

Foreword

It is obligatory on CAAB in compliance with Aeronautical Information Service (Annex-15) to the convention of International Civil Aviation Organization and as adopted by Bangladesh in CARs-1984, ANO (AIS) A.1 and ANO (Aeronautical Charts) A.1 to ensure that the level of safety of Air Navigation meets the minimum ICAO standard. The AIS of CAAB shall ensure the following process of Aeronautical Information Services Package (AIP, AIP AMDT, AIP SUPP, NOTAM & AIC) for issuance of safety critical information.

This directive (AIS 1/2010) has been enacted by the Civil Aviation Authority, Bangladesh under Rule 4 and Rule 273,274 and 275 of CAR-84 to give effect to the Standard and Recommended Practices of Annex-15, Annex-4 and AIS Manual Doc-126 to the Convention on International Civil Aviation Organization for safety, regularity and efficiency of Air Navigation in Bangladesh.

.....
(Air Codre Sakeb Iqbal Khan Majlis)

Chairman

Civil Aviation Authority, Bangladesh

Chairman's Directive (AIS) 1/2010

Processing of Aeronautical Information Service Package (AIP, AIP AMEND, AIP SUPP, NOTAM, AIC) for issuance of Safety Critical Information .

Introduction

The object of the aeronautical information service is to ensure the flow of information data necessary for the safety, regularity and efficiency of international air navigation. The role and importance of aeronautical information/data changed significantly with the implementation of area navigation (RNAV), required navigation performance (RNP) and airborne computer based navigation systems. Corrupt or erroneous aeronautical information data can potentially affect the safety of air navigation.

CAAB is responsible to ensure that aeronautical information/data provided is adequate, of required quality and timely. It is imperative that processing of aeronautical information service at all functional stages should be conducted in a systematic way to ensure its completeness, accuracy and to ensure dissemination of safety critical information in an effective and efficient manner.

Purpose

Purpose is to establish procedure to be followed to ensure correct, complete and timely issuance of Aeronautical Information Service Package comprising (AIP, AIP AMEND, AIP SUPP, NOTAM, AIC) concerning safety critical information.

Procedure

In order to avoid haphazard handling of activities under taken in processing aeronautical information package comprising (AIP, AIP AMEND, AIP SUPP, NOTAM, AIC) a checklist has been evolved which should be followed to ensure that aeronautical information/data is complete and accurate. The processing and dissemination of safety critical information/ data for use of air navigation, in a systematic manner, will ensure that its quality meets the given standard. The checklist attached as appendix-"A" to this directive outlines in detail the job description, tasks and subtasks which are performed in processing and dissemination of safety critical information/data by the Aeronautical Information Service Provider.

CHECKLIST

CHECKLIST FOR AERONAUTICAL INFORMATION SERVICE PROVIDER

JOB-1

PREPARATION OF AIP AND UPDATING AIP

TASK-1

Planning for New edition of AIP

SUB TASKS

1.1 Identify the requirement of publishing a new AIP based on one or more of following reasons:

- a) To fulfill the ICAO requirement of publishing IAIP as a country this has not published IAIP so far.
- b) To re-publish the existing AIP according to a new ICAO format.
- c) When most of the information published in the existing AIP has become obsolete and require update.

1.2 When the AIP is going to be published as the next edition;

- a) Identify and list out the information to be published in the intended AIP according to the Specimen AIP given in the AIS Manual (ICAO Doc 8126).
- b) Identify and list out the local authorities from whom the source data for the information (as identified in (i) above) to be published in the relevant sections and sub sections of the intended AIP can be obtained.
- c) Co-ordinate with the above selected authorities (through proper channel) to convene a suitable arrangement to obtain source information relevant to the AIP on regular basis.
- d) Write (through proper channel) to the relevant authorities requesting the required information giving an appropriate cutoff date for response. (Promulgation advice Form also should be introduced).
- e) Decide whether to use single side paging or double side paging in the intended AIP. This may be considering the facts such as amount of information to be published, possible frequency of changing information etc. Decide the page numbering according to the selected paging system.
- f) Create a soft copy of the Specimen AIP given in the AIS manual. Do the necessary initial editing, deleting or adding to this document to convert it to be the local AIP (country name, edition, aerodrome names, postal addresses etc with the already available data).
- g) Open a file to file all correspondence regarding AIP. Another three files may be opened to file source data information individually as GEN, ENR and AD.

