



NAMIBIAN CIVIL AVIATION AUTHORITY

Advisory Pamphlet (AP)

ANSSO-AIS-AP175/04

GUIDANCE ON PROVISION OF PRE-FLIGHT AND POST-FLIGHT INFORMATION

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GUIDANCE ON PROVISION OF PRE-FLIGHT AND POST-FLIGHT INFORMATION

1. PURPOSE

This Advisory Pamphlet (AP) provides guidance and information to an AIS provider in organizing its pre-flight information service in accordance with the provision of NAMCAR Part 175. The information in this AP is mainly related to the provision of such a service in a manual environment. Where pre-flight information services are provided by automated means, the guidance contained in Advisory Pamphlet ANSSO-AIS-AP175/03 should also be taken into consideration. This AP also provides guidance to the AIS provider in making arrangements for the collection and distribution of post flight information to meet the requirements of the regulations.

2. BACKGROUND

- (a) The NAM-CAR Part 175 requires an AIS provider providing a service at any aerodrome/heliport normally used for international air operations to make available to flight operations personnel, including flight crews and services responsible for pre-flight information aeronautical information necessary for safety, regularity and efficiency of air navigation and for pre-flight planning purposes.
- (b) The NAM-CARs Part 175 requires an AIS provider to use automated pre-flight information systems to make aeronautical information available to operations personnel including flight crew members for self-briefing, flight planning and flight information service purposes
- (c) The NAM-CARs Parts 175 further requires an AIS provider to make arrangements to receive and distribute information from flight crews regarding the state of operation of air navigation facilities.
- (d) Below are the extracts from the Civil Aviation Regulations to which this Advisory Pamphlet apply.

3. EXTRACTS FROM NAM-CARS, PART 175 – AERONAUTICAL INFORMATION SERVICES

Pre-flight information services

175.07.5 An AIS provider, providing a service for any aerodrome or heliport used for international air operations must make arrangements for the provision of pre-flight information service to personnel concerned with flight operations in accordance with the standards set out in Document NAM-CATS-AIS.

Post-flight information

175.07.6 An AIS provider, providing a service for any aerodrome or heliport used for international air operations must make arrangements for the provision of post-flight information service in accordance with the standards set out in Document NAM-CATS-AIS.

4. EXTRACTS FROM NAM-CATS-AIS

175.07.5 Pre-flight information

- 1.1 For any aerodrome/heliport used for international air operations, aeronautical information relative to the route stages originating at the aerodrome/heliport must be made available to flight operations personnel, including flight crews and services responsible for pre-flight information.
- 1.2 Aeronautical information provided for pre-flight planning purposes must include information of operational significance from the elements of the aeronautical information products.

Compliance Note 1. The elements of the aeronautical information products may be limited to national publications and when practicable, those of immediately adjacent States, provided a complete library of aeronautical information is available at a central location and means of direct communications are available with that library.

Compliance Note 2. A recapitulation of valid NOTAM of operational significance and other information of urgent character may be made available to flight crews in the form of plain language pre-flight information bulletins (PIB). Guidance material on the preparation of PIB is contained in the Aeronautical Information Services Manual (Doc 8126).

175.07.6 Post-flight information

- 1.1 For any aerodrome/heliport used for international air operations, arrangements must be made to receive information concerning the state and operation of air navigation facilities or services noted by aircrews.
- 1.2 The arrangements specified in 1.1 must ensure that such information is made available to the aeronautical information service for distribution as the circumstances necessitate.
- 1.3 For any aerodrome/heliport used for international air operations, arrangements must be made to receive information concerning the presence of wildlife hazard observed by aircrews.
- 1.4 The information about presence of wildlife hazard must be made available to the aeronautical information service for such distribution as the circumstances necessitate.

Compliance Note. See Part 139 for requirements on wildlife hazard management

GUIDANCE ON PROVISION OF PRE-FLIGHT AND POST-FLIGHT INFORMATION

1. PROVISION OF PRE-FLIGHT INFORMATION SERVICE

1.1 General

1.1.1 NAMCAR Part 175 specifies that pre-flight information must be made available at each aerodrome/heliport normally used for international operations. This includes all aerodromes/heliports designated for regular use by international commercial air transport as listed in the relevant ICAO regional plans and any aerodromes/heliports serving as alternates to these regular aerodromes/heliports.

1.1.2 The following guidance material is primarily intended to assist AIS providers in organizing their pre-flight information service. It should be noted that this service is required by all operators and particularly those who have not made specific arrangements to obtain such information. The service should also be arranged so as to supplement existing arrangements where these do not fully meet the operators' requirements. In determining the extent of the service that will be provided, the AIS provider should note that the following information is mainly related to the provision of such a service in a manual environment. The provisions of Advisory Pamphlet ANSSO-AIS-AP175/03 may also be taken into consideration where pre-flight information services are provided by automated means.

