbook (DAH) - (see 2.2.1).
- c) General Planning International (GPI).**
- d) ADF Aeronautical Information Package Catalogue (CAT).
- e) Chart Amendment Document (CHAD).
- f) AsA Planning Chart Australia (PCA).
- g) Aeronautical Information Package Amendment Bulletin (AIPAB).
- h) AsA AIP Supplement (SUP).
- i) AsA Aeronautical Information Circular (AIC).
- j) Military Aerodrome Obstruction Charts (Type A).
- k) Aeronautical Information Order Booklet (AIOB).

* GPA and FIHA are complementary publications and will not normally be supplied separately.

** GPI and FIHI are complementary publications and will not normally be supplied separately.

1.2 En Route Products

- a) Flight Information Handbook Australia (FIHA).*
- b) En Route Supplement Australia (ERSA).
- c) Flight Information Handbook International (FIHI).**
- d) En Route Supplement International East (ERSIE).
- e) En Route Supplement International West (ERSIW).
- f) En Route Supplement Regional (ERSR).
- g) Tactical Airfield Guide Regional (TAGR).
- h) En Route Charts Australia (ERCA).
- i) En Route Charts International (ERCI).

* GPA and FIHA are complementary publications and will not normally be supplied separately.

** GPI and FIHI are complementary publications and will not normally be supplied separately.

1.3 Terminal Products

- a) Terminal Australia (TERMA).
- b) Terminal International East (TERMIE).
- c) Terminal International West (TERMIW).
- d) Terminal Regional East (TERMRE).
- e) Terminal Regional West (TERMRW).
- f) AsA Departure and Approach Procedures Australia East and West (DAPE, DAPW).
- g) Terminal Area Charts (TAC).
- h) AircservicesAustralia - Visual Terminal Charts (VTC)
- i) AircservicesAustralia - Visual Navigation Charts (VNC)
- j) Terminal Australia - Fast Jet North (TERMA-FJN)(Limited Distribution).
- k) Terminal Australia - Fast Jet South (TERMA-FJS)(Limited Distribution).

1.4 Aeronautical Charting Products

- a) Global Navigation Charts (GNC).
- b) Jet Navigation Charts (JNC).
- c) Operational Navigation Charts (ONC).
- d) Tactical Pilotage Charts (TPC).
- e) Joint Operations Graphics - Air (JOG-Air).
- f) RAAF Plotting Charts.

2. Planning Products

2.1 General Planning Australia (GPA)

2.1.1 GPA is compiled and published by RAAF AIS and has replaced AsA AIP as the authoritative document for RAAF and RAN users. It details the rules and procedures governing military aviation operations within Australian airspace. GPA is designed for planning purposes and is complementary to FIHA.

2.1.2 GPA is published every 16 weeks as a complete book.

2.2 Designated Airspace Handbook (DAH)

2.2.1 DAH is compiled by AsA and contains the lateral and vertical limits and hours of activity (where appropriate) of designated Australian airspace, and a list of navigation aids, IFR waypoints and air routes.

2.2.2 DAH is published every 26 weeks as a complete book.

2.3 General Planning International (GPI)

2.3.1 GPI is compiled and published by RAAF AIS containing information and procedures that differ from Australian procedures for selected nations in the area of ADF FLIP coverage. GPI is designed for planning purposes and is complementary to FIHI. GPI production cycle dates are outlined in the Production Schedule. The document includes coverage of the following locations;

- Cook Islands
- East Timor
- Fiji
- Indonesia
- Kiribati
- Malaysia
- Nauru
- New Zealand
- New Caledonia
- Niue
- Papua New Guinea
- Samoa
- Singapore
- Solomon Islands
- Tonga
- Tuvalu

2.3.2 GPI is published every 16 weeks as a complete book.

2.4 ADF Aeronautical Information Package Catalogue (CAT)

2.4.1 CAT is compiled and published by RAAF AIS and provides users with a reference of the various aeronautical chart and documentation products available from RAAF AIS. CAT is to be read in conjunction with CHAD.

2.4.2 CAT is produced primarily as an Internet/Intranet product. In exceptional circumstances CD versions can be provided.

2.4.3 CAT is published annually or when sufficient changes have accrued to warrant a new edition.

2.5 Chart Amendment Document (CHAD)

2.5.1 CHAD is compiled and published by RAAF AIS and is a supplement to the CAT. CHAD contains the following:

- a) A listing of all new charts.
- b) A listing of all new editions.
- c) A cumulative listing of amendments to current editions of RAAF and UK aeronautical charts within the Pacific and Australasia region.

2.5.2 CHAD is published every 8 weeks as a complete book.

2.6 AsA Planning Chart Australia (PCA)

2.6.1 PCA is compiled and published by AsA and contains Meteorological Area Forecast boundaries and locations, communication coverage and World Aeronautical Chart (WAC) coverage locations.

2.6.2 PCA is published every 26 weeks and is packaged with ERC Australia.

2.7 Aeronautical Information Package Amendment Bulletin (AIPAB)

2.7.1 AIPAB is compiled and published by RAAF AIS and amends information contained in ADF FLIP.

2.7.2 AIPAB is published every 4 weeks, except December edition (not published) as a complete book.

2.8 AsA AIP Supplement (SUP)

2.8.1 SUPs are compiled and published by AsA and used to supplement the information in AsA AIP when the information is of a temporary nature, requires advanced distribution, or is appropriate to the AsA AIP but would not be made available with sufficient rapidity by the amendment cycle to the AsA AIP.

2.9 AsA Aeronautical Information Circular (AIC)

2.9.1 AICs are compiled and published by AsA and used to disseminate AI to aircrew. Usually, the information is of an administrative nature and not directly concerned with the present conduct of airborne operations, but may have implications for the future. AICs contain advice which does not qualify for promulgation in NOTAM or SUP.

2.10 Aeronautical Information Order Booklet (AIOB)

2.10.1 AIOB is compiled and published by RAAF AIS and contains a list of all RAAF, AsA and foreign source documents and commercial products that are available through RAAF AIS to aircrew and support personnel for pre-flight planning and in-flight use.