Processing data for the AIP

SUB TASKS

- 2.1 Gather and categorize the source data information received (as on final date for response) from the relevant data source authorities as the replies to the **sub task 1.2 (iv)** according to the sections and sub sections of the AIP.
- 2.2 Identify and record relevant sections of the AIP in which information from the NOTAM can be included.
- 2.3 Identify and record relevant sections of the AIP in which information from the AIP SUPP can be included.
- 2.4 Identify and record relevant sections of the AIP in which the information from the AICs (forecasted by the AIC and already implemented) can be included.
- 2.5 Identify and record the charts and diagrams to be published in the individual sections of the AIP as per the AIS Manual.
- 2.6 Gather and record the available data required for the charts and the diagrams to be produced as in **sub task 2.4** above.
- 2.7 Forward the gathered information in **sub task 2.5** to the Cartography section with the necessary briefing on the AIP chart specifications (with the reference in the ANO as adopted from ICAO Annex 4) and other information such as chart page numbers, page Header & Footer information, page sizes etc according to the specimen AIP

JOB-2

ISSUING AIP AMENDMENTS

TASK 1

Planning for next AIP Amendment

SUB TASKS

- 1.1 Decide an appropriate publication date for the AIP amendment considering the facts such as the urgency of update of information, available resources, etc
- 1.2 Decide a last date to receive update information from relevant source data providing authorities
- 1.3 Initiate inquiry letters to all relevant authorities who provide source data for AIP, informing them about the planned AIP amendment (with the information on above sub tasks 1.1 and 1.2). Include the copies of relevant AIP pages and ask whether any content to be updated.
- 1.4 Check Bangladesh current NOTAM for any information qualifying to be included for update AIP.

- 1.5 Check Bangladesh current AIP SUPP which can be superseded by this amendment.
- 1.6 Check for the manuscript amendments declared by previously issued amendment in order to update the relevant AIP pages.
- 1.7 Check for any correction to be done in the AIP as self noted or highlighted by the users time to time.
- 1.8 Open a new file with appropriate reference (i.e; AIP/AMD 1/10) and file all correspondence, source data, etc relevant to the amendment with a system of easy access to the changes initiated by the amendment.

TASK 2

Processing data for the AIP Amendment

SUB TASKS

- 2.1 Gather and categorize the updated information received from the relevant data source authorities previously or as the replies to the **sub task 1.3** according to the sections of the AIP
- 2.2 Identify and record relevant sections of the AIP which have been updated by the NOTAMS individually selected **as per sub task 1.4**
- 2.3 Identify and record relevant sections of the AIP which have been updated by the AIP SUPPs individually, selected **as per sub task 1.5**
- 2.4 Identify and record the manuscript amendments previously declared (**as per sub task 1.6**) or requirement of new minor corrections.
- 2.5 Check, identify and record the other sections/subsections, paragraphs, page etc affected by each of above update and decide whether to replace such affected areas with new page(s) or to have manuscript amendments based on the gravity (of the effect of change)/and amount of update.
- 2.6 Identify and record the AIP charts to be updated or requirement of new charts to be produced.
- 2.7 Process, text edit and format the data/information of above **sub task 2.1 to 2.5** according to the AIP requirements
- 2.8 Contact the relevant data originators if any clarification is required in order to ensure accurate information to be published.
- 2.9 Direct the charts to be updated and the specifications for new charts to be produced to the cartography unit with the necessary directions and requirements of the AIP amendment. (Give information about AIP AMDT number date of publication, update information etc)