1.2 Responsibility for provision of pre-flight information services

1.2.1 A provider of AIS is responsible for the provision of pre-flight information in accordance with part 175. Aerodrome/heliport AIS units established for this purpose should be organized and administered on the basis of the amount and type of traffic normally expected to use the aerodrome/heliport and on the length and number of the air routes originating at the aerodrome/heliport. Such units should be staffed by qualified AIS personnel, since a complete and responsible briefing can only be provided by staff possessing the requisite knowledge in this field. It may be necessary, however, to delegate such responsibility to an air traffic services (ATS) unit or other operational service at an aerodrome/heliport where minimal traffic requires personnel to perform more than one task.

1.3 Facilitation of self-briefing

1.3.1 The main objective of an aerodrome/heliport AIS unit is to make available to pilots the aeronautical information required for a flight. Often, a pilot may not have sufficient time to spend in the AIS unit and it is therefore important that information be presented in a manner that will facilitate self-briefing. This will provide a time-saving method for the pilot to obtain required information. In order to provide this type of service, the main factors to be considered are:

- a) the layout of the briefing room;
- b) the format of the pre-flight information bulletins
- c) (PIB or “bulletins”);
- d) the wall displays; and
- e) the access to basic information.

These factors are dealt with in detail in this AP.

1.3.2 In addition to providing a self-briefing service, verbal briefings, when required, should also be available during the operational hours of the aerodrome/heliport.

2. LOCATION OF AN AIS UNIT

2.1 Aerodrome/heliport

AIS units should be situated close to other aerodrome/heliport flight services and to airline flight operations offices to facilitate pre-flight functions by flight crews with maximum efficiency and without their being compelled to cover undue distances. Ideally, all such services, namely meteorological briefing flight clearance and the collection of fees and charges (if any), should be established in a group of soundproof offices located on the ground floor of the terminal building, preferably near the apron.

2.2 In order to reduce ground time, particularly for flights continuing without a change of crew, arrangements should be made for access to pre-flight information services without the necessity of customs clearance and/or other formalities. For the convenience of crews unfamiliar with the aerodrome/heliport, a diagram indicating the location of the aerodrome/heliport AIS unit should be placed at the apron entrance(s) to the terminal building.

- 2.3 Where the aerodrome/heliport is the site of a flight information centre or area control centre, it may be advisable to locate the ATS unit and the AIS unit in close proximity (providing the principles outlined above are not compromised).

3. LAYOUT OF AN AIS UNIT

3.1 General

- 3.1.1 There is no ideal layout for an AIS unit that can be applied generally. The space available, the extent of the coverage zone and the demand for pre-flight information services (which reflects the type and volume of traffic using the aerodrome/heliport) will be the determining factors. However, some principles are considered to be generally applicable, namely:

- a) briefing material relating to major facilities, ATS schemes and navigation warnings should also be displayed on maps and charts to the greatest extent possible;
- b) elements of the Integrated Aeronautical Information Package should be readily available for examination with a minimum amount of contact with briefing personnel;
- c) suitable space and work tables should be available for the study of documentary material, and for the plotting and planning of flight operations; and
- d) the displays and other facilities in the briefing room should, as far as possible, be arranged in a logical sequence so that personnel using the facilities may proceed with a minimum of time and effort. (This would be facilitated by a separate entrance and exit.)

3.2 Wall displays

- 3.2.1 Wall displays normally should consist of the following, although the extent of the coverage zone, the availability of suitable charts and the size of the available wall area may necessitate some deviation:

- a) two sets of charts of the coverage zone at small scale (1:1 000 000 to 1:3 000 000) showing:
 - (i) the ATS system, aerodromes/heliports and radio aids to navigation;
 - (ii) areas over which the flight of aircraft is dangerous, restricted or prohibited;

Note. The areas contained in navigation warning bulletins should be plotted on glass or transparent plastic sheeting and superimposed on this chart.

- b) a 1:500 000 or larger scale chart of the State;

Note. This may be limited to the flight information region (FIR) in which the aerodrome/heliport is located and adjacent FIR.

- c) an outline chart of the coverage zone at small scale with an index to the area or route breakdown used in distributing briefing material. This chart should show the FIRs and items that would be mentioned in a briefing bulletin;
- d) a large scale chart or series of charts of the aerodrome/heliport traffic area showing controlled areas, approach aids, and holding, approach and departure procedures (the scale should be as large as practicable);
- e) an Aerodrome Obstacle Chart;
- f) a large scale chart (approximately 1:3 000) of the aerodrome/heliport movement area and approaches (in so far as necessary to include all lighting aids) showing the location of all technical services and the normal taxiing routes to be followed from apron to take-off positions; and
- g) a large scale diagram of the terminal area showing location of various offices and facilities of interest to visiting flight crews.

3.3 Updating of charts

- 3.3.1 Due to the frequent changes in the ATS system, the information about the current situation can best be indicated by the use of coloured tapes, pins, markers, etc., superimposed on a chart. Such a presentation can be amended from day to day and is much more intelligible to flight crews.

