NATO STANDARD

AATMP-23

CONTENT AND FORMAT OF FLIGHT INFORMATION PUBLICATION (FLIP) TERMINAL HIGH/LOW INSTRUMENT APPROACH PROCEDURES, INSTRUMENT DEPARTURE PROCEDURES, AND AERODROME DIAGRAMS/LAYOUTS

Edition A Version 1
JULY 2018

NORTH ATLANTIC TREATY ORGANIZATION
ALLIED AIR TRAFFIC MANAGEMENT PUBLICATION

Published by the
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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

19 July 2018

1. The enclosed Allied Air Traffic Management Publication AATMP-23, Edition A, Version 1, CONTENT AND FORMAT OF FLIGHT INFORMATION PUBLICATION (FLIP) TERMINAL HIGH/LOW INSTRUMENT APPROACH PROCEDURES, INSTRUMENT DEPARTURE PROCEDURES, AND AERODROME DIAGRAMS/LAYOUTS, which has been approved by the nations in the AIR TRAFFIC MANAGEMENT – COMMUNICATIONS, NAVIGATION AND SURVEILLENCE ADVISORY GROUP, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 3970.

2. AATMP-23, Edition A, Version 1, is effective upon receipt.

3.

4. This publication shall be handled in accordance with C-M(2002)60.

Dieter Schmaglowski
Deputy Director NSO
Branch Head P&C

Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

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RESERVED FOR NATIONAL LETTER OF PROMULGATION

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS

Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.

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RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]

Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.

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INTRODUCTION

1. The purpose of AATMP-23 is to list the minimum information required and the format to be used when producing for publication terminal instrument approach procedures, standard instrument departures (SIDs) procedures, and aerodrome diagrams.

2. Participating nations agree to the requirements outlined in Annexes B, C, and D. The application of this STANAG in exercises or times of tension and war is subject to the decision of the appropriate operational authority.

3. The requirements detailed in this document have been established for the purpose of ensuring the minimum information is included when publishing terminal instrument approach procedures, standard instrument departures, and aerodrome diagrams/layout and that it is depicted in a uniform manner.

4. To accommodate the minor differences in member nation publishing specifications, this STANAG states only the minimum information necessary to ensure a safe accomplishment of the charted procedure or safe movement on the aerodrome manoeuvring surfaces. In addition, certain options in chart format are allowed to preclude massive publishing specification changes by member nations.

LIST OF ANNEXES

Safety Annex

5. Safety considerations in implementing STANAG 3970 are contained in Annex A.

Terminal Instrument Approach Procedures Annex

6. Terminal Instrument Approach Procedures minimum required information when implementing STANAG 3970 is contained in Annex B.

Standard Instrument Departure (SID) Procedures Annex

7. Standard Instrument Departure (SID) Procedures minimum required information when implementing STANAG 3970 is contained in Annex C.

Aerodrome Diagram/Layout Annex

8. Aerodrome Diagram/Layout minimum required information when implementing STANAG 3970 contained in Annex D.

Annex A: Safety Considerations in Implementing STANAG 3970 – Content and Format of Flight Information Publications (FLIP) Terminal High/Low Instrument Approach Procedures, Instrument Departure Procedures and Aerodrome Diagrams/Layouts

Introduction:
This Annex is intended for NATO Led Service Providers in implementing this STANAG at existing or planned airfields as well as during deployed operations.

It includes general considerations such as the suitability of the STANAG/AATMP for the required operations, currency with regard to edition number and amendments, applicability of related documents, nations ratifying and reservations.

Specific safety considerations are identified by the custodian of the STANAG/AATMP and national SMEs along with consequences and possible mitigations.

