

PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA
NOMOR : KP 215 TAHUN 2017

TENTANG

PETUNJUK TEKNIS PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN
8900-3.324 (*STAFF INSTRUCTION 8900-3.324*) TENTANG
PROSEDUR PERSETUJUAN DAN INSPEKSI TERHADAP MANUAL
PENGOPERASIAN PESAWAT UDARA
(*APPROVAL AND INSPECTION OF OPERATION MANUAL*)

DENGAN RAHMAT TUHAN YANG MAHA ESA

DIREKTUR JENDERAL PERHUBUNGAN UDARA,

- Menimbang :
- a. bahwa dalam rangka mengatur mengenai prosedur persetujuan dan inspeksi terhadap manual pengoperasian pesawat udara, telah ditetapkan Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 125 Tahun 2016 tentang Petunjuk Teknis Bagian 8900-3.324 (*Staff Instruction 8900-3.324*) Prosedur Persetujuan Dan Inspeksi Terhadap Manual Pengoperasian Pesawat Udara (*Approval And Inspection Of Operation Manual*);
 - b. bahwa untuk melakukan pembaruan sesuai dengan standar internasional penerbangan sipil, perlu dilakukan pencabutan terhadap Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 125 Tahun 2016 tentang Petunjuk Teknis Bagian 8900-3.324 (*Staff Instruction 8900-3.324*) Prosedur Persetujuan Dan Inspeksi Terhadap Manual Pengoperasian Pesawat Udara (*Approval And Inspection Of Operation Manual*) untuk menyesuaikan dengan perubahan *Staff Instruction CASR* dimaksud;
 - c. bahwa untuk melaksanakan ketentuan sebagaimana dimaksud pada huruf a dan huruf b, perlu menetapkan Peraturan Direktur Jenderal Perhubungan Udara tentang Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 8900-3.324 (*Staff Instruction 8900-3.324*) tentang Prosedur Persetujuan Dan Inspeksi Terhadap Manual Pengoperasian Pesawat Udara (*Approval And Inspection Of Operation Manual*);

- Mengingat :
1. Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 1, Tambahan Lembaran Negara Republik Indonesia Nomor 4956);
 2. Peraturan Presiden Nomor 7 Tahun 2015 tentang Organisasi Kementerian Negara (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 8);
 3. Peraturan Presiden Nomor 40 Tahun 2015 tentang Kementerian Perhubungan (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 75);
 4. Peraturan Menteri Perhubungan Nomor KM 18 Tahun 2002 tentang Persyaratan-Persyaratan Sertifikasi Dan Operasi Bagi Perusahaan Angkutan Udara Niaga Untuk Penerbangan Komuter dan Charter sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 53 Tahun 2016;
 5. Peraturan Menteri Perhubungan Nomor PM 28 Tahun 2013 tentang Peraturan Keselamatan Penerbangan Sipil Bagian 121 (*Civil Aviation Safety Regulation Part 121*) Tentang Persyaratan-Persyaratan Sertifikasi Dan Operasi Bagi Perusahaan Angkutan Udara Yang Melakukan Penerbangan Dalam Negeri, Internasional Dan Angkutan Udara Niaga Tidak Berjadwal (*Certification And Operating Requirements: Domestic, Flag, and Supplemental Air Carriers*) sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 41 Tahun 2016;
 6. Peraturan Menteri Perhubungan Nomor PM 59 Tahun 2015 tentang Kriteria, Tugas dan Wewenang Inspektur Penerbangan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 142 Tahun 2016;
 7. Peraturan Menteri Perhubungan Nomor PM 189 Tahun 2015 tentang Organisasi dan Tata Kerja Kementerian Perhubungan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 86 Tahun 2016;

8. Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 221 Tahun 2016 tentang Petunjuk Teknis SI Form-01 Manual Formulir Pada Direktorat Kelaikudaraan dan Pengoperasian Pesawat Udara (*Staff Instruction SI Form-01 DAAO Form Manual*);

MEMUTUSKAN

Menetapkan : PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA TENTANG PETUNJUK TEKNIS PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 8900-3.324 (*STAFF INSTRUCTION 8900-3.324*) TENTANG PROSEDUR PERSETUJUAN DAN INSPEKSI TERHADAP MANUAL PENGOPERASIAN PESAWAT UDARA (*APPROVAL AND INSPECTION OF OPERATION MANUAL*).

Pasal 1

Memberlakukan Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 8900-3.324 (*Staff Instruction 8900-3.324*) tentang Prosedur Persetujuan Dan Inspeksi Terhadap Manual Pengoperasian Pesawat Udara (*Approval And Inspection Of Operation Manual*) sebagaimana tercantum dalam Lampiran yang merupakan bagian tak terpisahkan dari Peraturan ini.

Pasal 2

Pada saat Peraturan ini mulai berlaku, maka:

- a. Peraturan Direktur Jenderal Perhubungan Udara Nomor KP 125 Tahun 2016 tentang Petunjuk Teknis Bagian 8900-3.324 (*Staff Instruction 8900-3.324*) Prosedur Persetujuan Dan Inspeksi Terhadap Manual Pengoperasian Pesawat Udara (*Approval And Inspection Of Operation Manual*); dan
- b. Volume 3 Chapter 3 Lampiran Peraturan Direktur Jenderal Perhubungan Udara Nomor SKEP/45/III/2010 Tahun 2010 tentang *Staff Instruction 8400 - Flight Operations Inspector's Handbook*;

dicabut dan dinyatakan tidak berlaku.