2.10.2 AIOB is re-issued as a complete book when sufficient changes warrant.

2.11 Military Aerodrome Obstruction Charts (MIL AOC) (ICAO Type A)

2.11.1 MIL AOC charts are designed and compiled by Defence Estate Organisation (DEO) to provide obstruction data for all military airfields. MIL AOC are published by RAAF AIS.

2.11.2 The DI(AF) AAP 8132.006 Military Aerodrome Obstruction Charts has now been discontinued. Type A charts are available in airfield sets or individually.

3. En Route Products

3.1 Flight Information Handbook Australia (FIHA)

3.1.1 FIHA is compiled and published by RAAF AIS and has replaced AsA AIP as the authoritative document for RAAF and RAN users. It details the rules and procedures governing military aviation operations within Australian airspace. FIHA is designed for use in flight and is complementary to GPA.

3.1.2 FIHA is published every 16 weeks as a complete book.

3.2 En Route Supplement Australia (ERSA)

3.2.1 ERSA is jointly compiled by AsA and RAAF AIS and contains data for selected airfields located within the Australian FIR.

3.2.2 ERSA is published on a 12/12/16/12 week cycle as a complete book.

3.3 Flight Information Handbook International (FIHI)

3.3.1 FIHI is compiled and published by RAAF AIS containing information and procedures that differ from Australian procedures for selected nations in the area of ADF FLIP coverage. FIHI is designed for use in flight and is complementary to GPI. The document includes coverage of the following locations;

- Cook Islands
- Kiribati
- Papua New Guinea
- East Timor
- Malaysia
- Samoa
- Fiji
- New Zealand
- Singapore
- Indonesia
- Niue (refer to Fiji section)
- Solomon Islands

Note : New Caledonia will be added in future versions of FIHI. Contact RAAF AIS for information.

3.3.2 FIHI is published every 16 weeks as a complete book.

3.4 En Route Supplement International East (ERSIE)

3.4.1 ERSIE is compiled and published by RAAF AIS and contains data for selected airfields located in countries in the 'East' area of coverage. These include Cook Islands, French Polynesia, Fiji, Samoa, Marshall Islands, Tonga and United States Minor Outlying Islands.

3.4.2 ERSIE is published every 16 weeks as a complete book.

3.5 En Route Supplement International West (ERSIW)

3.5.1 ERSIW is compiled and published by RAAF AIS and contains data for selected airfields located in countries in the 'West' area of coverage. These include British Indian Ocean Territories, Brunei, Malaysia, Singapore, Sri Lanka and Thailand.

3.5.2 ERSIW is published every 16 weeks as a complete book.

3.6 En Route Supplement Regional (ERSR)

3.6.1 ERSR is compiled and published by RAAF AIS and contains data for selected airfields with main runway length above 915M located in countries that abut Australia (except to the West). These include Antarctica, Indonesia, New Caledonia, New Zealand, Papua New Guinea, Solomon Islands and Vanuatu.

3.6.2 ERSR is published every 16 weeks as a complete book.

3.7 Tactical Airfield Guide Regional (TAGR)

3.7.1 TAGR is compiled and published by RAAF AIS and contains data for selected airfields with main runway length above 400M but below 915M located in countries that abut Australia (except to the West). These include Antarctica, Indonesia, New Caledonia, New Zealand, Papua New Guinea, Solomon Islands and Vanuatu.

3.7.2 TAGR is published every 16 weeks as a complete book.

3.8 En Route Charts (ERC)

3.8.1 En Route Charts Australia (ERCA) are compiled and published by AsA. En Route Chart International (ERCI) are compiled and published by RAAF AIS.

3.8.2 ERCs are designed to show significant air traffic route areas, controlled airspace, prohibited, restricted and danger areas, airways, air traffic and radio-navigation services. Each route is divided into segments, which include information relating to magnetic tracks, distances and route lowest safe altitudes, etc. Information published on these charts is supplemented by information contained in the relevant En Route Supplement.

3.8.3 Aeronautical information within terminal areas on ERCs may not be complete and operators should refer to TAC or VTC in these areas.

3.8.4 En Route Charts are published every 26 weeks.

4. Terminal Products

4.1 Terminal Australia (TERMA)

4.1.1 TERMA is compiled and published by RAAF AIS and contains information on departure and approach procedures for Australian military airfields.

4.1.2 TERMA is available in two formats - Type 1 or Type 2. In Type 1 the pages are bound head-to-toe whereas in Type 2 the pages are bound head-to-head.

4.1.3 TERMA is published every 16 weeks as a complete book.

4.2 Terminal Australia - Fast Jet (TERMA-FJ)

4.2.1 The purpose of TERMA-Fast Jet (TERMA-FJ) is to provide details of authorised instrument procedures within Australia for state aircraft of the following Wings: 78,81,82 and ARDU. TERMA-FJ contains information sourced from TERMA and DAP. It is produced in a bound A5 format suitable for cockpit use. The criteria for the inclusion of airfields and approach plates is: Runways sealed 5000' or greater, SIDs, STARSS, Aerodrome charts, DME Arrivals and all approaches that meet a minimum of Cat D performance.

4.2.2 TERMA-Fast Jet North (TERMA-FJN) encompasses airfields within NT, QLD, and NSW. TERMA-Fast Jet South (TERMA-FJS) encompasses airfields within WA, SA, VIC, and TAS.

4.2.3 TERMA-FJ is only published in Type 1 format.

4.2.4 TERMA-FJ is published every 8 weeks to the same production schedule as DAP.

4.2.5 Customers receiving TERMA-FJ are not issued with DAP but reference copies are kept at each unit.

4.3 Terminal Regional East (TERMRE)

4.3.1 TERMRE contains information on departure and approach procedures for selected airfields for countries in the 'Regional East' area of coverage. These include New Caledonia, New Zealand, Solomon Islands and Vanuatu. TERMRE continues to be populated on the basis of highest priority and usage airfields as requested by user units, and as data is validated.

4.3.2 TERMRE is available in two formats - Type 1 or Type 2. In Type 1 the pages are bound head-to-toe. In Type 2 the pages are bound head-to-head.