3.4 Bulletin trays and bulletin amendments

- 3.4.1 It will generally be found that the most convenient way of storing bulletins is to put them in trays. Each tray should be clearly marked with an indication of the type of bulletin

(route, area, FIR, etc.). The tray should be deep enough to hold at least the number of bulletins anticipated to be required for a 24-hour period.

3.5 Access to basic documents

- 3.5.1 Basic documents (such as up-to-date AIP, AIP Supplements, AIC and ICAO documents) should be stored in such a way as to facilitate access to those wishing to refer to them. Whatever filing system a unit chooses to adopt for its reference library should be such that it is immediately identifiable to the intended user and thereby help to promote self-briefing.

3.6 Sale of Aeronautical charts

- 3.6.1 At each aerodrome/heliport AIS unit arrangements could be made, where practicable, to have appropriate aeronautical charts available for sale. The quantity maintained on hand should be kept to the minimum consistent with the potential demand in order to avoid, as much as possible, the effect of obsolescence.

4. COVERAGE ZONE

4.1 Geographic coverage

- 4.1.1 For each aerodrome/heliport AIS unit, the geographic area and/or the air routes for which aeronautical information is to be available must be determined and periodically reviewed as changes take place or are anticipated in the air traffic pattern.
- 4.1.2 The coverage zone must be sufficient to cater for at least the first route stage requirements of not only the national carriers but also for those of the foreign airlines operating into or through the territory of Namibia territory. This coverage must satisfy day-to-day requirements quickly and accurately while leaving sufficient margin to cater for new requirements without undue strain. Additionally, the possibility of charter flights to locations away from the routine traffic pattern must be kept in mind. The coverage zone for which information/data must be held can be obtained by a survey of the user requirements at each of the aerodromes/heliports, within a State, used for international air operations. An example of an information coverage zone form, which includes explanatory notes on the information/data required under column headings, is reproduced in Figure 1 of this AP.

- 4.1.3 In general, the coverage zone should be limited to the Windhoek FIR within which the aerodrome/heliport is located, the FIR(s) adjacent thereto and all air route stages (i.e. a route or portion of a route flown without an intermediate landing) originating at the aerodrome/heliport and extending beyond the FIR(s) mentioned.

4.2 Anticipation of traffic requirements

- 4.2.1 The existing traffic pattern is easily determined from operators, while useful indications of future trends may be gleaned from careful study of the reports of regional air navigation meetings, bilateral agreements and statements from operators. The aim should be to anticipate traffic requirements rather than be overtaken by them.

4.3 Depth of information

- 4.3.1 Having determined the geographical area of coverage, it is then necessary to take account of the depth of information required within that area. The immediately adjacent areas will be those most used by short-range traffic, whether it is commercial or private flying. For these areas it will be necessary to request the maximum amount of information relating to the State as a whole and in particular to every aerodrome/heliport available for use by international traffic. Quite frequently it may be necessary to request similar information in respect of aerodromes/heliports which, though not designated as airports of entry, may be used by charter or private aircraft which have cleared customs elsewhere. Thus, in determining the extent to which pre-flight information services are to be provided, States should ascertain that the requirements for "first sector briefing" (point of departure to point of first intended landing) are fully met.

4.4 Analysis

- 4.4.1 A careful analysis of the traffic emanating from each aerodrome/heliport is essential. This must be supplemented by close liaison with the representatives of the operators using the aerodrome/heliport. By this means, any changes in the route plans of any operator will be known by the AIS unit and it will then be possible to organize the adjustment, supply or additional information called for by such changes. Where two or more AIS units are required at an aerodrome/heliport, the information held at each unit

should be designed to meet the needs of traffic normally emanating from the aerodrome/heliport.

- 4.4.2 The use of long range aircraft often dictates a need for information far beyond that which may normally be available and the AIS should therefore ensure that briefings cover route segments which go further than the first point of landing (i.e. final destination) and that required information/data are readily available.

5. DETAILED INFORMATION TO BE HELD FOR EACH COVERAGE ZONE

- 5.1** The aeronautical information documents to be available at an aerodrome/heliport AIS unit for pre-flight planning purposes are to be established on the basis of the unit's coverage zone as explained in Section 4 above. The documentation provided must include relevant elements of the integrated aeronautical information package. In cases where a complete library of aeronautical information is available, at a central location and direct communications exist between it and the aerodrome/heliport AIS unit, such material can be limited to national publications and, where practicable, those of immediately adjacent States. The following list is intended as a guide to the types of information that should be readily available for each coverage zone:

- a) Air routes;
- b) Regulations concerning entry into and transit of civil aircraft on international flights;
- c) aerodromes/heliports available to international aviation;
- d) air navigation aids and mobile communication facilities;
- e) meteorological facilities;
- f) rules of the air and ATS procedures;
- g) controlled and restricted airspace;
- h) hazards to air navigation;
- i) search and rescue facilities;
- j) survival information;
- k) appropriate maps and charts;
- l) a recapitulation of current NOTAM, and other information of urgent character not contained in NOTAM, on aerodrome/heliport conditions, including the serviceability and operational status of visual ground aids, and the manoeuvring area, e.g.:
 - 1) construction and maintenance work on or immediately adjacent to the manoeuvring area;