Pasal 3

Direktur Kelaikudaraan dan Pengoperasian Pesawat Udara mengawasi pelaksanaan Peraturan ini.

Pasal 4

Peraturan ini mulai berlaku sejak tanggal ditetapkan.

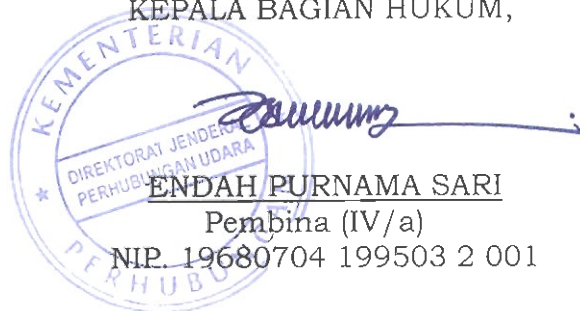
Ditetapkan di : JAKARTA
Pada tanggal : 23 AGUSTUS 2017

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya
KEPALA BAGIAN HUKUM,



Staff Instruction

SI 8900 – 3.324

Approval and Inspection of Operation Manual

Edition : 1
Amendment : 0
Date :

FOREWORD

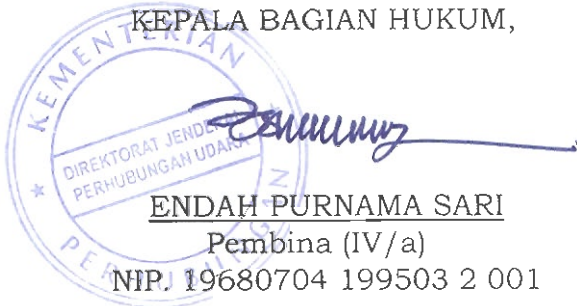
1. PURPOSE : This Staff Instruction has been prepared to guide and assist applicable personnel of the Directorate of Airworthiness and Aircraft Operations, Directorate General of Civil Aviation (DGCA), in the processes and procedures leading to approve and evaluate an Operation Manual.
2. REFERENCES : This Staff Instruction should be used in accordance with the applicable regulations.
3. CANCELLATION : Staff Instruction Number SI 8900-3.324 Amdt 0, dated 8 April 2016 and SI 8400 Volume 3 Chapter 3, have been canceled.
4. AMENDMENT : The amendment of this Staff Instruction shall be approved by the Director General of Civil Aviation.

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya
KEPALA BAGIAN HUKUM,



ENDAH PURNAMA SARI
Pembina (IV/a)
NIP. 19680704 199503 2 001

TABLE OF CONTENTS

| | |
|--|-----|
| FOREWORD..... | ii |
| TABLE OF CONTENTS..... | iii |
| CHAPTER 1 INTRODUCTION..... | 2 |
| 1.1 BACKGROUND AND OBJECTIVES..... | 2 |
| 1.2 MANUAL ORGANIZATION..... | 2 |
| 1.3 APPROVAL PROCEDURES..... | 3 |
| 1.4 REGULATORY REFERENCES..... | 3 |
| CHAPTER 2 OPERATIONS MANUAL INSPECTION AREAS..... | 4 |
| 2.1 OVERALL OPERATIONS MANUAL INSPECTION AREAS..... | 4 |
| 2.2 SPECIFIC OPERATIONS MANUAL INSPECTION AREAS..... | 5 |
| 2.2.1 General Part/Section..... | 5 |
| 2.2.2 Aircraft operating information..... | 15 |
| 2.2.3 Areas, routes and aerodromes..... | 20 |
| 2.2.4 Training..... | 21 |

CHAPTER 1 INTRODUCTION

1.1 Background And Objectives

Civil Aviation Safety Regulation (CASR) require each air operator to issue to crew members and persons assigned operational control functions an operations manual. Furthermore, CASR outline the organization and contents of the operations manual. The operations manual shall be reviewed by the DGCA and its content found acceptable or be approved, as applicable, prior to being provided for the use of personnel. DGCA will require revision of the manual as necessary to achieve compliance with CASR and safety requirements.

The objective of DGCA review of the operations manual is to ensure that the policies and procedures contained in the manual:

- a. implement the regulations of the Indonesia;
- b. provide clear, complete and detailed operating instructions, policies and procedures so that operational personnel are fully informed of what is required of them. Procedures shall be effective, represent sound safety philosophy and be capable of being accomplished;
- c. make provisions for revision to ensure that the information contained therein is kept up to date;
- d. present the necessary guidance and instructions to personnel in a suitable and convenient format; and
- e. outline standardized procedures for all crew member functions.