4.3.3 TERMRE is published every 16 weeks as a complete book.

4.4 Terminal Regional West (TERMRW)

4.4.1 TERMRW contains information on departure and approach procedures for selected airfields for Indonesia and Papua New Guinea. TERMRW continues to be populated on the basis of highest priority and usage airfields as requested by user units, and as data is validated.

4.4.2 TERMRW is available in two formats - Type 1 or Type 2. In Type 1 the pages are bound head-to-toe. In Type 2 the pages are bound head-to-head.

4.4.3 TERMRW is published every 16 weeks as a complete book.

4.5 Terminal International East (TERMIE)

4.5.1 TERMIE contains information on departure and approach procedures for selected airfields for countries in the 'East' area of coverage. The area of coverage of TERMIE is being reviewed and at present TERMIE does not include complete coverage of international airfields. TERMIE continues to be populated on the basis of highest priority and usage airfields as requested by user units, and as data is validated.

4.5.2 TERMIE is available in two formats - Type 1 or Type 2. In Type 1 the pages are bound head-to-toe. In Type 2 the pages are bound head-to-head.

4.5.3 TERMIE is published every 16 weeks as a complete book.

4.6 Terminal International West (TERMIW)

4.6.1 TERMIW contains information on departure and approach procedures for selected airfields for countries in the 'East' area of coverage. The area of coverage of TERMIW is being reviewed and at present TERMIW does not include complete coverage of international airfields. TERMIW continues to be populated on the basis of highest priority and usage airfields as requested by user units, and as data is validated.

4.6.2 TERMIW is available in two formats - Type 1 or Type 2. In Type 1 the pages are bound head-to-toe. In Type 2 the pages are bound head-to-head.

4.6.3 TERMIW is published every 16 weeks as a complete book.

4.7 AsA Departure and Approach Procedures Australia East and West (DAP East & West)

4.7.1 DAP East and West is compiled and published by AsA and contain instrument departure and approach procedures for civil and joint user aerodromes within Australia. Both documents also contain noise abatement procedures for applicable locations.

4.7.2 DAP East and West page replacement amendments are published every 8 weeks.

4.8 Terminal Area Charts (TAC)

4.8.1 ERCA TACs are compiled and published by AsA and ERCI T-01/T-02 are compiled and published by RAAF AIS. Both provide a detailed depiction of airspace, air-routes, prohibited, restricted and danger areas, navigation aids and radio frequencies within their area of coverage. Terminal area charts do not contain topographical information. TACs are published for terminal areas around major cities within Australia where information congestion would lead to excessive clutter on ERCA. T-01/T-02 are published for terminal areas around major cities within the Asia Pacific region where information congestion would lead to excessive clutter on ERCI.

4.8.2 TACs and T-01/T-02 are published every 26 weeks and packaged with ERCA and ERCI.

4.9 AsA Visual Terminal Charts (VTC)

4.9.1 VTCs are compiled and published by AsA and provide both aeronautical and hypsometric tints for VFR operations in and near terminal areas. In some cases, these charts show detail of tracks to be flown and significant landmarks to aid pilots of VFR aircraft to navigate through and around controlled airspace. They are available as a complete package or individually.

4.9.2 VTCs are published every 26 weeks.

4.10 AsA Visual Navigation Charts (VNC)

4.10.1 VNCs are compiled and published by AsA and provide both aeronautical and hypsometric tints for VFR operations in controlled airspace surrounding major and regional centres. In some cases, these charts show detail of tracks to be flown and significant landmarks to aid pilots of VFR aircraft to navigate through and around controlled airspace. Coverage is shown on the front of each chart. They are available as a complete package or individually.

4.10.2 VNCs are published every 26 weeks.

5. Aeronautical Charting Products

5.1 Each aeronautical chart series has an inventory listing and graphic index in CAT.

CAT 1.2 AERONAUTICAL CHART SERIES INFORMATION

1. Chart Specifications

1.1 The aeronautical chart series conform to National Imagery and Mapping Agency (NIMA) specifications. MIL-J-89100 for JOG-Air series, MIL-T-89101 for TPC series, MIL-O-89102 for ONC series and PS/IAC/140 for JNC series. ERCs and TACs conform to ICAO specifications. All aeronautical charts conform to the minimum standard agreed to by the ASCC.

1.2 Aeronautical Charts depicted in the graphic indexes and inventories shown in this Catalogue form only part of the world wide series of aeronautical charts.

1.3 The base detail for aeronautical charts produced by the ADF is compiled by the DIGO (Defence Imagery And Geospatial Organisation) Bendigo.

Note.- Check marginalia information as to ascertain the geodetic datum used to construct the chart.

2. Aeronautical Chart Listings

2.1 Each aeronautical chart series listing in this Catalogue contains a chart series title or designation, chart description, inventory, and graphic index.

2.2 Series Title or Designation

2.2.1 The series title or code is used to identify a series of charts or related group of charts that are published for a common purpose. e.g. Operational Navigation Charts (ONC).

2.3 Chart Description

2.3.1 The chart description section provides a synopsis of each chart series and includes the scale, projection, size, purpose, base detail, aeronautical overprint, and grid overprint.

2.3.2 Purpose

2.3.2.1 The purpose of a chart series defines the common usage of a chart. Some charts have dual usage, either intended or through practical application in the field. Usage is described in terms of pre-flight or in-flight planning, in-flight navigation, staff planning etc. The intended type of navigation is indicated, i.e. dead reckoning, visual or radar pilotage, celestial, or radio. The category of aircraft performance for which the chart was intended, or is most suitable, is indicated in terms as follows:

Performance Parameter Description

Very low altitude	Below 500FT AGL
Low altitude	500 to 2000FT AGL
Medium altitude	2000 to 25,000FT
High altitude	25,000 to 50,000FT
Very high altitude	Above 50,000FT
Low speed	Slower than 130KTS
Medium speed	130 to 350KTS
High speed	faster than 350KTS
Short Range	less than 1200NM
Medium Range	1200 to 3500NM
Long Range	more than 3500NM

2.3.3 Scale

2.3.3.1 The scale is the ratio between any given unit of length on a chart and the true distance it represents on the earth e.g. 1:500 000. In this case 1mm on the chart represents 500,000mm on the earth's surface.