TASK 3

Preparation of AIP Amendment

SUB TASKS

- 3.1 Categorize all above processed data in **Task 2** according to the main and sub sections of the AIP (i.e. GEN 1, GEN 1.2 etc)
- 3.2 Identify, select and mark the relevant sections, subsections, pages, paragraphs of the AIP to be updated, modified and for new additions with the data processed in the **sub task 2.1**
- 3.3 Modify existing text, insert new text or delete existing text of the areas identified in subtask 3.2 with the new data appropriately. This may require replacing of existing pages, adding new pages or removing existing pages.
- 3.4 In case of the instances requiring replacing, adding new pages or removing existing pages follow the correct page numbering system and make notes in the existing AIP pages checklist then and there on that effect.
- 3.5 Also check whether the table of contents of the relevant section would be affected with the moving of information from page to another or with the addition, deletion of pages. If so, select such page(s) of the Table of content as a new page to be included in the amendment with the necessary modifications (make note in the checklist of this case also)
- 3.6 Check for accuracy/compliance for format of the reproduced new charts received from the cartographic unit.
- 3.7 Check and make records in the AIP Pages Checklist with regard to reproduced new chart pages.
- 3.8 Finalize the new pages arising from the above updates and follow the existing format to insert header /footer which include page number/date of publication/AMDT number etc.
- 3.9 Update the AIP Page(s) checklist as new page(s) based on above **sub tasks 3.3, 3.4, 3.5 and 3.7**. In this case the new checklist should highlight the page numbers of the page included in the AIP AMDT by adding an asterisk against each page number(s) which also are given

in the bold characters (**Remark:** The checklist of the amendment shall include the numbers of all pages of the AIP).

3.10 A cover sheet for the AIP AMDT should be prepared according to the format given in ICAO Doc 8126 mainly to give following information:

- i. AIP AMDT Number and publication date.
- ii. The significant changes and new information declared by the amendment.
- iii. Information about replacement/removal/addition of new pages by the amendment
- iv. Manuscript amendments to be done.
- v. Manuscript amendments carried forward from the previous amendment.
- vi. List of references to previously published elements of AIP of which the information has been superseded by the amendment.

3.11 Finalize the AIP amendment as a set of following items together:

- i. Cover sheet of AIP AMDT
- ii. Checklist of AIP Pages
- iii. New/Replacement AIP Pages

TASK 4

Final corrections and proof reading

SUB TASK

- 4.1 Re-check whether the page numbers of all pages in the amendment except cover sheet but including checklist page(s) are indicated in the Checklist of AIP pages properly **as per sub task 3.9** while ensuring all remaining AIP page numbers and the publication dates are correctly indicated
- 4.2 Re-check whether the subject continuation in the new/replacement pages do tally with the remaining contents of the relevant pages.
- 4.3 Re-check whether the contents of the new/replacement pages do tally with the table of contents of the relevant section. (Check for page number and paragraph/chart reference)
- 4.4 Re-check for editorial errors in the text on new/replacement pages.
- 4.5 Re-check whether the references given in the new/replacement pages to the other sections/pages etc are correct
- 4.6 Re-check for the manuscript amendments declared in the previous amendment not updated by this amendment are properly indicated under the item; Manuscript Amendments of the cover sheet.

- 4.7 Re-check whole AIP for any more information not updated by this amendment but yet can be declared as a Manuscript Amendments
- 4.8 Make available of the complete set of amendment after performing above **sub tasks 4.1 to 4.7** to the selected proof reading panel of Senior AIS Officers.
- 4.9 Proof reading of the amendment should include:
 - i. Checking for editorial errors.
 - ii. Checking for consistence to the format.
 - iii. Checking for compatibility to the AIP original.

 - iv. Tallying the given references in the new pages within the amendment and also within the AIP.
 - v. Tallying the Checklist of AIP Pages of the amendment with the amendment pages and also with the AIP remaining pages.
 - vi. Tallying the text references of the amendment pages with the table of content of relevant sections.

TASK 5

Preparation of final copy for approval and publication

SUB TASK

- 5.1 After performing the proof reading as in **sub task 4.9**, make the final copy of the amendment with the necessary correction and modifications highlighted by the proof
- 5.2 Check whether the source data file (reference **sub task 2.9**) is complete with the source information and other relevant records in respect of all changes initiated by the amendment and also whether easy access to the source data in respect of each change is ensured
- 5.3 Forward the final original copy (computer printout) to the approving authority through the proper channel with a covering letter while retaining the soft copy and a paper copy of the same
- 5.4 On receipt of the approval prepare the final copy of the amendment with the
- 5.5 necessary modifications (if any) notified by the approving authority for printing.