1.2 Manual Organization

In order to accomplish the above requirements and effectively organize policy and instructions, that portion of an operator's overall manual system which applies specifically to operations personnel is typically divided into several volumes. The size, as well as the number of volumes, of the operations manual will depend upon the size and complexity of the proposed operations. The overall manual system may be organized in any manner which adequately provides guidance concerning all important aspects of the operation.

The operations manual shall be organized with the following structure:

- a. general;
- b. aircraft operating information;
- c. area, routes and aerodromes; and
- d. training.

1.3 Approval Procedures

- a. The assigned operation inspector shall complete the approval and inspection of operations manual checklist (DAAO Form No. 120-31) for the approval and inspection of the Operations Manual.
- b. The assigned operation inspector shall inform the applicant, in writing, of all discrepancies that will require follow-up. Discrepancies should be noted and forwarded to the applicant.
- c. All discrepancies must be addressed or corrected by the applicant to the satisfaction of the assigned operation inspector.
- d. The Operation Manual shall only be approved with the completion of the DAAO Form No. 120-31 and any discrepancy reports that were raised. The assigned operation inspector will inform the applicant in writing when the Operation Manual is approved
- e. The completed DAAO Form No. 120-31, all completed discrepancy reports, any correspondence with the applicant and any relevant documents in submitted conjunction with the application should be appropriately filed.
- f. Copy of the approved Operation Manual shall be retained by DGCA.

1.4 Regulatory References

- a. Civil Aviation Safety Regulation (CASR) Part 121 "Certification And Operating Requirements: Domestic, Flag, and Supplemental Air Carriers".
- b. Civil Aviation Safety Regulation (CASR) Part 135 "Certification And Operating Requirements: for Commuter And Charter Air Carriers".
- c. Staff Instruction (SI) FORM – 01 "DAAO Form Manual".

CHAPTER 2 OPERATIONS MANUAL INSPECTION AREAS

2.1 Overall Operations Manual Inspection Areas

Inspectors shall review the air operator's operations manual or manual system to ensure that it contains information in sufficient detail to permit all flight operations personnel to perform their duties safely and efficiently. The following areas shall be evaluated:

- a. *organization and readability.* The manual(s) shall be organized so that information specific to various employee positions and types of operations is easy to locate, clear, concise, and unambiguous. Tables of contents shall be detailed enough so that specific subject areas may be easily and expeditiously located. Print quality, illustrations, and graphics shall be clear and readable. Each manual shall be numbered and issued according to a specific distribution list, and each holder made responsible for its prompt and accurate update. The distribution list shall contain all operations personnel and others requiring the information therein for proper performance of their duties. Those parts of the manual required to be carried on board each aircraft shall be designed for convenient use and all parts shall permit ready and accurate reference;
- b. *validity and accuracy.* Technical information contained in manuals such as weight and balance charts, performance charts, limitations, etc. shall accurately reflect data provided from the manufacturer or shall have been developed through the use of accepted and approved methods;
- c. *consistency.* Information presented in the various sections or volumes of a manual shall be consistent with that presented in other sections;
- d. *currency and conformity.* Information contained in manuals shall reflect current company organization, equipment, procedures and policies. The manual(s) shall be easy to update and contain a list of effective pages;
- e. *distribution and availability.* The operator shall have an effective system for distributing and updating manuals. The individual(s) responsible for entering changes in specific manuals shall be identified. The DGCA must be provided with copies of all manuals;
- f. *approvals.* CASR require that certain portions of the operations manual be reviewed in detail and approved by DGCA, while other portions of the operations manual are to be acceptable to DGCA. For aspects of the operations manual to be acceptable to DGCA inspectors shall conduct a specific evaluation to ensure that the information provided is in accordance with the applicable regulations and/or DGCA guidance material. The inspectors shall ensure the operator complies with the applicable approvals issued

by the State of Registry, when Indonesia is not the State of Registry, and/or the State of Design in addition to DGCA requirements;

- g. *content.* The approval and inspection of operations manual checklist (DAAO Form No. 120-31) form which appears at Staff Instruction (SI) FORM – 01 “DAAO Form Manual” will be used for all operations manual inspections. The focus of the manual inspection will be to evaluate the operator’s operations manual in the areas listed above. The “content” area of the form contains a checklist of the minimum subject areas which shall be adequately addressed in the operator’s manual(s). The checklist items in the “content” area are designed to be used for all operators. Certain items may not apply to a particular operator in which case the checklist item shall be annotated – not applicable. More specific information on each checklist item is outlined below. In determining the acceptability of the material contained in the manual(s), inspectors will need to often cross reference against the applicable regulations and DGCA guidance material;

2.2 Specific Operations Manual Inspection Areas

2.2.1 General Part/Section. The general part or section of the operations manual shall contain at least the following:

1. administration and control of the operations manual:
 - a. introduction:
 - 1) a statement that the manual complies with all applicable DGCA regulations and requirements and with the terms and conditions of the applicable air operator certificate;
 - 2) a statement that the manual contains operational instructions that are to be complied with by the relevant personnel in the performance of their duties;
 - 3) a list and brief description of the various operations manual parts, their contents, applicability and use; and
 - 4) explanations and definitions of terms and words used in the manual;
 - b. system of amendment and revision:
 - 1) an operations manual shall describe who is responsible for the issuance and insertion of amendments and revisions;
 - 2) a record of amendments and revisions with insertion dates and effective dates is required;
 - 3) a statement that hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety;