Custodian POC. For users to provide any comments and lessons learned: Capt Scott Anningson (Canada) scott.anningson@forces.gc.ca

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General:
In the implementation of any STANAG/AATMP, the NATO Led Service Provider should verify the items listed below using the NATO Standardization Office (NSO) pass word protected Website https://nso.nato.int

A. Suitability	Review STANAG 7210 (AEP-68) *Guidance in the Selection of STANAGs for Deployed Operations, to determin*e if the STANAG/AATMP is suitable for the type of operation required.
B. Currency	Ensure that STANAG/AATMP Edition and any Amendments are the most current as shown on the NSA website.
C. Related Documents	Obtain related documents cited in the STANAG/AATMP and, in particular, review those documents where criteria as been adopted. STANAGs are available on the NSA Website whereas civilian documents, such as ICAO, may be available from your Aviation or Engineering Commands.
D. Implementation Status	Review the ratification status along with any reservations to the STANAG/AATMP on the NSA Website and, in particularly, the status for those for nations taking part in the operation.
E. Compliance	For existing airfield facilities and procedures, determine if they are in compliance with the criteria and standards specified in the STANAG/AAMTP.

Specific:
The safety considerations, consequences and possible mitigations listed below by the STANAG/AATMP Custodian assisted by Subject Matter Experts are by no means exhaustive or fully applicable to all environments or situations.

Full safety surveys in accordance with STANAG 4720 *NATO Standard for Air Traffic Management (ATM) Safety Management System (SMS)*, shall still be carried out.

Annex A: Safety Considerations in Implementing STANAG 3970 – Content and Format of Flight Information Publications (FLIP) Terminal High/Low Instrument Approach Procedures, Instrument Departure Procedures and Aerodrome Diagrams/Layouts

Safety Considerations	Consequences	Possible Mitigations
Individual designer may inadvertently incorporate a format error into the newly published Instrument Procedure.	Incorrect interpretation by aircrew utilizing the instrument procedures leading to an aircraft accident.	1) Ensure solid quality control measures are employed. 2) All Instrument procedures must be checked by an independent qualified designer prior to release for operational use.
Outdated charted information depicted in the Instrument procedure.	Aircraft accident	1) Ensure most recent data is used to depict aerodrome information. 2) Create a feedback loop between the publisher/designer and the local airport authorities.

Annex B: Minimum Information Required for Terminal Instrument Approach Procedures

INTRODUCTION

1. Terminal instrument approach procedures publications produced by NATO members shall include a communications list, a plan view, a minima block and, when appropriate, an aerodrome sketch. A sample format is depicted in Figure B-1.

GENERAL REQUIREMENTS

2. Terminal instrument approach procedures diagrams should include:

a. Name of agency authorizing the procedure;

b. Aerodrome name and ICAO location indicator. This shall be enlarged and bold text and should be located in the bottom right corner outside the frame;

c. Identification showing type of procedure. This shall be in enlarged and bold text and shall be located in the bottom left corner outside the frame;

d. Identification showing the rules which were used in the design of the procedure. This shall be in enlarged and bold text and shall be located in the top left corner outside the frame. One of the following words shall be used:

(1) **TERPS** Procedure designed in accordance with former NATO military criteria (APATC-1 (A)).

(2) **MIPS** Procedure designed in accordance with NATO military instrument procedures standardization implemented by AATCP-1.

(3) **PANS-OPS** Procedure designed in accordance with ICAO DOC 8168 Volume II.

(4) **NATIONAL XXX** Procedure designed in accordance with national specific criteria, with XXX being the NATO abbreviation for the country, e.g. NATIONAL CAN.

e. Pertinent communications information. This shall be located either across the top or in the top left corner of the planview area;

f. Aerodrome and/or heliport-pad sketch and/or accompanying diagram/layout. The aerodrome sketch shall include the following:

(1) Runways, showing lengths, widths, displaced thresholds and designators;

(2) A representation of taxiways and hard standings;

(3) Arrester gear;

(4) Approach lighting symbols;

(5) Touchdown zone elevation (TDZE) or threshold elevation if TDZE is not available, as applicable;

(6) Navigational facility relevant to the procedure;

(7) Helicopter landing areas;

(8) Aerodrome identification beacon; and

(9) Runway gradient (where it exceeds 0.5%).

g. Approach limitations and/or special warning notices. Notes shall be kept to a minimum and shall be based on user requirements consistent with a safe execution of the procedure;

h. Procedural minima shall be portrayed in accordance with AATCP-1.

i. Criteria used to derive vvisibility minima should be annotated by white letters vertically upward on black background on the left side of the minima box:

(1) **TERPS** Minima assigned in accordance with former NATO military criteria (APATC-1 (A)).