2.3.3.2 Small scale charts portray large areas, eg. the World, a hemisphere, continent or country. The scale of these charts are traditionally 1:1 000 000 or smaller e.g. Jet Navigation Chart 1:2 000 000.

2.3.3.3 Large scale charts portray small areas with a large amount of detail. The scale of these charts are traditionally larger than 1:1 000 000 e.g. Joint Operations Graphics - Air 1:250 000.

2.3.4 *Projection*

2.3.4.1 The projection identifies the technique or method used in the portrayal of parallels of latitude and meridians of longitude. Each type of projection has characteristics of its own which often have a direct bearing on the intended use of a chart or the navigation techniques utilised. Some of the more commonly used projections on aeronautical and en route charts are Transverse Mercator and Lambert Conformal Conic.

2.3.5 *Base Detail Shown*

2.3.5.1 The 'Base Detail Shown' section details all features portrayed on each chart other than those contained in the aeronautical or grid overprint.

2.3.5.2 *Culture*

2.3.5.2.1 Cultural features are the man made terrain elements such as roads, railways, pipelines, installations, and miscellaneous constructions such as dams, bridges, or mines. Standard symbols are used. Principal variations of technique of portrayal and the features depicted will be indicated. Density of portrayal is related to chart scale, chart use and the geographic area covered.

2.3.5.3 *Hydrography*

2.3.5.3.1 Hydrographical features include coast lines, oceans, lakes, rivers and streams, canals, swamps, or reefs. Density is indicated by reference to principal or detailed drainage. Principal variations of features portrayed will be indicated. Open water may be portrayed by either of the following methods:

- a) Water Tint - the depiction of open water areas such as oceans and lakes by a solid tint, usually a light blue.
- b) Water Vignette - an alternative treatment of open water where the water is depicted with a deep or dark tone along the shore line and rapidly but evenly lightened in tone outward from the shore to a uniform or white shading. This technique produces a chart with large white open water areas, making it easier to plot on, and accentuating small bodies of water and small islands.
- c) Fathom Lines - A fathom line is represented by a line on a chart connecting all points of equal water depth below some defined level such as mean sea level. Fathom lines are in units of 6 feet.
- d) Water Tints - Different colours depicting intervals between defined depth values.

2.3.5.4 *Relief*

2.3.5.4.1 The relief section details how the relative differences in elevation of the land surface are portrayed. Complexity of relief features is dependent upon scale and/or contour interval used. Generally large scale charts show many relief features, whereas very small scale charts can only show major mountain masses. Relief can be shown by the following methods:

- a) Contours - A contour is represented by a line on a chart connecting all points of equal elevation above some defined level such as mean sea level. On a steep slope contours are closer together, on a gentle slope they are further apart.
- b) Layer Tints - Different colours depicting intervals between certain contour lines.
- c) Shaded Relief - Pictorial presentation simulating shadows cast by areas of high relief.
- d) Spot Elevations - A dot with an elevation value which depicts an accurately measured elevation above sea level at a specific location. On some charts a small "x" is used to indicate an approximate elevation at a specific location. If the exact location of an elevation is unknown only the figures are shown.
- e) Terrain Characteristic Tints - Colour tints representing areas of low relief and areas of high relief.

2.3.5.5 *Vegetation*

2.3.5.5.1 Vegetation is not shown on most small scale charts. Forests and wooded areas in certain parts of the world are shown on some medium scale charts. Some large scale charts have park areas, orchards, plantations and vineyards.

2.3.6 *Aeronautical Overprint*

2.3.6.1 The aeronautical overprint consists of aerodromes, aeronautical communication and navigation facilities, selected commercial radio broadcast stations, visual aids, ADIZ boundaries, compulsory corridors, airspace reservations, vertical obstructions, Maximum Elevation Figures (MEF), warning notes, isogonals, navigation grids, etc. overprinted onto a topographic base. Some aeronautical charts have an aeronautical overprint, which does not include features that are not geographically visible such as airways, radio frequencies or certain controlled airspace. The position of symbology on aeronautical overprints is to an accuracy of at least 1/10th of a minute. (Refer paragraph 4.1)

2.3.7 *Supplementary Navigation Grid and Georeference Overprint*

2.3.7.1 A grid overprint is provided on some charts to enable physical referencing of the features and detail contained in the charts. The grid overprints used on charts in this Catalogue are the Transverse Mercator Grid, the Universal Grid Reference System using the Universal Transverse Mercator (UTM) Grid, the world Geographic Reference System (GEOREF), the Polar Grid, and the Sub Polar Grid.

2.3.8 *Chart Reliability*

2.3.8.1 Chart reliability diagrams are found in chart margins and gauge the accuracy of information portrayed. (Chart reliability diagrams refer only to base detail).

2.4 **Chart Series Inventories**

2.4.1 The chart series inventories in this Catalogue list the Chart numbers and/or names, edition identification, aeronautical information currency, and some explanatory notes.

2.4.2 *The Chart Number/Name*

2.4.2.1 The chart number or name identifies each sheet within a series e.g. SJ 55-10 Warragul. On some charts there is a letter following the number to identify a particular characteristic of that chart. Letters which are used in this catalogue are as follows:

- a) S - identifies a chart which has been produced as a special chart and is not part of the world nomenclature for chart series.
e.g. Q-12DS where Q-12D is the chart number.
- b) N - identifies a chart which contains a Navigational Grid overprint. e.g. JNC-72N where JNC-72 is the chart number.

2.4.3 *Edition Identification*

2.4.3.1 The edition identification specifies the status of each chart. Edition identification numbers are advanced when any changes are made to the chart face. Edition numbers may include the abbreviation of the producing agency e.g. 3-NIMA.

2.4.4 *Availability of Aeronautical Charts*

2.4.4.1 There are instances whereby the ADF has restrictions imposed on the distribution and sale of AI products. Generally these restrictions apply to aeronautical charts of various scales that have been produced covering foreign nations by either the United States of America (USA), United Kingdom (GBR) or Australia. Approval for distribution in these instances is dependent upon receiving approval from both the host nation and the nation which published the charts.

2.5 **Chart Series Graphic Indexes**

2.5.1 The indexes within this Catalogue graphically portray charts by series within the region of coverage of RAAF AIS. Only charts that are produced have a title shown on the graphic indexes and appear in the accompanying listing.