- 4) a description of the system for the header of footer data of pages, including their effective dates;
 - 5) a list of effective pages and their effective dates;
 - 6) a means of indicating changes on text pages and as practicable, on charts and diagrams;
 - 7) a system for recording temporary revisions;
 - 8) a description of the distribution system for the manuals, amendments and revisions; and
 - 9) a statement of who is responsible for notifying DGCA of proposed changes and working with the DGCA on changes requiring approval;
2. organization and responsibilities:
- a. *organizational structure.* A description of the organizational structure, including the general company organization and operations department organization. The relationship between the operations department and other departments of the company. In particular, the subordination and reporting lines of all divisions, departments, etc., which pertain to the safety of flight operations shall be shown. Instructions outlining the responsibilities of operations personnel pertaining to the conduct of flight operations;
 - b. *responsible manager.* The name of each management personnel as required in CASR shall be listed. A description of their function and responsibilities shall be included;
 - c. *responsibilities and duties of operations management personnel.* A description of the duties, responsibilities of operations management personnel pertaining to the safety of flight operations and to compliance with applicable regulations shall be listed;
 - d. *duties and responsibilities of a PIC.* A statement defining the duties and responsibilities of the PIC shall be listed;
 - e. *duties and responsibilities of crew members other than the PIC.* A statement defining the duties and responsibilities of all required crew members shall be listed;
3. operational control and supervision:
- a. *supervision of the operation by the air operator.* A description of the system for supervision of the operation by the Air operator shall be listed. This description shall show how the safety of flight operations and the qualifications of personnel involved in such operations are supervised and monitored. In particular, the procedures related to the following items shall be described:

- 1) specifications for the operational flight plan;
 - 2) competence of operations personnel; and
 - 3) control, analysis and storage of records, flight documents, additional information and safety related data;
- b. *system of promulgation of additional operational instructions and information.* A description of any system for promulgating information which may be of an operational nature but is supplementary to that in the operations manual. The applicability of this information and the responsibilities for its promulgation shall be included;
- c. *operational control.* A description of the objectives, procedures, and responsibilities necessary to exercise operational control with respect to flight safety shall comply with CASR;
4. crew:
- a. *crew composition.* An explanation of the method for determining crew compositions taking into account of the following:
- 1) experience (total and on type), recency and qualification of the crew members;
 - 2) the designation of the PIC and, if required by the duration of the flight, the procedures for the relief of the PIC or other members of the flight crew; and
 - 3) the flight crew for each type of operation including the designation of the succession of command;
- b. *designation of the PIC.* The rules applicable to the designation of a PIC;
5. qualifications of flight crew, cabin crew, flight operations officer and other operations personnel:
- a. *qualifications.* A description of the required licence, rating(s), qualification/competency (e.g., for routes and aerodromes), experience, training, checking and recency of experience, as applicable, for operations personnel to conduct their duties. Consideration shall be given to the aircraft type, kind of operation, and composition of the crew;
- b. *flight crew.* Operation on more than one type or variant;
- c. *cabin crew:*
- 1) cabin crew member in charge;
 - 2) cabin crew member;
 - a) required cabin crew member;
 - b) additional cabin crew member; and
 - c) cabin crew member during familiarization flights;

- 3) operation on more than one type or variant;
 - d. *flight operations officer*;
 - e. *other operations personnel*;
6. flight and duty time:
flight and duty time limitations and rest schemes:
 - a. flight crew;
 - b. cabin crew;
7. crew health:
crew health precautions. The relevant regulations and guidance for crew members concerning health including:
 - a. psychoactive substances;
 - b. pharmaceutical preparations;
 - c. immunization;
 - 1) self-contained underwater breathing apparatus (SCUBA) diving;
 - 2) blood donation;
 - 3) meal precautions prior to and during flight;
 - 4) sleep and rest; and
 - 5) surgical operations.
8. operating procedures:
 - a. *flight preparation* instructions. As applicable to the operation:
 - 1) criteria for determining the usability of aerodromes;
 - 2) the method for determining minimum flight altitudes;
 - 3) the method for determining aerodrome operating minima;
 - 4) en-route operating minima for visual flight rules (VFR) flights. Policy regarding VFR flights, including a description of en route operating minima for VFR flights or VFR portions of a flight and, where single-engine aircraft are used, instructions for route selection with respect to the availability of surfaces which permit a safe forced landing;
 - 5) presentation and application of aerodrome and en-route operating minima; interpretation of meteorological information. Explanatory material on the decoding of meteorological (MET) forecasts and MET reports relevant to the area of operations, including the interpretation of change indicators and probability groups; and
 - 6) determination of the quantities of fuel and oil carried. The specific instructions and methods by which the quantities of fuel and oil to be carried are determined and monitored in flight. Such

instructions shall take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight re-planning and of failure of one or more of the aircraft's power plants, and possible loss of pressurization. This section shall also include instructions on the measurement and distribution of the fluid carried on board. The system for maintaining fuel and oil records shall also be described.