- 2) rough portions of any part of the manoeuvring area, whether marked or not, e.g. broken parts of the surface of runways and taxiways;
- 3) presence and depth of water on runways and taxiways, including its effect on surface friction;
- 4) parked aircraft or other objects on or immediately adjacent to taxiways;
- 5) presence of other temporary hazards;
- 6) presence of birds constituting a potential hazard to aircraft operations;
- 7) failure or irregular operation of part or all of the aerodrome/heliport lighting system including approach, threshold, runway, taxiway, obstacle and manoeuvring area lights and aerodrome/heliport power supply;
- 8) failure, irregular operation and changes in the operational status of ILS (including markers), MLS, Basic GNSS, SBAS, SRE, PAR, DME, SSR, VOR, NDB, VHF aeromobile channels, RVR observing system, and secondary power supply; and
- 9) presence and operation of humanitarian relief missions, such as those undertaken under the auspices of the United Nations, together with any associated procedures and/or limitations applied thereto.

5.2 The recapitulation of current NOTAM and other information of urgent character must be made available to flight crews in the form of plain-language PIB.

5.3 All of the forgoing information should be contained in the various elements of the integrated aeronautical information package providing these documents are available for all States in the coverage zone. If such documentation is not available, the AIS should take steps to obtain adequate information, preferably through the civil aviation authority of the State concerned or, if necessary, from other sources, such as commercial airlines, airline service organisations and military services. Information from other sources must be verified, if possible, before distribution and if not verified, must, when distributed, be clearly identified as such.

5.4 NOTAM should be classified and filed systematically and in a manner that facilitates selection for publication of PIB.

5.5 ICAO documents should be selected as appropriate to meet local requirements for reference material.

5.6 Aeronautical charts, selected from the following list to meet local requirements, should be maintained for reference purposes (Charts for wall displays are treated under 3.2.):

- a) World Aeronautical Charts ICAO 1:1 000 000 or aeronautical charts of similar scale for areas where ICAO charts are not available;
- b) available chart series of a scale larger than 1:1 000 000, e.g. 1:500 000 and 1:250 000 scale;
- c) small scale Planning Chart(s), preferably covering the entire coverage zone on one or two sheets;
- d) one or more series of 1:2 000 000 or smaller scale Plotting Charts;
- e) any available charts for use with electronic aids to navigation
- f) Approach and Aerodrome/Heliport Charts for all aerodromes/heliports normally used for international operations; and
- g) En-route Charts.

Note. Charts referred to in f) and g) are normally contained in Aeronautical Information Publications.

6. VERBAL BRIEFING

6.1 Verbal briefing should be adjusted to the pilot's requirements depending upon familiarity with the route. A checklist may be used by the briefing officer to ensure that the briefing is as comprehensive as necessary; the completeness of a briefing should not be dependent upon the unaided memory of the briefing officer. The items to be included in such a checklist will vary according to the local situation. A list of items upon which the checklist may be based is given in Figure 2. If there is any reason to doubt published information, e.g. on aerodromes/heliports or aerodrome/heliport facilities, the briefing officer should not hesitate to telephone the appropriate authority for the latest information. To facilitate SAR action, the briefing officer must ensure that the exact location of the intended landing places of the flight which is being briefed is known, particularly in the case of light aircraft not equipped with a two-way radio. When it is impracticable to obtain information for the complete flight planned route, or when it is more expeditious for information concerning part of the route to be provided by or through another unit, the briefing officer must ensure that the pilot knows where to obtain information for the next route segment. It may be necessary, in exceptional cases, to supplement the normal bulletins and verbal briefing with additional written material specially prepared for a pilot totally unfamiliar with the route to be flown.

7. SELF-BRIEFING

7.1 Pre-flight information bulletins

- 7.1.1 The provision of daily bulletins is of primary significance in a self-briefing service. Manually prepared, printed plain-language bulletins for collection by pilots, containing current information on the status of facilities and services should be provided. Additionally, amendments to the information contained in bulletins should be made available in the form of handout sheets or updated PIB.

7.2 Scope of bulletins

- 7.2.1 Bulletins may take the simple form of a list of current NOTAM covering selected routes or areas, or at the discretion of the State, may be presented in a more elaborate form. A list of the types of bulletins that can be made available is found in 7.8.