3. **Chart Amendments**

3.1 Refer to the current CHAD for a list of amendments affecting Australian produced aeronautical charts. For the latest corrections to overseas produced charts, access the Electronic Chart Updating Manual (ECHUM) via the NIMA website: www.nima.mil.

4. **Portrayal of Vertical Obstructions**

4.1 Not all vertical obstructions 150FT AGL (JOG-Air) and 200FT AGL (TPC and ONC) and higher are portrayed due to chart scale and feature density. The highest obstruction in each 15 second by 15 second matrix for a JOG-Air chart, 1 minute by 1 minute matrix for a TPC and 3 minute by 3 minute matrix for an ONC (originating at full degree intersection) is shown. In areas of dense culture, this pattern is further reduced to enhance clarity, at the expense of lower reaching obstructions.

Warning - Powerline information and vertical obstructions have been extracted from the most reliable source available. However, due to the possibility of incomplete source data, some vertical obstructions may not be shown.

5. **Reporting Uncharted Vertical Obstructions**

5.1 If an aircrew member observes a vertical obstruction that is not shown on the chart, he/she should estimate the latitude, longitude and height (AGL) of the obstruction by the best means available and inform RAAF AIS immediately. An online Vertical Obstruction Report Form is available from either the Defence Intranet (defweb.cbr.defence.gov.au/raafais/) or Internet (raafais.gov.au).

CAT 1.3 TERMS AND ABBREVIATIONS

1. Catalogue Terms

Warning - Information which, if not utilised, could result in personal injury or loss of life.

Caution - Information which, if not utilised, could result in damage to equipment or injury to personnel.

Note - Information which is considered essential to highlight, and will ensure more effective operation.

Map - A map is a graphic representation, usually on a plane surface and at an established scale, of natural and artificial features on the surface of a part or the whole of the earth or other planetary body. The features are positioned as accurately as possible, usually relative to a coordinate reference system. A map is also a graphic representation of a part or the whole of the celestial sphere.

Chart - A chart is a special purpose map, generally designed for navigation or other particular purposes, in which essential map information is combined with other data critical to the intended use.

Aeronautical Chart - An aeronautical chart is a specialised chart with a representation of mapped features of the earth, or some part of it, produced to show selected terrain, cultural and hydrographic features, and supplemental information required for air navigation, pilotage or for planning air operations.

Note.- ERCs are classified as FLIP rather than aeronautical charts.

2. Catalogue Abbreviations

2.1 Refer GPA GEN 2.2 or ERSIs ABRV for a list of abbreviations used within this publication.

CAT 2. FOREIGN AERONAUTICAL INFORMATION PRODUCT DESCRIPTIONS

CAT 2.1 GENERAL

1. Availability of Foreign Products

1.1 Some Foreign FLIP and Aeronautical Charts are not available to RAAF AIS due to exchange agreements existing between foreign countries. The publishing authority may not give permission to issue some products to a third party.

1.2 Some Foreign FLIP and Aeronautical Charts may not be held by RAAF AIS but they may be ordered. Some stocks of Foreign FLIP and Aeronautical Charts are held in short supply so units should give the maximum notice possible to RAAF AIS of requirements as it may be necessary to obtain extra products from the publishing authority which could delay delivery or only part of the unit's request may be filled.

1.3 There are instances whereby the ADF has restrictions imposed on the distribution and sale of AI products. Generally these restrictions apply to aeronautical charts of various scales that have been produced covering foreign nations by either USA, GBR or Australia. Approval for distribution in these instances is dependent upon receiving approval from both the host nation and the nation which published the charts.

2. Procurement and Distribution

2.1 Units that wish to vary their unit standing order or have a specific requirement for foreign AI products are to contact RAAF AIS through their Unit AIO or authorised delegate.

3. Irregular Requirements

3.1 RAAF AIS holds a limited supply of foreign AI products necessary to meet existing and contingent requirements of the ADF. Should units require foreign AI products in excess of their regular distribution, it may be necessary to obtain extra foreign AI products from the publishing authority which could delay delivery for extended periods. Units are required to give the maximum notice possible to RAAF AIS of contingency requirements.

CAT 2.2 US DoD FLIGHT INFORMATION PUBLICATIONS

1. Note on supply of US DoD FLIP

1.1 The National Imagery and Mapping Agency (NIMA) has advised RAAF AIS that quantities of US DoD FLIP are held at Hickam AFB Hawaii for transit aircrew use. Units requiring additional US DoD FLIP (particularly at short notice) should utilise this avenue of supply in preference to urgent requests to RAAF AIS which may result in unavoidable delays.

1.2 Units must contact RAAF AIS immediately with their requirements. RAAF AIS will liaise directly with NIMA at Hickam AFB on the Unit's behalf. Units are not to contact NIMA at Hickam AFB directly unless advised to do so by RAAF AIS. This service is provided as a favour by NIMA to RAAF AIS and is not to be abused.

2. Planning Products

2.1 General Planning (GP)

2.1.1 Contains general information on all FLIP, terms, explanation of the divisions of United States Airspace, Flight Plans and Codes, common worldwide pilot procedures, ICAO procedures, Operations and Firings over the High Seas and Aviation Weather Codes.

2.2 Area Planning (AP/1, AP/2, AP/3 and AP/4&4A)

2.2.1 Contains planning and procedural information for specific geographical areas as follows:

- a) AP/1 North and South America
- b) AP/2 Europe, Africa, and the Middle East
- c) AP/3 Pacific Australasia and Antarctica
- d) AP/4&4A Eastern Europe and Asia.

2.3 Area Planning - Special Use Airspace (AP/1A, AP/2A, AP/3A and AP/4&4A)

2.3.1 These documents contain all Prohibited, Restricted, Danger, Warning and Alert areas listed by country. Military Operations and known Parachute Jumping Areas are also listed. These documents cover the same geographical areas as the Area Planning documents.

2.4 Area Planning - Military Training Routes - North and South America (AP/1B)

2.4.1 Contains information pertinent to military routes, including IFR Military Training Routes (IR), VFR Military Training Routes (VR), Slow Speed Low Altitude Training Routes (SR), Refuelling Tracks/Anchors/VFR Helicopter Refuelling Tracks (AR), and avoidance locations. Charts containing graphic depictions of the IR, VR and SR route systems throughout the United States and Alaska are also included.