- 7) weight and centre of gravity. The general principles of weight and centre of gravity including:
 - a) the policy for using either standard and/or actual weights;
 - b) the method for determining the applicable passenger, baggage and cargo weight;
 - c) the applicable passenger and baggage weights for various types of operations and aircraft type;
 - d) general instruction and information necessary for verification of the various types of weight and balance documentation in use; – last minute changes procedures;
 - e) seating policy/procedures; and
 - f) list of documents, forms and additional information to be carried during a flight.
9. ground handling arrangements and procedures:
 - a. *fuelling procedures.* A description of fuelling procedures, including:
 - 1) safety precautions during refuelling and defueling including when an auxiliary power-unit (APU) is in operation or when a turbine engine is running and, if applicable, the propeller brakes are on;
 - 2) refuelling and defueling when passengers are embarking, on board or disembarking, including the two-way communication;
 - 3) precautions to be taken to avoid mixing fuels; and
 - 4) method to ensure the required amount of fuel is loaded.
 - b. *aircraft, passengers and cargo handling procedures related to safety.* A description of the handling procedures to be used when allocating seats and embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the

aircraft is on the ramp, shall also be given. Handling procedures shall include:

- 1) sick passengers and persons with reduced mobility;
- 2) permissible size and weight of hand baggage;
- 3) loading and securing of items in the aircraft;
- 4) special loads and classification of load compartments (i.e., dangerous goods, live animals, etc.);
- 5) positioning of ground equipment;
- 6) operation of aircraft doors;
- 7) safety on the ramp, including fire prevention, blast and suction areas;
- 8) start-up, ramp departure and arrival procedures;
- 9) servicing of aircraft;
- 10) documents and forms; and
- 11) multiple occupancy of aircraft seats.

c. *procedures for the refusal of embarkation.* Procedures to ensure that persons who appear to be intoxicated or who demonstrate by manner or physical indications that they are under the influence of alcohol or drugs, except medical patients under proper care, are refused embarkation;

d. *de-icing and anti-icing on the ground (as applicable).* Instructions for the conduct and control of ground de-icing/anti-icing operations. A description of the de-icing and anti-icing policy and procedures for aircraft on the ground. These shall include descriptions of the types and effects of icing and other contaminants on aircraft while stationary, during ground movements and during take-off. In addition, a description of the fluid types used shall be given including:

- 1) proprietary or commercial names;
- 2) characteristics, including hold-over tables;
- 3) effects on aircraft performance; and
- 4) precautions during usage.

10. flight procedures and flight navigation equipment:

a. *flight procedures*, including:

- 1) standard operating procedures (SOP) for each phase of flight;
- 2) instructions on the use of normal checklists and the timing for their use;
- 3) departure contingency procedures;
- 4) instructions on the maintenance of altitude awareness and the use of automated or flight crew altitude call-outs;

- 5) instructions on the use of autopilots and auto-throttles in instrument meteorological conditions (IMC), in RVSM airspace and when conducting performance-based navigation procedures, as applicable;
 - 6) instructions on the clarification and acceptance of ATC clearances, particularly where terrain clearance is involved;
 - 7) departure and approach briefings;
 - 8) procedures for familiarization with areas, routes and aerodromes;
 - 9) stabilized approach procedure;
 - 10) limitation on high rates of descent near the surface;
 - 11) conditions required to commence or to continue an instrument approach;
 - 12) instructions for the conduct of precision and non-precision instrument approach procedures;
 - 13) allocation of flight crew duties and procedures for the management of crew workload during night and IMC instrument approach and landing operations; and
 - 14) the circumstances during which a radio listening watch is to be maintained.
- b. *navigation equipment*. A list of the navigational equipment to be carried including any requirements relating to operations where performance-based navigation is prescribed;
- c. *navigation procedures*. A description of all navigation procedures relevant to the type(s) and area(s) of operation. Consideration shall be given to:
- 1) standard navigational procedures including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the aircraft;
 - 2) in-flight re-planning;
 - 3) procedures in the event of system degradation;
 - 4) where relevant to the operations, the long range navigation procedures, engine failure procedure for extended diversion time operation (EDTO) and the identification and utilization of diversion aerodromes;
 - 5) instructions and training requirements for the avoidance of controlled flight into terrain and policy for the use of the ground proximity warning system (GPWS);

- 6) policy, instructions, procedures and training requirements for the avoidance of collisions and the use of the airborne collision avoidance system (TCAS);
- 7) information and instructions relating to the interception of civil aircraft including:
 - a) procedures for pilots-in-command of intercepted aircraft; and
 - b) visual signals for use by intercepting and intercepted aircraft.
- 8) for aeroplanes intended to be operated above 49 000 ft (15 000 m):
 - a) limit values for exposure to solar cosmic radiation;
 - b) procedures for the use of cosmic or solar radiation detection equipment and for recording its readings including actions to be taken in the event that limit values specified in the operations manual are exceeded;
 - c) information which will enable the pilot to determine the best course of action to take in the event of exposure to solar cosmic radiation; and
 - d) procedures in the event that a decision to descend is taken, covering.
- d. *policy and procedures for in-flight fuel management;*
- e. *adverse and potentially hazardous atmospheric conditions.* Procedures for operating in, and/or avoiding, including report and record, potentially hazardous atmospheric conditions. The procedures shall include with the following conditions:
 - 1) thunderstorms;
 - 2) icing conditions;
 - 3) turbulence;
 - 4) wind shear;
 - 5) jet stream;
 - 6) volcanic ash clouds;
 - 7) heavy precipitation;
 - 8) sand storms;
 - 9) mountain waves; and
 - 10) significant temperature inversions.
- f. *operating restrictions:*
 - 1) cold weather operations;
 - 2) take-off and landing in turbulence;
 - 3) low-level wind shear operations;
 - 4) crosswind and tailwind operations;
 - 5) high temperature operations; and