(2) **MIPS** Minima assigned in accordance with NATO military instrument procedures standardization implemented by AATCP-1.

(3) **EU-OPS** Minima assigned in accordance with EU-OPS.

(4) **National XXX** Minima assigned in accordance with national specific criteria, with XXX being the NATO abbreviation for the country, e.g. NATIONAL CAN.

j. Effective date which is usually included in front of the FLIP booklet;

k. Geographic coordinates of the Aerodrome reference point (ARP), normally located at the bottom of the page outside the frame. The coordinates should be given in decimal minutes and, whenever possible, to the nearest one-hundredth of a minute (0.01). Specific geodetic datum used, if known (i.e. WGS84, NAD83, unknown, etc.) should be identified.

l. Aerodrome elevation;

m. Transition altitude, as applicable;

n. Timing block, if appropriate to the procedure;

o. A legend, usually at the beginning of the FLIP booklet;

p. A table of contents, usually at the beginning of the FLIP booklet; and

q. Radar minima, as applicable.

PLAN VIEW

1. The main part of the diagram should show a plan view of the aerodrome and local area, including:

a. Plan view of the procedure;

b. Safety altitude information with:

(1) Minimum sector altitudes portrayed as a circular diagram (not including RNAV TAA); and

(2) Emergency safe altitude

Whenever possible, both sets of values should be portrayed together and should normally be located in the bottom left corner of the plan view.

c. Magnetic variation, if applicable;

d. Significant obstructions, including danger areas and water features (lakes, rivers, oceans);

e. Adjacent aerodromes where pilot confusion may arise;

f. Primary navigation facilities upon which the procedure is based shall be depicted and identified by callsign, channel/frequency and Morse identification contained within a box. In addition, secondary facilities which could be useful may be shown;

g. A range circle within which all depicted features are shown to scale;

h. Large hydrographical features, if applicable. These should be subdued so as not to overcrowd the approach plate;

i. Large built up areas in close proximity to the aerodrome, if applicable. These should be subdued so as to not overcrowd the approach plate;

j. Holding depiction, if applicable; and

k. Lead-in radials, if appropriate for the procedure being flown.

PROFILE VIEW

2. This block of the diagram should show:

l. Profile view of the procedure;

m. Written missed approach instructions entitled “Missed Approach” or a schematic depiction (using missed approach icons) with written missed approach instructions entitled “Missed Approach” shown elsewhere on the plate;

n. Touchdown zone elevation and/or threshold elevation shall be displayed in the aerodrome sketch, and/or underneath the profile;

o. Primary navigational facility;

p. Threshold crossing height (precision approaches or non-precision if applicable) represented as TCH or as RDH (Reference Datum Height);

q. Glideslope information (precision approaches).