7.3 Treatment

- 7.3.1 Bulletins should be prepared for major traffic areas or air routes, the choice of areas and/or air routes being dependent upon the needs of the major users and the degree to which it is feasible to provide a specialized service. For example, a group of routes extending in the same general direction may be treated collectively. To facilitate use of the bulletins, the information for each area or route may be divided into the following two categories and published as separate bulletins:
- a) navigation warnings, i.e. activation of areas over which the flight of aircraft is dangerous or restricted (termed “NAV WARNINGS” — sample format at Figure 3); and
 - b) information other than navigation warnings, i.e. routine serviceability reports, changes in procedures, etc. (termed “GENERAL” — sample format at Figure 4)

7.4 Navigation warning display

- 7.4.1 As mentioned in 3.2 a) ii), the wall display should include a plot of the navigation warnings that appear in the daily navigation warning bulletins. A 1:1 000 000 scale chart is suitable for this purpose, but the actual scale chosen will depend upon the

coverage zone of the bulletins and the wall space available. If there is insufficient wall space, consideration should be given to the use of a mobile board. The bulletin coverage zone may be divided into areas (e.g. FIR or States) and each area allocated a letter. This letter should be allocated to all navigation warnings in that area. Additionally, each navigation warning should be allocated a number. Thus all navigation warnings in a particular area will have the same identifying letter and each a separate number. This reference would appear on the left side of the bulletin and, as a means of identification, on the chart on which the warnings are plotted (see Figure 5). To further facilitate self-briefing, and as a time saver for those using the service, the reference on the chart of navigation warnings that have an upper limit in excess of a specified flight level/altitude may be underlined in red. This will help the users to readily identify navigation warnings that may affect their flight. A suitable notice would have to be displayed on or adjacent to the chart indicating the meaning of the red underlining.

7.5 Entries

7.5.1 Entries made on the bulletin relating to the serviceability of facilities should clearly indicate:

- a) the location of the facility including, if appropriate, the city and the aerodrome/heliport served by the facility, together with the four-letter location indicator where available; and
- b) the information to be conveyed, in plain language, including, where appropriate, ICAO abbreviations.

7.6 Central bulletin production

7.6.1 Where aerodrome/heliport AIS units have overlapping coverage zones or route stages, central bulletin production offers the most efficient method of providing PIB. For this purpose, sufficiently rapid and reliable air or surface (electronic) communications must be available for bulletin distribution. The local AIS unit will have to update the bulletin, whenever necessary, with the latest information. The date and time of issue should therefore be given in each bulletin. The use of automated processes is ideally suited to central bulletin production, since the information content is continually changing; direct line communications are, of course, essential for distribution purposes. This method of producing PIB can offer considerable savings in staffing requirements and enhance the consistency and consequent operational reliability of published

information. The advantages of such a system are covered in greater detail in Advisory Pamphlet ANSSO-AIS-AP175/03

7.7 Bulletin types

- 7.7.1 There are two broad categories of bulletins, the “area” and “route” types, as well as a variety of subdivisions of each of these. The common set of NOTAM qualifiers, as explained in the instructions for completing the NOTAM Format, enables a system to provide this range of bulletins. From the foregoing it can be seen that NOTAM are the principal source of information which affect the contents of PIB and data can be structured to meet the needs of any user(s), based on specific operational requirements.
- 7.7.2 Depending on the requirements of users, PIB should be made available in the form of:
- a) area type bulletins;
 - b) route type bulletins;
 - c) aerodrome type bulletins;
 - d) immediate automatic notification of items of urgent operational significance;
 - and
 - e) administrative bulletins
- 7.7.3 The bulletins should be provided using a standard format and sequence of information. These standard formats are given in Figures 6 to 8. PIB should only contain information of operational significance that differs from that published in the AIP, and should be tailored to meet both operational and administrative users’ needs.

7.8 Area type bulletins (FIR, groups of FIR or State(s))

- 7.8.1 The following area type bulletins can be made available from within an automated system:
- a) all PIB information;
 - b) IFR PIB information;
 - c) VFR PIB information;
 - d) OPSIG information;
 - e) IMMEDIATE NOTIFICATION information;
 - f) only en-route information (IFR, VFR, OPSIG, IMMEDIATE NOTIFICATION, LOWER/UPPER);

- g) selected lists by aerodrome location indicators; and
- h) any combination of the above.

7.9 Route type bulletins

7.9.1 The following route type bulletins can contain the same type of information as the area type bulletins in the form of:

- m) FIR route specific: i.e. providing information regarding FIR crossed and specific departure, destination and alternate aerodromes/heliports; and
- n) Narrow path route specific: i.e. providing information only for an area determined by a strip defined geographically about the route with departure, destination and alternate aerodromes/heliports.

7.9.2 A benefit of route-specific bulletins based on FIR is that they can also include information for the return flight which does not always follow the same routing for the outgoing one. Also, when there is a choice of two or more routings between one city pair, for which a narrow path bulletin could be inadequate, a bulletin based on FIR may be preferable. There could be a requirement, in addition to the above, for the provision of more refined data retrieval which requires the introduction of a geographical reference feature. This form of retrieval can provide narrow-path route-specific bulletins which may be required for RNAV operations and to cater to a higher level of automation within certain air navigation services and user systems.

7.10 Aerodrome type bulletins

7.10.1 Essentially aerodrome type bulletins should contain information on selected aerodromes/heliports as may be necessary. Depending on user requirements, such bulletins can contain data on aerodromes/heliports within one or more FIR, for specified sectors or for destination and alternate aerodromes/heliports only. These requirements should be established through agreement between the AIS authority and the operator(s) concerned.