- 6) high altitude operations.
- g. *incapacitation of crew members*. Procedures to be followed in the event of incapacitation of crew members in flight. Examples of the types of incapacitation and the means for recognizing them shall be included;
- h. *cabin safety requirements*. Procedures covering:
 - 1) cabin preparation for flight, in-flight requirements and preparation for landing including procedures for securing cabin and galleys;
 - 2) procedures to ensure that passengers are seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aircraft;
 - 3) procedures to be followed during passenger embarkation and disembarkation;
 - 4) smoking on board; and
 - 5) use of portable electronic equipment and cellular telephones.
- i. *passenger briefing procedures*. The contents, means and timing of passenger briefing;
- j. *Communicable Disease*. Procedure for the crew to evaluate a traveller with suspected communicable disease and procedure for the pilot-in-command to report promptly to air traffic control (ATC) a suspected communicable disease, with transmission of the following information:
 - 1) Aircraft identification
 - 2) Departure Aerodrome
 - 3) Destination Aerodrome
 - 4) Estimated time of arrival
 - 5) Number of person on board
 - 6) Number of suspected case(s) on board;and
 - 7) Nature of the public health risk, if known.
- 11. all-weather operations;
- 12. use of the minimum equipment list (MEL) and configuration deviation list (CDL);
- 13. *non-revenue flights*. Procedures and limitations, including the kind of persons who may be carried on such flights, for:
 - a. training flights;
 - b. test flights;
 - c. delivery flights;
 - d. ferry flights;
 - e. demonstration flights; and
 - f. positioning flights.

14. *oxygen requirements*. An explanation of the conditions under which oxygen shall be provided and used;
15. dangerous goods and weapons:
 - a. *transport of dangerous goods*. Information, instructions and general guidance on the transport of dangerous goods including:
 - 1) air operator's policy on the transport of dangerous goods;
 - 2) guidance on the requirements for acceptance, labelling, handling, stowage and segregation of dangerous goods;
 - 3) procedures and actions to be taken for responding to emergency situations involving dangerous goods;
 - 4) duties and training of all personnel involved; and
 - 5) instructions on the carriage of company material.
 - b. *transport of weapons*. The conditions under which weapons, munitions of war and sporting weapons may be carried.
16. security:
 - a. *security policies and procedures*. A description of security policies and procedures for handling and reporting crime on board such as unlawful interference, sabotage, bomb threats, and hijacking;
 - b. *security instructions and guidance*. Security instructions and guidance of a non-confidential nature which shall include the DGCA and responsibilities of operations personnel;
 - c. *preventative security measures and training*. A description of preventative security measures and training; and
 - d. *aeroplane search procedures and guidance on least-risk bomb locations where practicable*. A checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices. The checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aeroplane.
17. *handling of accidents and occurrences*. Procedures for the handling, notifying and reporting of accidents and occurrences. This section shall include:

- a. definitions of accidents and occurrences and the relevant responsibilities of all persons involved;
 - b. the descriptions of which company departments, Authorities or other institutions have to be notified by which means and in which sequence in case of an accident;
 - c. special notification requirements in the event of an accident or occurrence when dangerous goods are being carried;
 - d. a description of the requirements to report specific occurrences and accidents;
 - e. the forms used for reporting and the procedure for submitting them to the [insert agency to report accidents and serious incidents] shall also be included; and
 - f. procedures for pilots-in-command observing an accident.
18. *rules of the air*. Rules of the air including:
- a. territorial application of the rules of the air;
 - b. interception procedures;
 - c. ATC clearances, adherence to flight plan and position reports;
 - d. the ground/air visual codes for use by survivors, description and use of signal aids; and
 - e. distress and urgency signals.
19. *safety management system (SMS)*. Details of the safety management system.