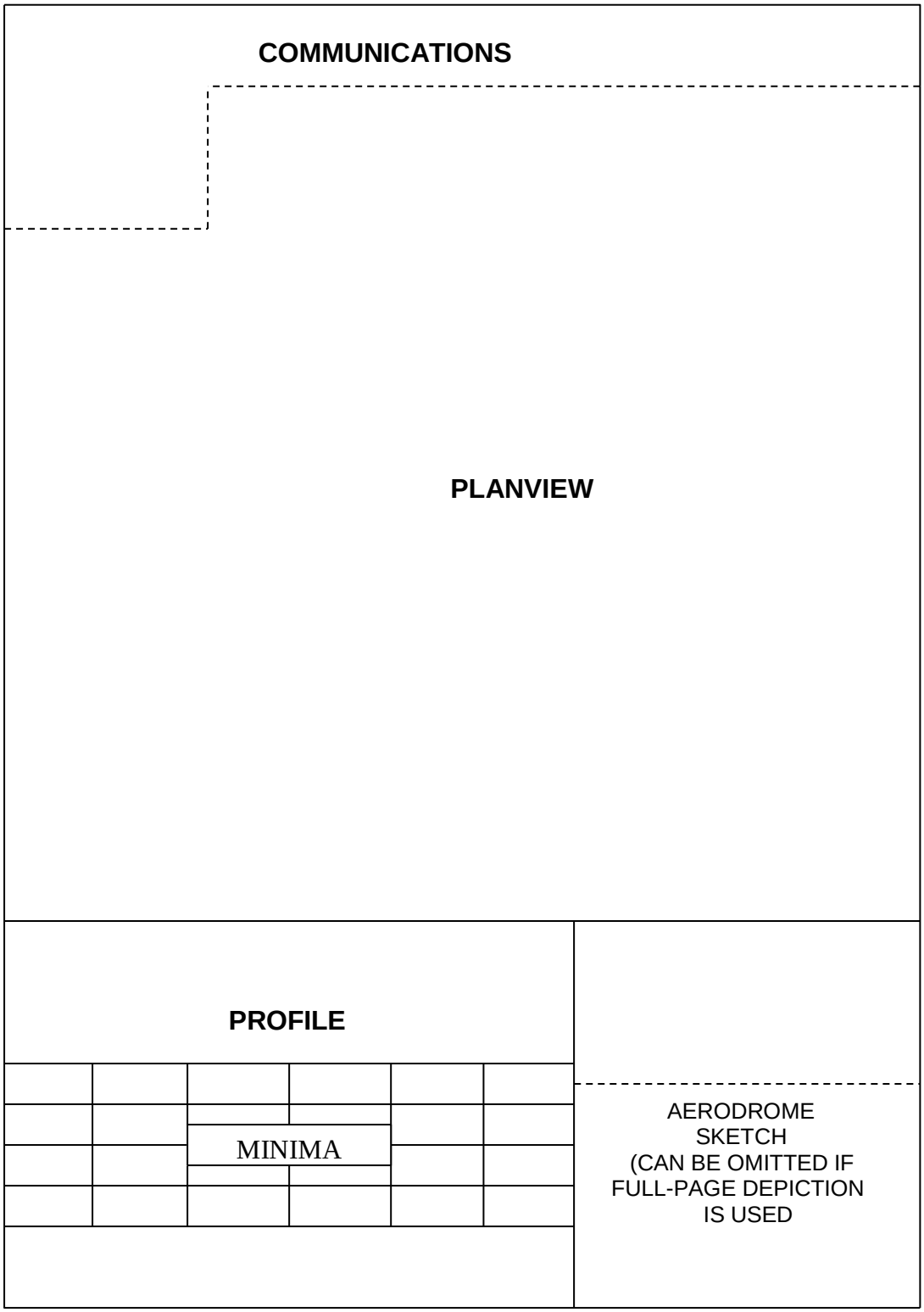

Figure B-1. Terminal Instrument Approach Procedures Chart (sample format)

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Annex C: Minimum Information Required for Standard Instrument Departure (SID) Procedures

INTRODUCTION

1. Terminal standard instrument departure (SID) procedure publications produced by NATO members shall include a communications list, a plan view, a departure route description area, and an aerodrome sketch. A sample format is depicted in Figure B-1.

GENERAL REQUIREMENTS

2. All SID diagrams should include:

a. Name of agency authorizing the procedure;

b. Aerodrome name and ICAO location indicator. This shall be enlarged and bold text and should be located in the bottom right corner outside the frame;

c. Identification showing type of procedure. This shall be in enlarged and bold text and shall be located in the bottom left corner outside the frame;

d. Identification showing which rules were used in the design of the procedure. This shall be in enlarged and bold text and shall be located in the top left corner outside the frame. One of the following words shall be used:

(1) **TERPS** Procedure designed in accordance with former NATO military criteria (APATC-1 (A)).