7.11 Immediate automatic notification of items of urgent operational significance

7.11.1 Items of urgent operational significance, which are listed separately in the NOTAM Selection Criteria, must be brought to the attention of operators concerned even after the pre-flight briefing stage.

7.12 Administrative bulletins

7.12.1 The following administrative bulletins must be provided:

- a) checklists of all current NOTAM by State/FIR/aerodrome/heliport; and
- b) all NOTAM input since a specified date-time group. (This procedure greatly facilitates briefings.)

7.13 Bulletin update

7.13.1 The updating of PIB should be covered by:

- a) the system products listed in 7.14 or 7.15; or
- b) a request for a new bulletin.

7.13.2 The above-mentioned bulletin types would make obsolete the requirement for specific update bulletins which have been found to require complex time reference procedures

7.14 Postal bulletins

7.14.1 It is envisaged that, for the foreseeable future, there will still be a need for a very comprehensive area type bulletin, containing information from a specified date-time group projected ahead to another date-time group, which will have to be distributed to minor aerodromes/heliports by post. AIS authorities should therefore ensure that such data are expedited with a minimum of delay.

7.15 Bulletin format

7.15.1 The bulletin output must have the following characteristics:

- a) NOTAM text in significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language; and
- b) NOTAM number to the right of text

7.15.2 Bulletins must be prepared in the following sequence:

- a) a heading (identity of origination, area covered and for whom prepared);
- b) en-route information;
- c) aerodrome/heliport information; and
- d) navigation warnings.

7.15.3 Within each of subparagraphs b) to d) above, the information should be presented in the order of subsections of the AIP. These may also be used as subheadings, if so desired, but are not essential as the subject should be clear from Item E) of the NOTAM.

8. POST-FLIGHT INFORMATION

8.1 Purpose of post-flight information

8.1.1 The purpose of post-flight information is to ensure that inadequacies of facilities essential to the safety of flight operations, and the presence of birds on or around the airport constituting a potential hazard to aircraft operations, observed by a pilot during the flight, are reported without delay to the authority responsible for those facilities. The responsibility for reporting any inadequacy lies with the operator. NAMCAR Part 175 requires that arrangements be made at aerodromes/heliports to receive this information and to make it available to the AIS “for such distribution as the circumstances necessitate”. This is the basis on which the collection and distribution of post-flight information should be administered, and should influence the formulation of a format for the collection of such information.

8.1.2 Furthermore, NAMCAR Part 175 requires that arrangements be made to receive at aerodromes/heliports information concerning the presence of birds observed by aircrews and ensure that such information is made available to the AIS for such distribution as the circumstances necessitate.

8.2 Collection of post-flight information

- 8.2.1 In most cases, an inadequacy of a facility or the presence of birds is reported by the pilot on the appropriate ATS frequency, and this information must then be passed on to the responsible authority and to AIS for required action.
- 8.2.2 After landing, a pilot wishing to confirm in writing any observations, or wishing to make an initial report, may do so at the aerodrome/heliport AIS unit, where a post-flight report form should be available. A specimen post-flight report form is at Figure 9. A space could also be provided on a PIB to facilitate the reporting of such data in writing at the aerodrome/heliport of destination.
- 8.2.3 Copies of the post-flight report form could also be made available in the airline operator's offices at the aerodrome/heliport to facilitate filing of post-flight reports by the pilot. The report must subsequently be made available to the AIS without delay

NAME OF AERODROME AIS UNIT

Operator	Destination	Alternates	ATS route(s)	FIR	NOF	Frequency	Departure time (s)	Remarks

Explanatory notes on information required under column headings

1. Operator. All operators using or intending to use the aerodrome/heliport at which the aerodrome/heliport AIS unit is located.
2. Destination. The aerodrome of first intended landing on the air route stage originating at the aerodrome at which the aerodrome/heliport AIS unit is located.
3. Alternates. The alternate aerodrome(s)/heliport(s) for the destination given in the preceding column, specified by the operator.
4. ATS route(s). The air traffic service (ATS) route(s), as applicable, specified by the operator for flight to the destination and alternate(s).
5. FIR. The flight information region(s) through which the flight to the destination and alternate(s) is planned, together with those adjacent FIR which contain information significant to the flight.
6. NOF. The international NOTAM offices responsible for the provision of aeronautical information in the FIR specified in the preceding column.
7. Frequency. The number of flights, specified as per day or per week, for the given air route stage.
Note. This will determine the pre-flight information bulletin reproduction requirements.
8. Departure time(s). The scheduled departure time(s) for the given air route stage.
Note. This will determine the pre-flight information bulletin optimum release time.
9. Remarks. Any additional information concerning the given air route stage; e.g. pre-flight information required for lower airspace only.