2.2.2 Aircraft operating information. The part or section containing aircraft operating information shall contain at least the following:

- 1. *general information and units of measurement*. General Information (e.g., aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables;
- 2. *certification and operational limitations*. A description of the certified limitations and the applicable operational limitations including:
 - a. certification status;
 - b. passenger seating configuration for each aircraft type including a pictorial presentation;
 - c. types of operation that are approved (e.g. IFR/VFR, CAT II/III, flights in known icing conditions etc.);
 - d. minimum crew composition;
 - e. weight and centre of gravity limitations;

- f. speed limitations;
 - g. flight envelopes;
 - h. wind limits including operations on contaminated runways;
 - i. performance limitations for applicable configurations;
 - j. runway slope limitations;
 - k. limitations on wet or contaminated runways;
 - l. airframe contamination;
 - m. time-limit of systems, as applicable;
 - n. brake temperature limitations; and
 - o. tire speed and tire pressure limitations.
3. *normal procedures.* The normal procedures and duties assigned to the crew, the appropriate checklists, the system for use of the checklists and a statement covering the necessary coordination procedures between flight and cabin crew, as applicable. The following normal procedures and duties shall be included:
- a. pre-flight;
 - b. pre-departure and loading;
 - c. altimeter setting and checking;
 - d. taxi, take-off and climb;
 - e. noise abatement;
 - f. cruise and descent;
 - g. approach, landing preparation and briefing;
 - h. VFR approach;
 - i. instrument approach;
 - j. visual approach and circling;
 - k. missed approach;
 - l. normal landing;
 - m. post-landing; and
 - n. operation on wet and contaminated runways.
4. *specific flight deck procedures:*
- a. determining airworthiness of aircraft;
 - b. obtaining flight release;
 - c. initial cockpit preparation;
 - d. standard operating procedures;
 - e. cockpit discipline and sterile cockpit procedures;
 - f. standard call-outs;
 - g. communications;
 - h. flight safety;
 - i. push-back and towing procedures;
 - j. taxi guidelines and ramp signals;
 - k. take-off and climb out procedures;
 - l. choice of runway;
 - m. take-off in limited visibility;
 - n. take-off in adverse weather;
 - o. use and limitations of weather radar;

- p. use of landing lights;
 - q. monitoring of flight instruments;
 - r. power settings for take-off;
 - s. malfunctions during take-off;
 - t. rejected take-off decision;
 - u. climb at normal speed, best angle and best rate;
 - v. en-route and holding procedures;
 - w. cruise control;
 - x. navigation log book;
 - y. descent, approach and landing procedures;
 - z. reporting maintenance deficiencies; and
 - aa. how to obtain maintenance and service en-route.
5. *abnormal and emergency procedures and duties.* The manual shall contain a listing of abnormal and emergency procedures assigned to crew members with appropriate check-lists that include a system for use of the check-lists and a statement covering the necessary co-ordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties shall be included:
- a. general considerations and policy;
 - b. fire and smoke drills;
 - c. unpressurised and partially pressurized flight, as applicable;
 - d. exceeding structural limits such as overweight landing;
 - e. exceeding cosmic radiation limits, as applicable;
 - f. lightning strikes;
 - g. distress communications and alerting ATC to emergencies;
 - h. engine failure;
 - i. system failures;
 - j. guidance for diversion in case of serious technical failure; 11)
 - k. ground proximity warning;
 - l. TCAS advisories;
 - m. windshear;
 - n. emergency landing/ditching;
 - o. aircraft evacuation;
 - p. fuel jettisoning (as applicable);
 - q. crew incapacitation;
 - r. emergency descent;
 - s. low fuel;
 - t. emergency signal for cabin crew members; and
 - u. communication procedures.

6. *performance data*. Performance data shall be provided in a form in which it can be used without difficulty. Performance material which provides the necessary data to allow the flight crew to comply with the approved aircraft flight manual performance requirements shall be included to allow the determination of:
 - a. take-off climb limits – weight, altitude, temperature;
 - b. take-off field length limits (dry, wet, contaminated), including the effect of inoperative systems under the MEL which affect the take-off distance (e.g. de-activated brake);
 - c. net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;
 - d. the gradient losses for banked climb outs;
 - e. en-route climb limits;
 - f. approach climb limits;
 - g. landing climb limits;
 - h. landing field length limits (dry, wet, contaminated) including the effects of an in-flight failure of a system or device, if it affects the landing distance;
 - i. brake energy limits; and
 - j. speeds applicable for the various flight stages (also considering wet or contaminated runways).
7. *supplementary performance data*. Supplementary data covering:
 - a. flights in icing conditions;
 - b. the maximum crosswind and tailwind components for each aeroplane type operated and the reductions to be applied to these values having regard to gust, low visibility, runway surface conditions, crew experience, use of autopilot, abnormal or emergency circumstances, or any other relevant operational factors; and
 - c. any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative, shall be included.
8. *other acceptable performance data*. If performance data, as required for the appropriate performance class, is not available in the approved AFM, then other data acceptable to the DGCA shall be included. Alternatively, the operations manual may contain cross-reference to the approved data contained in the AFM where such data is not likely to be used often or in an emergency;
9. *additional performance data*. Additional performance data where applicable including:
 - a. all engine climb gradients;
 - b. drift-down data;