(2) **MIPS** Procedure designed in accordance with NATO military instrument procedures standardization implemented by AATCP-1.

(3) **PANS-OPS** Procedure designed in accordance with ICAO DOC 8168 Volume II.

(4) **NATIONAL XXX** Procedure designed in accordance with national specific criteria, with XXX being the NATO abbreviation for the country,
e.g. NATIONAL CAN.

e. Pertinent communications information. This shall be located either across the top or in the top left corner of the plan view area;

f. Helicopter landing areas, if appropriate;Departure limitations and special warning notices. Notes shall be kept to a minimum and shall be based on user requirements consistent with safe execution of the procedure;

g. Effective date, usually indicated in the front of the FLIP booklet;

h. Geographic coordinates, including the aerodrome reference point, normally located at the bottom of the page, outside the frame. The coordinates should be listed in decimal minutes and, whenever possible, to the nearest one-hundredth of a minute (0.01). The specific geodetic datum used, if known (i.e WGS84, NAD83, unknown, etc.) should be identified;

i. Aerodrome elevation;

j. Transition altitude;

k. A legend, usually in the front of the FLIP booklet; and,

l. A table of contents or catalogue of current charts, usually in the front of the FLIP booklet.

PLAN VIEW

3. The main part of the diagram should show a plan view of the aerodrome and local area, including:

a. Plan view of the procedure;

b. Safety altitude information will include, as appropriate:

(1) Minimum sector altitudes portrayed as a circular diagram centred on the navigational aid/location on which the altitude is based; and

(2) Emergency safe altitude.

c. Wherever possible, both sets of values should be portrayed together and should normally be located in the bottom left corner of the plan view;

d. Magnetic variation, if applicable;

e. Significant obstructions, danger areas and water features (lakes, rivers, oceans, etc.);

f. Aerodrome in the immediate vicinity of the departure track which affect the departure route may be shown;

g. Primary navigational facilities upon which the procedure is based

shall be depicted and identified by callsign, channel/frequency, and Morse identification contained within a box. In addition, secondary facilities which could be useful may be shown.

DEPARTURE ROUTE DESCRIPTION AREA

4. A written description of the departure procedure, including all turns, altitudes, headings, distances, facilities/fixes and all routes (indicating number, if on airways, or direct, if off airways) to the terminating facility/fix, will be printed in plain text. Lost communication procedure(s) should be included if provided.