3. En Route and Terminal Publications

3.1 US DoD En Route Publications are designed to provide radio navigation, departure, airway structure, letdown, approach and landing information for use during the in-flight phase of IFR operations.

3.2 A brief description of each type of publication commences below, and a list of each publication produced by US DoD by geographic region is included at the end of this section.

3.3 Some of the publications in each geographic region are not produced and others are amalgamated as the areas are small or lack sufficient information to warrant production of a separate document.

3.4 Flight Information Handbook

3.4.1 This handbook contains AI required by US DoD aircrews in flight, but which is not subject to frequent change. Sections include information on Emergency Procedures, FLIP and NOTAM abbreviation/codes, National and International Flight Data and Procedures, MET Information, Conversion Tables, and Standard Time Signals. The handbook is designed for worldwide use in conjunction with DoD FLIP En Route Supplements.

3.5 En Route Low Altitude Charts

3.5.1 These charts portray the airway system and related data required for IFR operations below the appropriate Flight Levels as designated in the area for the route structure.

3.6 En Route High Altitude Charts

3.6.1 These charts portray the airway system and related data required for IFR operations above the appropriate Flight Levels as designated in the area for the route structure.

3.7 Sectional Aeronautical Chart - Hawaiian Islands

3.7.1 This chart is designed for visual navigation of slow to medium speed aircraft. The topographic information featured consists of the relief and a judicious selection of visual checkpoints used for flight under VFR. The checkpoints include populated places, drainage patterns, roads, railroads, and other distinctive landmarks. The aeronautical information on Sectional Charts includes visual and radio aids to navigation, airports, controlled airspace, restricted areas, obstructions, and related data.

3.8 En Route IFR Supplement

3.8.1 This supplement contains an alphabetical IFR Airport/Facility Directory, Special Notices and Procedures required to support the Enroute and Area Charts.

3.9 En Route VFR Supplement

3.9.1 This supplement contains an alphabetical listing of selected VFR airports with sketches.

3.10 Terminal High Altitude

3.10.1 Contains high altitude Instrument Approach Procedures with Airport Sketches, Airport Diagrams, Standard Instrument Departure, and Radar Instrument Approach Minimums. Transitional information from the High Altitude Routes structure to the Terminal Facility has been added to charts servicing the United States area.

3.11 Terminal Low Altitude

3.11.1 Contains low altitude Instrument Approach Procedures with Airport Sketches, Airport Diagrams, Standard Instrument Departure, and Radar Instrument Approach Minimums.

3.12 Area Charts

3.12.1 These charts portray the airway system and related data required for IFR operations in selected terminal areas.

3.13 Area Arrival Charts Depicting Terrain Data

3.13.1 These charts contain terrain data for selected airports which have significant surrounding terrain which may affect aircraft during departure and approach.

3.14 VFR Arrival/Departure Routes

3.14.1 This booklet is designed to satisfy DoD requirements for establishing VFR Arrival and Departure Routings.

3.15 En Route and Terminal Products by Region

3.15.1 United States

- a) En Route IFR Supplement.
- b) En Route VFR Supplement.
- c) En Route Low Altitude (IFR below 18000FT AMSL) - 28 charts.
- d) En Route High Altitude (IFR above 18000FT AMSL) - 6 charts.
- e) Area Charts (selected TMA below 18000FT AMSL) - 2 charts.
- f) Terminal High Altitude - 4 books.
- g) Terminal Low Altitude - 15 books.
- h) Area Arrival Charts Depicting Terrain Data - 6 charts (United States and Greenland).
- i) Terminal Airport Diagrams, Civil Standard Instrument Departures, Profile Descent Procedures and Standard Terminal Arrival Routes.

3.15.2 Alaska

- a) En Route Supplement (IFR and VFR).
- b) En Route Low Altitude (IFR below 18000FT AMSL) - 4 charts.
- c) En Route High Altitude (IFR above 18000FT AMSL) - 2 charts.
- d) Terminal High/Low.
- e) Area Arrival Charts Depicting Terrain Data - 2 charts.

3.15.3 Canada and North Atlantic

- a) En Route Supplement (IFR and VFR).
- b) En Route Low Altitude (IFR below 18000FT AMSL) - 10 charts with 2 additional Terminal Area Charts.
- c) En Route High Altitude (IFR above 18000FT AMSL) - 4 charts.
- d) Terminal High/Low.

3.15.4 Caribbean and South America

- a) En Route Supplement (IFR and VFR).
- b) En Route Low Altitude - 17 charts plus 2 Terminal Area Charts.
- c) En Route High Altitude - 6 charts.
- d) Terminal High/Low Altitude.
- e) Area Arrival Charts Depicting Terrain Data - 2 charts.

3.15.5 *Europe, North Africa and Middle East*

- a) En Route Supplement (IFR and VFR).
- b) En Route Low Altitude - 20 charts with 4 accompanying Terminal Area charts.
- c) En Route High Altitude - 15 charts.
- d) Terminal High/Low Altitude - 7 books.
- e) Area Arrival Charts Depicting Terrain Data - 5 charts.

3.15.6 *Africa*

- a) Combined En Route Supplement/Terminal High/Low Altitude.
- b) En Route High/Low Altitude - 4 charts plus 1 Terminal Area Chart of Johannesburg.
- c) Area Arrival Chart of Johannesburg.

3.15.7 *Pacific, Australasia and Antarctica*

- a) En Route Supplement (IFR and VFR).
- b) En Route High/Low Altitude - 20 charts plus 2 Terminal Area charts of the following;
 - 1) T-1 Bangkok, Hong Kong, Delhi, Seoul/Osan, Singapore, Karachi and Tokyo,
 - 2) T-2 Auckland, Brisbane, Darwin, Perth, Manila, Melbourne and Sydney.
- c) Terminal High/Low Altitude - 3 books.
- d) Area Arrival Charts Depicting Terrain Data - 6 charts.