- c. effect of de-icing/anti-icing fluids;
 - d. flight with landing gear down;
 - e. for aircraft with three or more engines, one engine inoperative ferry flights; and
 - f. flights conducted under the provisions of a configuration deviation list (CDL).
10. *flight planning data:*
- a. flight planning. Specific data and instructions necessary for pre-flight and in-flight planning including factors such as speed schedules and power settings. Where applicable, procedures for engine(s) out operations, EDTO and flights to isolated aerodromes shall be included for the flight plan and the operational flight plan; and
 - b. fuel calculations. The method for calculating the fuel needed for the various stages of flight.
11. *weight and balance calculations. Instructions and data for the calculation of weight and balance including:*
- a. calculation system (e.g. index system);
 - b. information and instructions for completion of weight and balance documentation, including manual and computer generated types;
 - c. limiting weight and centre of gravity of the various versions; and
 - d. dry operating weight and corresponding centre of gravity or index.
12. *loading:*
- a. *loading procedures.* Instructions for loading and securing the load in the aircraft;
 - b. use of aircraft systems and associated controls; and
 - c. *loading dangerous goods.* The operations manual shall contain a method to notify the PIC when dangerous goods are loaded in the aircraft (if applicable).
13. *survival and emergency equipment including oxygen:*
- a. list of survival equipment to be carried:
A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated check list(s) shall also be included;
 - b. *oxygen usage.* The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression shall be considered. The information provided shall be in a form in which it can be used without difficulty;

- c. *emergency equipment usage*. A description of the proper use of the following emergency equipment, if applicable:
 - 1) life jackets;
 - 2) life rafts;
 - 3) medical kits/first aid kits;
 - 4) survival kits;
 - 5) emergency locator transmitter (ELT);
 - 6) visual signaling devices;
 - 7) evacuation slides;
 - 8) emergency lighting;
- 14. *emergency evacuation*:
 - a. *emergency evacuation preparation*. Instructions for preparation for emergency evacuation including crew co-ordination and emergency station assignment;
 - b. *emergency evacuation procedures*. A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of the passengers in the event of a forced landing, ditching or other emergency;
- 15. *aircraft systems*. A description of the aircraft systems, related controls and indications and operating instructions.

2.2.3 Areas, routes and aerodromes. The part or section of the operations manual shall contain at least the following:

- 1. the route guide will ensure that the flight crew will have for each flight, information relating to communication facilities, navigation aids, aerodromes, instrument approaches, instrument arrivals and instrument departures as applicable for the operation, and such other information as the operator may deem necessary in the proper conduct of flight operations;
- 2. each route guide shall contain at least the following information:
 - a. the minimum flight altitudes for each aircraft to be flown;
 - b. aerodrome operating minima for each of the aerodromes that are likely to be used as aerodromes of intended landing or as alternate aerodromes;
 - c. the increase of aerodrome operating minima in case of degradation of approach or aerodrome facilities;
- 3. Information related to the level of RFFS (rescue and fire-fighting services) protection that is deemed acceptable by the operator.

2.2.4 Training. The training part or section of the operations manual shall contain at least the following:

1. flight crew training programme; The training syllabi and checking programmes for flight crew members shall include:
 - a. a training programme approved by the DGCA that provides for basic indoctrination, initial, transition, difference and recurrent training, as appropriate, for flight crew members for each type of aircraft flown by that crew member. This training programme shall include both normal and emergency procedures training applicable for each type of aircraft flown by the crew member;
 - b. adequate ground and flight training facilities and properly qualified instructors required to meet training objectives and needs;
 - c. a current list of approved training materials, equipment, training devices, simulators and other required training items needed to meet the training needs for each type and variation of aircraft flown by the air operator; and
 - d. a record system acceptable to the DGCA to show compliance with appropriate training and currency requirements.
2. cabin crew duties training programme; The training syllabi and checking programmes for cabin crew members shall include:
 - a. basic initial ground training covering duties and responsibilities;
 - b. appropriate DGCA rules and regulations;
 - c. appropriate portions of the operator's operating manual;
 - d. appropriate recurrent training as required by the DGCA and the operator's operating manual;
 - e. appropriate in-flight safety duties and functions training;
 - f. appropriate recurrent, upgrade, or difference training, as required, to maintain currency in any type and variance of aircraft the crew member may be required to work in;
 - g. adequate training facilities and properly qualified instructors required to meet training objectives and needs;

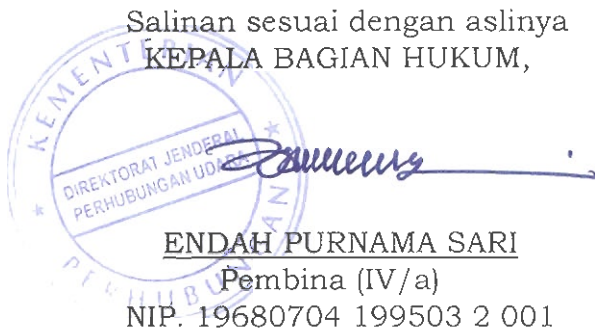
- h. a current list of approved training materials, equipment, training devices, simulators and other required training items needed to meet the training needs for each type and variation of aircraft flown by the air operator; and
 - i. maintain a training record system acceptable to the DGCA to show compliance with all required training.
3. flight operations officer / flight dispatcher training programme. A documented training programme shall be developed that pertains to their respective duties. The training programme shall provide for initial, recurrent and any required upgrade training.

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya
KEPALA BAGIAN HUKUM,



ENDAH PURNAMA SARI
Pembina (IV/a)
NIP. 19680704 199503 2 001