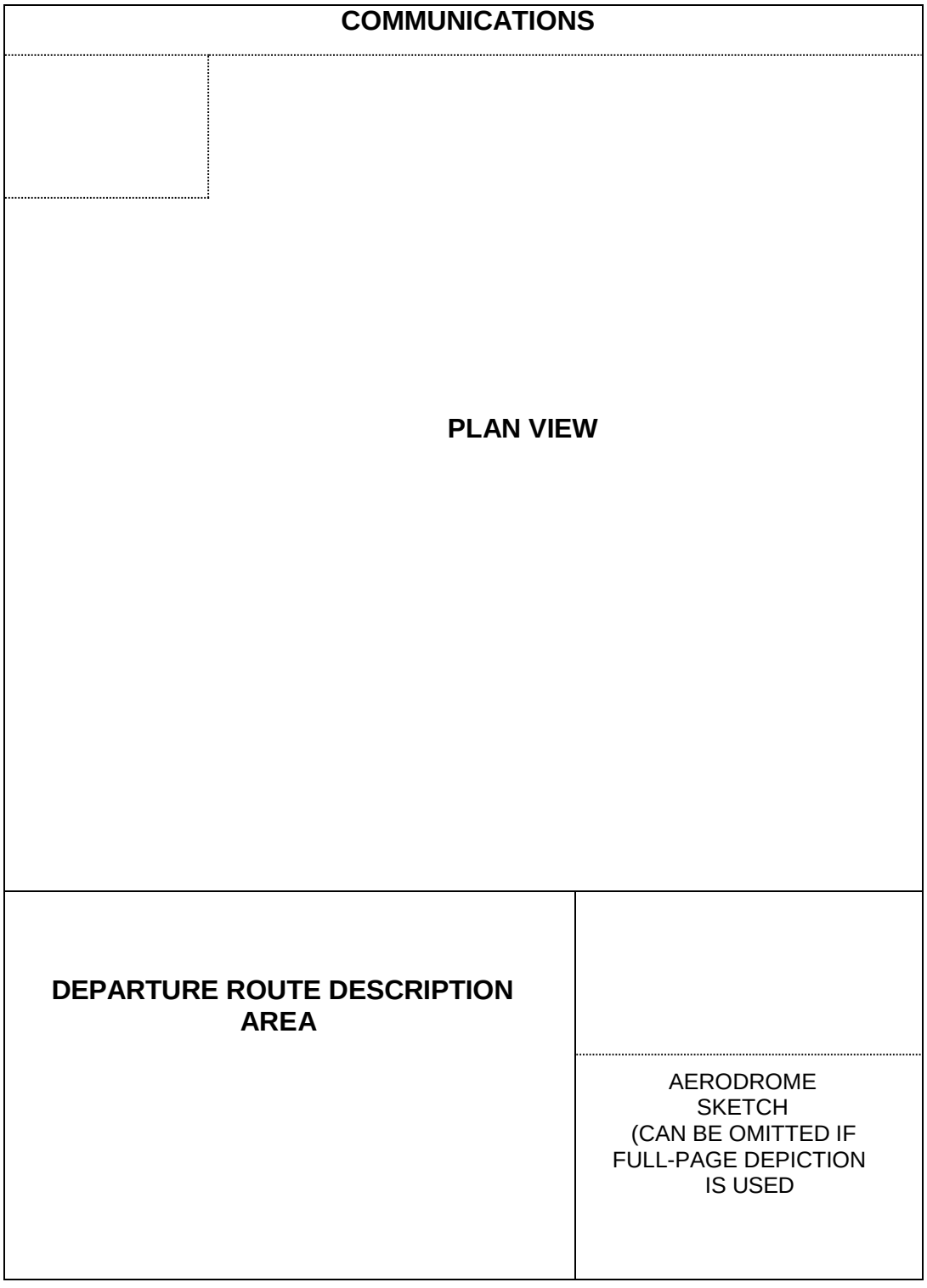

Figure C-1. Standard Instrument Departure (SID) Procedures Chart (sample format)

Annex D: Minimum Information Required for Aerodrome Diagram/Layout

GENERAL REQUIREMENTS

1. Aerodrome diagram/layout charts shall include the following minimum chart information:

a. Name of agency authorizing the chart;

b. Aerodrome diagram/layout title. This shall be in enlarged and bold text and shall be located in the bottom left corner outside the frame;

c. Aerodrome name and ICAO identification. This shall be in enlarged and bold text and shall be located in the bottom right corner outside the frame;

d. Runways, showing lengths, widths, displaced thresholds, gradients, magnetic headings, and designators;

e. A representation of taxiways and hard-standings;

f. Arrestor gear;

g. Approach lighting symbols;

h. Touch-down zone elevations and/or threshold elevations;

i. Aerodrome elevation;

j. All navigational facilities within the graphical area;

k. Helicopter landing areas;

l. Aerodrome identification beacon;

m. Magnetic variation symbol;

n. Airfield reference point symbol and coordinates;

o. Control tower; and,

p. Other unique structures or features as required by the appropriate national authority.

2. Aerodrome diagrams/layouts shall include an accurate position reference system whenever feasible. Legends of all pertinent publication will include an indication of which datum was used for position fixing in that publication and, where differences occur, the datum used will be indicated on the individual page with the aerodrome coordinates.

AATMP-23(A)(1)