Figure 1. Information coverage zone form

1. Regulations and procedures
 - a) Basic publications and recent amendments and supplements
 - b) Procedures applicable to airspace to be used
 - c) ATS procedures
 - d) Altimeter setting
2. Meteorological information
 - a) Availability of MET facilities, forecasts and weather reports
 - b) Provision of relevant available meteorological information where there is no meteorological office at the aerodrome/heliport, including weather information reported by en-route aircraft
3. Route and destination information
 - a) Suggestions concerning available routes
 - b) Tracks, distances, general topography and terrain features and information required to maintain safe levels
en route
 - c) Availability and serviceability state of aerodromes/heliports and aerodrome/heliport facilities
 - d) Availability and serviceability state of navigation aids
 - e) SAR procedures and facilities and functions of the SAR organization
4. Communication facilities and procedures
 - a) Availability and serviceability of air/ground communication facilities
 - b) Procedures
 - c) Radio frequencies and hours of operation
 - d) Communication facilities available to aircraft not equipped with radio for forwarding movement reports
5. Hazards to air navigation
6. Any other essential information(including that requested by a pilot which might not be available locally but which can be obtained from the appropriate source)

Figure 2. Briefing checklist

Pre-flight information Bulletin	AERONAUTICAL INFORMATION SERVICE		Date and time of issue	Route or area Coverage
NAVIGATION WARNINGS			22/8/03 1200 UTC	NORTH ATLANTIC
FIR/UIR Ref.	<u>Period</u> Time (UTC)	Area and nature of activity		<u>Upper limit</u> Lower limit
SHANNON FIR A2	<u>28/8/03</u> 0945-1015	10 KM radius of 532800N 0105600W. Demolition of explosives		<u>2 000 M MSL</u> GND
SHANNON OCEANIC FIR A5	<u>23/8/03</u> 0700-1600	Sector: 573000N 0111500W GEO BRG 200° and 280°, distance 45 KM. Firing on towed target.		<u>4 500 M MSL</u> SFC
A7	<u>21-25/8/03</u> 0800-2200	Area: 503600N 0114200W 502000N 0115300W 503300N 0125200W 505000N 0124500W 503600N 0114200W In-flight refueling		<u>FL 180</u> FL 120
GANDER FIR C1	<u>22/8/03</u> 0300-1200	20 KM radius of 473000N 0533000W. Air-to-air firing.		

Figure 3. Sample of pre-flight information bulletin — navigation warnings

Pre-flight information bulletin	AERONAUTICAL INFORMATION SERVICE		Date and time of issue 4/11/03 1200 UTC	Route or area Coverage NORTH ATLANTIC
Location		Facility	Information	
LONDON FIR		RWY 05/23	Closed for maintenance 2100 – 0500 on nights of 7, 8 and 9 Nov	
LONDON/Heathrow EGLL				
REYKJAVIK FIR		ILS	AVBL for RWY 12 only.	
KEFLAVIK/Keflavik BIFK				
SONDRESTROM FIR		HF/RTF	FREQ. 2868, 2945 and 2987 KHZ unserviceable.	
PRINS CHRISTIANS SUND BGPC				
GANDER FIR		VOR	112.7 MHZ Voice unserviceable.	
GANDER CYQX				

Figure 4. Sample of pre-flight information bulletin — information other than navigation warnings