3.15.8 *Eastern Europe and Asia*

- a) En Route Supplement/Terminal.
- b) En Route High/Low Altitude - 9 charts plus 1 Terminal Area Chart.

4. FLIP Amendment Service

4.1 All FLIP Publications are amended during the period between their effective dates by either a Planning Change Notice (PCN), En Route Change Notice (ECN), or Terminal Change Notice (TCN) for Planning, En Route or Terminal products respectively.

4.2 Additionally, Urgent Change Notices (UCN) are published as required.

CAT 2.3 ROYAL AIR FORCE FLIGHT INFORMATION PUBLICATIONS

1. General

1.1 RAF FLIP falls into one of three categories: Planning, En Route and Terminal. All Publications are supported by a comprehensive Amendment service.

2. En Route Products

2.1 *En Route Supplements (ERS)*

2.1.1 Provide a comprehensive listing of AI for the selected areas of coverage. The following information is shown;

- a) All active British Military aerodromes regardless of size,
- b) Other military and selected civil aerodromes with a hard surface runway length of at least 5000FT (1530M) and some communication facilities,
- c) Other aerodromes at the discretion of 1 AIDU,
- d) All relevant Communications and Navigational facilities.

2.1.2 En Route Supplements are published for the following areas:

- a) British Isles and North Atlantic.
- b) Northern Europe.
- c) European Mediterranean.
- d) Southern Asia and Far East.
- e) South Atlantic and Africa.

2.2 *Flight Information Handbook (FIH)*

2.2.1 Designed to provide a digest of information useful to aircrew in flight. It contains emergency and safety procedures, a list of en route procedures, general planning information, codes and conversion tables.

2.3 Radio Communication Failure - National Procedures (RCF)

2.3.1 Describes the radio communication failure procedures for countries within the RAF FLIP area of coverage that have declared differences from the basic ICAO Radio Communication Failure Procedure.

2.4 En Route Charts (ERC) Series VI

2.4.1 En Route Charts give details of ATS routes, designated airspace, airspace reservations, radio navigation facilities and en route communications. Due to chart congestion sufficient information is given for transit flight only. ERCs should be used in conjunction with En Route Supplements, Planning Documents and Terminal Publications.

2.4.2 Chart coverage diagrams for the existing and future coverage follow this section. The following types of ERC are published:

- a) *Low Altitude* - these charts portray AI within the vertical limits of each Flight Information Region (FIR), as stated on the chart panel.
- b) *High Altitude* - AI is shown only for the Upper Airspace. Where no Upper Flight Information Region (UIR) is defined, the lower limit of the AI shown on the chart is FL200.
- c) *High/Low Altitude* - these charts show AI for both upper and lower airspace.
- d) *Area Navigation (RNAV)* - Area navigation information is shown on charts EU(H)RNAV 1-4 which cover routes in the European area.

3. Terminal Products

3.1 Standard Instrument Departure and Arrival Charts and Noise Abatement Procedures

3.1.1 Loose leaf pages designed to enable crews to carry out intermediate arrival and departure procedures under Instrument Flight Rules, as published by the Controlling Authorities. Only AI pertinent to these procedures is published, and these documents should therefore, be used together with the relevant ERCs which give details of ATS routes, designated airspace, airspace reservations, radio navigation facilities and en route communications. Noise Abatement Procedures are included where published.

3.2 Terminal Approach Procedure (TAP) Charts

3.2.1 TAP charts are intended to be used in conjunction with other FLIP. They illustrate graphically such AI as is necessary to enable an instrument approach to be made. Where necessary, supplementary charts (Radar Minima, Landing, Taxi, Ramp and Special Procedures) are also published.

3.3 Terminal Chart Booklets

3.3.1 Six Terminal Chart Booklets are published with all procedures for most UK civilian and military airfields:

- a) Terminal Charts Volume 1 (Includes UK North, Iceland and Norway).
- b) Terminal Charts Volume 2 (Includes UK Central and Northern Eire).
- c) Terminal Charts Volume 3 (Includes UK South and Southern Eire, Guernsey and Jersey).
- d) Terminal Charts Volume 4 (Includes Belgium, Denmark and Holland).
- e) Terminal Charts Volume 5 (Includes France and Germany).
- f) Terminal Charts Volume 6 (Includes Cyprus, Gibraltar, Greece, Italy, Malta, Morocco, Portugal, Sicily and Spain).

3.4 Fast-Jet Terminal Chart Booklets

3.4.1 These books are primarily for use by fast-jet operators and contain TACAN and ILS procedures for each instrument runway, and other non-procedural charts if appropriate, at selected aerodromes in the UK, Belgium, Ireland, Germany, Iceland, Netherlands and Norway.

3.4.2 Two Fast-Jet Chart Booklets are published:

- a) Fast-Jet Terminal Charts Northern Area.
- b) Fast-Jet Terminal Charts Southern Area (Including Germany).

3.5 Terminal Charts Information & Legends (TAPIL)

3.5.1 This booklet explains the format and symbols used in No1 AIDU Terminal Charts.

3.6 Helicopter Landing Sites

3.6.1 Three directories of helicopter landing sites are published, each containing detailed graphics and associated information for selected sites. The following directories are published:

- a) *Helicopter Landing Sites UK*. Contains selected military and civil sites in the UK, helicopter routes for selected zones and selected training areas.
- b) *Helicopter Landing Sites Hospitals UK*. Contains details of MIL/civil hospital landing sites (including Northern Ireland) and helicopter routes in selected control zones and training areas.
- c) *Helicopter Landing Sites & Visual Approach and Departure Charts Europe*. Contains selected military and civil sites in Belgium, Cyprus, Denmark, Faroe Islands, France, Germany, Italy, Norway and Netherlands, with associated Visual APP/DEP Charts and Controlled VFR Flights (CVFR) Charts.

3.7 Minor Airfields UK (MAD)

3.7.1 Contains detailed colour graphics and information for military and selected civilian aerodromes in the UK that either do not have a published instrument let down procedure, or do not meet the normal minimum criteria for inclusion in other FLIP.

4. FLIP Amendment Service

4.1 En Route Bulletin (ERB)

4.1.1 Issued fortnightly, updates all FLIPs (except Terminal Charts) to the date of the bulletin and provides advance information of impending changes. Each issue replaces the previous edition, which should be destroyed.