JOB-4

ORIGINATING NOTAMs

TASK 1

Receiving raw data from military organizations (by fax)

SUB TASK

- 1.1 Check for the approval from CAA Headquarters by referring the authorize signatures.
- 1.2 Analyze raw data for the suitability of inclusion in a NOTAM
- 1.3 Check whether the same information is previously received.
- 1.4 Refer the matter to the supervisor, if the information had been received previously.
- 1.5 Check the accuracy of the contents of the raw data.
- 1.6 Contact the originator over the phone, if the fax message of raw data is not clear.
- 1.7 Changes made to raw data shall clearly be indicated in the raw data form
- 1.8 Write the name of the officer who provides the changes over the phone.
- 1.9 Analyze raw data to determine the series of NOTAM is issued.
- 1.10 Decide the NOTAM number to be assigned.

TASK 2

Receiving raw data from ATC Units (by fax)

SUB TASK

- 2.1 Check whether the approval is required to issue the NOTAM.
- 2.2 Check whether the raw data is sent under an authorized signature.
- 2.3 Analyze raw data for the suitability of inclusion in a NOTAM.
- 2.4 Check whether the same information is previously received.
- 2.5 Refer the matter to the supervisor, if the information has been received previously.
- 2.6 Check the accuracy of the contents of the raw data.
- 2.7 Contact the originator over the phone, if the fax message of raw data is not clear.
- 2.8 Changes made to raw data shall clearly be indicated in the raw data form.
- 2.9 Write the name of the officer who provides the changes over the phone.
- 2.10 Analyze raw data to determine the series of NOTAM is issued.
- 2.11 Decide the NOTAM number to be assigned.

TASK 3

Receiving raw data from CAA Headquarters (by fax)

SUB TASK

- 3.1 Check whether raw data is sent under an authorized signature.
- 3.2 Analyze raw data for the suitability of inclusion in a NOTAM.
- 3.2 Check whether the same information is previously received.
- 3.4 Refer the matter to the supervisor, if the information had been received previously.
- 3.5 Check the accuracy of the contents of the raw data.
- 3.6 Contact the originator over the phone, if the fax message of raw data is not clear.
- 3.7 Changes made to raw data shall clearly be indicated in the raw data form
- 3.8 Write the name of the officer who provides the changes over the phone.
- 3.9 Analyze raw data to determine the series of NOTAM be issued.
- 3.10 Decide the NOTAM number to be assigned.

TASK 4 :

Drafting NOTAM

SUB TASK

- 4.1 Refer the NOTAM issuing form file
- 4.2 Refer Jeppesen Charts to select affected Areas and Routes.
- 4.3 Refer AIP Bangladesh to find relevant references.
- 4.4 Fill the NOTAM issuing form as per the instructions laid down.
- 4.5 Place the signature in the appropriate place.
- 4.6 Produce the filled NOTAM issuing form to the supervisor

TASK 5

Transmitting NOTAM

SUB TASK

- 5.1 Type the NOTAM message as written on the NOTAM issuing form.
- 5.2 Type the appropriate addresses.
- 5.3 Select the priority indicator as GG
- 5.4 Make the template of the typed message.
- 5.5 Change the originator indicator in the AFTN terminal as
- 5.6 Check the Date-Time Group of the NOTAM message.
- 5.7 Produce the message to the supervisor.
- 5.8 Get the approval from the supervisor to transmit the message
- 5.9 Press "SEND" button to transmit the message

TASK 6

Storage of NOTAM information

SUB TASK

- 6.1 Get the page of the transmitted NOTAM
- 6.2 Clip the page copy of the NOTAM to the filled NOTAM issuing form.
- 6.3 Attach the raw data information to the above document.
- 6.4 File the above document in the "NOTAM Issuing letters" file.
- 6.5 Assign a sequence number to the filed document.
- 6.6 Enter relevant information in the cover page of the file.

TASK 7

Promulgating NOTAM

SUB TASK

- 7.1 Make arrangements to paste a copy of the NOTAM in the appropriate NOTAM register.
- 7.2 Update the NOTAM register as per the category of NOTAM (NOTAMR or C).
- 7.3 Display it in the appropriate board, if the NOTAM carries significant information.
- 7.4 Update current Bangladesh NOTAM board based on the NOTAM issued.