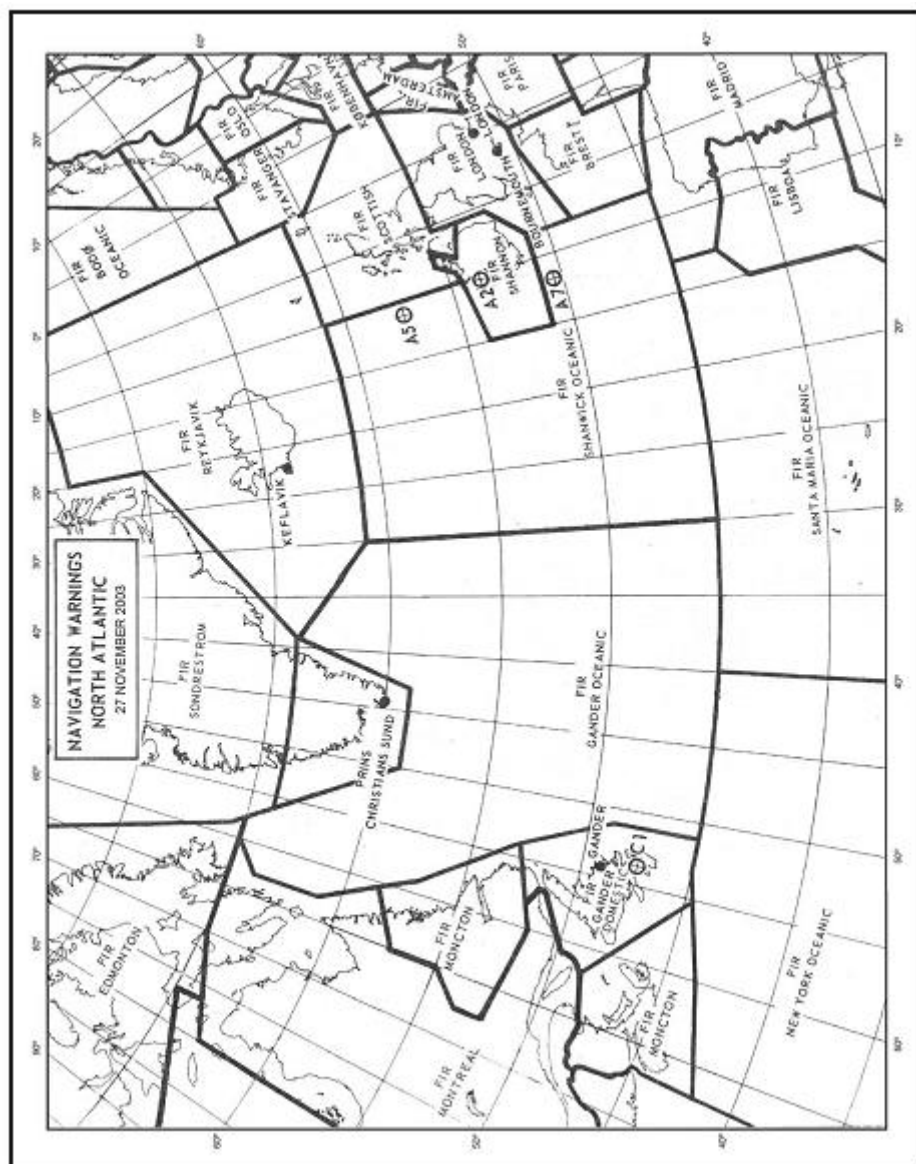


Figure 5 Sample navigation warning display

Pre-flight information bulletin (Aerodrome)	(State) AERONAUTICAL INFORMATION SERVICE
Date/time: 03/06/15/1000	Period: 03/06/15/0000 to 03/06/16/2400
Type of traffic: IFR/VFR	Height limits: Lower Upper
Bulletin contents: General purpose/OPSIG, AD	
Aerodromes: EDDF, EDDM, EDDV, etc.	
FRANKFURT/MAIN (EDDF) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)] MUNCHEN/RIEM (EDDM) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)] HANNOVER/LANGENHAVEN (EDVV) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)] Other aerodromes (name/ICAO location indicator), etc.	

Figure 6. Example of standard PIB format — Aerodrome type (skeleton for a two-day period)

Pre-flight information bulletin (Area)	(State) AERONAUTICAL INFORMATION SERVICE
Date/time: 03/06/15/1000	Period: 03/06/15/0000 to 03/06/16/2400
Type of traffic: IFR/VFR	Height limits: Lower 000 Upper 999
Bulletin contents: General purpose/OPSIG, Enroute, AD, NAV warning	
Area: RJTG (Tokyo)	
TOKYO FIR EN-ROUTE) [NOTAM sorted in the order of subsections of AIP Part 2 — En-route (ENR)] AERODROMES RJAA (XXYYZZ aerodromes) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)] Other aerodromes (names of aerodromes) NAV WARNINGS	

Figure 7. Example of standard PIB format — Area type (skeleton for a two-day period)

Pre-flight information bulletin (Route)	(State) AERONAUTICAL INFORMATION SERVICE
Date: 03/06/15/1000	Time (UTC): 0835
Type of traffic: IFR	Period: 03/06/15/0000 to 03/06/16/2400
Bulletin contents: General purpose/OPSIG, en-route, AD, NAV warning	
Height limits — All FIR (Lower/upper) — First FIR	000/999 000/120 Other: 120/999 Last: 000/120
Flight number:	City pair:
ADDEP: EHAM ADDEST: CYMX	Alternates: CYYZ
FIR: EHAA — EGTT — EISN — EGGX — CZQX — CZYL — CZZY	
EN-ROUTE EHAA (AMSTERDAM FIR) [NOTAM sorted in the order of subsections of AIP Part 2 — En-route (ENR)] Next FIR (etc.) AERODROMES AERODROME (DEPARTURE EHAM (AMSTERDAM/Schiphol)) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)] AERODROME (ARRIVAL) CYMX (MONTREAL/Mirabel) [NOTAM sorted in the order of subsections of AIP Part 3 — Aerodromes (AD)] AERODROMES (ALTERNATES) [Additional aerodrome information only if specially requested.] NAV WARNINGS	

Figure 8. Example of standard PIB format — Route type (skeleton for a one-day period)

POST-FLIGHT REPORT			
Aircraft nationality or common mark and registration mark:			
Owner/FLT NR:			
Departure aerodrome:		ATD (UTC):	
Arrival aerodrome:		ATA (UTC):	
Facility	Location	Details of inadequacy*	Time of Observation
Bird	Location	Details	Time of observation
Date: _____ Signature _____ of _____ Pilot: _____			

**Includes flight altitude/level distance and bearing from the facility(ies) observed*

Figure 9. Post-flight report on inadequacies in the status and operation of air navigation facilities and presence of birds