4.2 Terminal Chart Catalogue (TCC)

4.2.1 Issued monthly, lists and updates current TAP, SID and STAR charts. Unlisted charts are deemed to be withdrawn. Each issue replaces the previous edition.

4.3 Terminal Chart Amendment Bulletin (TCAB)

4.3.1 Issued weekly, lists amendments to Terminal Charts, Terminal Charts Books (Vol 1-6), Fast-Jet Books (North and South), Helicopter Landing Sites Books (EUR & VAD, UK, UK HOSP) and Minor Aerodromes Books.

4.4 Chart Amendment Low Flying (CALF) Incorporating Low Flying Supplement

4.4.1 Issued monthly, lists significant changes to the aeronautical information affecting the national low flying airspace depicted on Low Flying Overprint Charts.

CAT 2.4 FIJI AERONAUTICAL INFORMATION PUBLICATIONS

1. General

- 1.1 AI which is provided by RAAF AIS for Fiji is in the form of a VTC.

2. Terminal Products

2.1 Visual Terminal Charts (VTC)

2.1.1 VTC is compiled and published by Terralink New Zealand Ltd. for the New Zealand Defence Force and the Civil Aviation Authority of Fiji. VTC provides both aeronautical and topographical information for VFR operations in and near terminal areas. In some cases, these charts show detail of tracks to be flown and significant landmarks to aid pilots of VFR aircraft to navigate through and around controlled airspace. The Fiji VTC is an individual chart.

CAT 2.5 CANADIAN (DND) FLIGHT INFORMATION PUBLICATIONS

1. General

1.1 The arrangement between Department of Defence (AFHQ) and the Department of National Defence Canada, provides for the exchange of FLIP. The following items are available (further information online - http://aero.nrcan.gc.ca/english/ATS_enroute_e.html):

- a) Flight Planning and Procedures.
- b) RNC En Route Low Altitude - 10 charts.
- c) RNC En Route High Altitude - 6 charts.
- d) Canada Flight Supplement.
- e) Canadian Forces Flight Supplement.
- f) Terminal High/Low IAP - 5 books.
- g) Terminal Area Charts - 2 charts.

2. Planning Products

2.1 Flight Planning and Procedures (GPH 204)

2.1.1 Provides a ready reference to planning and procedural information concerning IFR operations.

3. En Route Products

3.1 RNC En Route Low Altitude (GPH 206)

3.1.1 The RNC En Route Low Altitude set, Canada and North Atlantic consisting of 10 charts are intended for use up to but not including 18,000FT AMSL within Canadian Domestic Airspace and that airspace over international waters and foreign territory in which Canada accepts responsibility for the provision of Air Traffic Control Services.

3.2 RNC En Route High Altitude (GPH 207)

3.2.1 The RNC En Route High Altitude set, Canada and North Atlantic consisting of 6 charts (on two sheets), are intended for use up to 18,000FT AMSL and above within Canadian Domestic Airspace and that airspace over international waters and foreign territory in which Canada accepts responsibility for the provision of Air Traffic Control Services.

3.3 Canada Flight Supplement (GPH 205)

3.3.1 The Canada Flight Supplement is a joint civil/military publication which contains information on land and some water aerodromes and is used as a reference for the planning and safe conduct of air operations.

3.4 Canadian Forces Flight Supplement (GPH 205S)

3.4.1 The Canadian Forces Flight Supplement is a military publication which contains information on aerodromes that are:

- a) military
- b) 4000FT in length or greater hard surfaces and have an instrument approach procedure
- c) North of 60 degrees North having an instrument approach procedure regardless of surface or length.

4. Terminal Products

4.1 Terminal High/Low IAP (GPH 200)

4.1.1 Contains Noise Abatement Procedures, Standard Instrument Departure Procedures, and both high and low altitude Instrument Approach Procedures.

4.1.2 There are five volumes as follows:

- a) Quebec.
- b) Ontario.
- c) Manitoba, Saskatchewan, and Alberta.
- d) British Columbia and Northern Canada.
- e) Atlantic.

4.2 Terminal Area Charts (GPH 206 T1/T2)

4.2.1 These charts are for use up to but not including 18,000FT AMSL within Canadian Domestic Airspace and that airspace over international waters and foreign territory in which Canada accepts responsibility for the provision of Air Traffic Control Services.

4.2.2 There are two charts in the series, with charts for Canada, Azores, Bermuda and Iceland included for military use.

CAT 2.6 PAPUA NEW GUINEA FLIGHT INFORMATION PUBLICATIONS

1. General

1.1 RAAF AIS purchases FLIP from the Papua New Guinea Department of Transport and Works, Office of Civil Aviation. The following items are available:

- a) Aerodrome Communications Chart (ADCOM).
- b) Radio Navigation Chart (RNC).
- c) Visual Terminal Charts (VTC).

2. Planning Products

2.1 Aerodrome Communications Chart (ADCOM)

2.1.1 ADCOM provides aerodrome/airstrip locations and abbreviations, FIS sector boundaries and communication frequencies for use within relevant sectors. It shows ATS units responsible for provision of air traffic services within a sector, ATZ or CTR.

3. En Route Products

3.1 Radio Navigation Chart (RNC)

3.1.1 RNCs are designed to show significant air traffic routes, controlled airspace, prohibited, restricted and danger areas, air traffic and radio-navigation services. Each route is divided into segments, which include information relating to magnetic tracks, distances and route lowest safe altitudes. Information published on these charts is supplemented by information contained in the relevant PNG AIP Flight Supplement.

4. Terminal Products

4.1 Visual Terminal Charts (VTC)

4.1.1 VTCs provide both aeronautical and topographical information for VFR operations in the vicinity of major aerodromes. In some cases, these charts show detail of tracks to be flown and significant landmarks which are used by pilots of VFR aircraft to avoid penetration of controlled airspace. They are available as a complete package or individually as follows;

- a) Goroka/Mt. Hagen,
- b) Wewak/Madang,
- c) Kiunga/Tabubil,
- d) Mendi/Tari,
- e) Port Moresby/Nadzab,
- f) Tokua (Rabaul).