JOB 5

ISSUING AERONAUTICAL INFORMATION CIRCULAR (AIC)

TASK 1

Identifying reasons for issuing an AIC

SUB TASK

- 1.1 The requirement of issuing an AIC may be based on the information which is mainly of an administrative nature and not qualify for promulgation in the AIP or NOTAM as listed in the ICAO Doc 8126 Chapter 7 paragraphs 7.1.1 and 7.1.2 and in addition the requirements such as declaration of AIRAC system, updating/revalidating existing old AICs, issuing checklists of AICs also may be considered.

TASK 2

Planning to issue an AIC

SUB TASK

- 2.1 Decide whether to issue a B-series AIC for domestic distribution or A-series AIC international distribution based on the effect/or and relevancy of the information to be published. In this case the information affecting/relevant only to the domestic concerned shall be considered to be published as B-series AIC and the information affecting/relevant only to the concerned internationally or also both domestic and internationally may be published as A-series distribution.
- 2.2 Decide a publication date for the AIC. No special consideration (as done in case of AIP Supplement) is required to decide a publication date of AICs and may be the facts such as available resources for printing , proof reading, time involvement in re-clarifications, obtaining approvals etc considered when deciding publication date for an AIC.
- 2.3 Check for the existing information published in the AIP, AIP SUPs, NOTM and AICs previously published related to the subject of information to be published by the new AIC and make record of necessary references to be given.
- 2.4 Check for the requirement of publishing new chart(s)/diagram(s) or revising the existing chart(s) in the AIP. If any, direct the AIS Cartography unit to prepare the required chart(s)/diagram(s) by providing them with the necessary data/information.
- 2.5 Make required clarifications with relevant authorities in order to publish accurate and precise information.
- 2.6 Plan a time schedule and try to achieve the same in respect of following:
 - i) Time to complete final draft and forward to the authority for approval
 - ii) Time to receive approval from the authority and to make final copy and to print the same.
- 2.7 Open a new file with appropriate subject reference (i.e. AIC/01/10) and file all correspondence, source data, etc relevant to the AIC with a system of easy access to the source of changes initiated by the AIC.

TASK 3

Processing data and preparation of the AIC

SUB TASK

- 3.3 Process/text/edit and format the data/information received from the data source according to the ICAO format for the AIC.
- 3.2 Include referenced recorded in **Sub task 2.3** above appropriately.
- 3.3 Indicate AIC number and the publication date appropriately as per the ICAO format. (AIC Nr. Consecutive based on the calendar year).
- 3.3 Check the charts/diagram(s) referred in Sub task 3.4 above with the appropriate references.
- 3.4 Include the Name & Designation of the publishing authority.

TASK 4

Final corrections and proof reading

SUB TASK

- 4.1 Re-check for data accuracy and completeness (by tallying with source data), consistence to the format, AIP compatibility etc.
- 4.2 Re-check for the accuracy of the references given.
- 4.3 Re-check the chart(s)/diagram(s) if any include for data accuracy, consistency and format.
- 4.4 Make available of the draft copy of AIC after performing above tasks 4.1 and 4.3 to the selected proof reading panel of senior AIS officers
- 4.5 Proof reading of the AIC should include
 - i) Checking for editorial errors.
 - ii) Checking for consistence to the format
 - iii) Checking for compatibility to the AIP
 - iv) Checking for the accuracy and consistence of the given references in the AIC.

TASK 5

Preparation of final copy for approval and publication

SUB TASK

- 5.1 After performing the proof reading as in **Sub task 4.4 and 4.5** above, make the final copy of the AIC with necessary corrections, modifications, highlighted by the proof.

- 5.2 Check whether the Source data file (ref **sub task 2.7** above) is complete with the source information and other relevant records in respect of all information published in the AIC and also whether easy access to the source data in respect of each data/information is ensured.
- 5.3 Forward the final original copy (computer printout) to the Chairman through Director ATS/Aero and DFSR with letter retaining the soft copy and a paper copy of the same.
- 5.4 On receipt of the approval from the Chairman or the designated officer prepare the final copy of the AIC with necessary modifications if any notified by the Chairman Office for printing.

JOB 6

ISSUING AIP SUPP

TASK 1

Identifying reasons for issuing an AIP SUPP

SUB TASK

- 1.1 The requirement of issuing an AIP SUPP may be based on the information which is mainly temporary changes of long duration (three months or longer) and information of short duration which contains extensive text and/or graphics shall be published as AIP Supplements. qualify for promulgation in the AIP or NOTAM as listed in the ICAO Doc 8126 Chapter 7 paragraphs 7.1.1 and 7.1.2 and in addition the requirements such as declaration of AIRAC system, updating/revalidating existing old AICs, issuing checklists of AICs also may be considered.

TASK 2

Planning to issue an AIP SUPP

SUB TASK

- 2.1 Decide whether to issue a B-series AIC for domestic distribution or A-series AIC international distribution based on the effect/or and relevancy of the information to be published. In this case the information affecting/relevant only to the domestic concerned shall be considered to be published as B-series AIC and the information affecting/relevant only to the concerned

internationally or also both domestic and internationally may be published as A-series distribution.

- 2.2 Decide a publication date for the AIC. No special consideration (as done in case of AIP Supplement) is required to decide a publication date of AICs and may be the facts such as available resources for printing , proof reading, time involvement in re-clarifications, obtaining approvals etc considered when deciding publication date for an AIC.
- 2.3 Check for the existing information published in the AIP, AIP SUPs, NOTM and AICs previously published related to the subject of information to published by the new AIC and make record of necessary references to be given.
- 2.4 Check for the requirement of publishing new chart(s)/diagram(s) or revising the existing chart(s) in the AIP. If any, direct the AIS Cartography unit to prepare the required chart(s)/diagram(s) by providing them with the necessary data/information.
- 2.5 Make required clarifications with relevant authorities in order to publish accurate and precise information.
- 2.6 Plan a time schedule and try to achieve the same in respect of following:
 - i) Time to complete final draft and forward to the authority for approval
 - ii) Time to receive approval from the authority and to make final copy and to print the same.
- 2.7 Open a new file with appropriate subject reference (i.e. AIC/01/10) and file all correspondence, source data, etc relevant to the AIC with a system of easy access to the source of changes initiated by the AIC.

TASK 3

Processing data and preparation of the AIP SUPP

SUB TASK

- 3.3 Process/text/edit and format the data/information received from the data source according to the ICAO format for the AIC.
- 3.2 Include referenced recorded in **Sub task 2.3** above appropriately.
- 3.3 Indicate AIC number and the publication date appropriately as per the ICAO format. (AIC Nr. Consecutive based on the calendar year).
- 3.3 Check the charts/diagram(s) referred in Sub task 3.4 above with the appropriate references.
- 3.4 Include the Name & Designation of the publishing authority.

TASK 4

Final corrections and proof reading

SUB TASK

- 4.1 Re-check for data accuracy and completeness (by tallying with source data), consistence to the format, AIP compatibility etc.
- 4.2 Re-check for the accuracy of the references given.
- 4.3 Re-check the chart(s)/diagram(s) if any include for data accuracy, consistency and format.
- 4.4 Make available of the draft copy of AIC after performing above tasks 4.1 and 4.3 to the selected proof reading panel of senior AIS officers
- 4.5 Proof reading of the AIC should include
 - i) Checking for editorial errors.
 - ii) Checking for consistence to the format
 - iii) Checking for compatibility to the AIP
 - iv) Checking for the accuracy and consistence of the given references in the AIC.

TASK 5

Preparation of final copy for approval and publication

SUB TASK

- 5.1 After performing the proof reading as in **Sub task 4.4 and 4.5** above, make the final copy of the AIC with necessary corrections, modifications, highlighted by the proof.
- 5.2 Check whether the Source data file (ref **sub task 2.7** above) is complete with the source information and other relevant records in respect of all information published in the AIC and also whether easy access to the source data in respect of each data/information is ensured.
- 5.3 Forward the final original copy (computer printout) to the Chairman through Director ATS/Aero and DFSR with letter retaining the soft copy and a paper copy of the same.
- 5.4 On receipt of the approval from the Chairman or the designated officer prepare the final copy of the AIC with necessary modifications if any notified by the Chairman Office for printing.