



WORKING PAPER

ASSEMBLY — 39TH SESSION

TECHNICAL COMMISSION

Agenda Item 37: Other issues to be considered by the Technical Commission

UPDATE OF GLOBAL (NORMAL) FLIGHT TRACKING PROVISIONS

(Presented by the International Federation of
Airline Dispatchers Associations (IFALDA))

EXECUTIVE SUMMARY

Amendment 39 to Annex 6 prescribes Flight Tracking provisions on Air Transport operators. The accompanying Draft Guidance Material – Aircraft Tracking Implementation Circular effectively relates this duty to the functions of designated licensed and non-licensed Flight Operations Officers/Flight Dispatchers in satisfying their requirements. This paper represents practical aspects currently facing the global operational control and flight dispatch community including others engaged in the control and supervision of flights in meeting these requirements. It also calls for a review of the complementary proposals under Amendment 39 and under a risk-based approach that can only be met by closely integrating Flight Planning and Flight Following procedures within the Air Operator Centers. It will require the active involvement and larger role of the Flight Operations Officer/Flight Dispatcher community and by leveraging the skills, knowledge and tools that they currently use.

Action: The Assembly is invited to:

- a) call on States to note the critical roles and responsibilities of the Flight Operations Officer/Flight Dispatcher in meeting all the normal and exceptional flight tracking provisions;
- b) call on ICAO to recognize the need to improve and introduce a competency based approach to the ICAO Flight Operations Officers/Flight Dispatchers Training Manual, currently Doc.7192 – AN/857 Part D-3, 2nd Edition published in 1998;
- c) call on IFALDA, through their technical competency, to improve and introduce a competency based approach to the ICAO Flight Operations Officers/Flight Dispatchers Training Manual, currently Doc.7192 – AN/857 Part D-3, 2nd Edition published in 1998 and
- d) request ICAO to support the timely publication of Circulars and Manuals and any necessary guidance and tools for the introduction of Amendment 39, Annex 6, Part I.

<i>Strategic Objectives:</i>	This working paper relates to the Safety, Air Navigation Capacity and Efficiency, Environmental Protection and Economic Development of Air Transport Strategic Objectives.
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¹ English, Arabic, Chinese, French, Russian and Spanish versions provided by IFALDA

<i>Financial implications:</i>	The financial implication of most action items is minimal; however, action item c) could have financial implications for ICAO involving the cost to assign one or more individuals to collaborate with IFALDA’s proposal to update the training manual. In the longer term, ICAO would be burdened with this cost anyway since manuals must be kept up to date in order to continue to have value in the continuously evolving world of civil aviation. It also must be recognized that IFALDA is willing to provide the technical subject matter expertise at no direct cost to ICAO.
<i>References:</i>	Summary of Discussions – NATII/2 Face-to-Face Meeting Global Aeronautical Distress and Safety System (GADSS) – Concept of Operations Report of the Normal Aircraft Tracking Implementation Initiative (NATII) Annex 6, Part I Annex 1 Doc 7192, <i>Training Manual</i> , Part D-3 State letter AN 11/1.1.29-15/12 State letter SP 55/4-15/15

1. INTRODUCTION

1.1 The International Federation of Airline Dispatchers Associations (IFALDA), formed in 1961, is a global professional standards, non-labour association. We represent the professional and technical roles and responsibilities of dispatchers and flight operations officers worldwide. IFALDA is recognized by ICAO as an International Organization representing Flight Operations Officers and Flight Dispatchers worldwide and as an industry stakeholder carries wide expertise and interest in contributing to the development and promulgation of ICAO Provisions for Standards, Procedures and Guidance. Where reference is made to flight dispatchers (dispatchers) and flight operations officers (FOOs) in this document as well as other ICAO documents, the terms are functionally identical and used interchangeably. The term “those engaged in the control and supervision of flights” refers to individuals designated by the operator to serve in a similar functional capacity to dispatchers and FOOs, whether licensed or not, in the exercise of operational control in those States not requiring dispatch systems.

1.2 The Council approved amendment 39 to Annex 6, Part I for an applicability date of 8 November 2018. ICAO also expressed its intent to support these amendments with a Circular “Normal Aircraft Tracking Implementation Guidelines (Cir 347)” and update the Flight Planning and Fuel Management Manual (Doc 9976) with feasible implementation options using a performance based approach.

2. DISCUSSION

2.1 At the outset, IFALDA would like to express its belief that the ICAO Annex 6, Part 1 Amendment 39 “Recommendation” under Para 3.3.2 would, in many cases be deemed by certain State Regulators as a compliance item in meeting the Mandate and therefore highlighted as such in the presentation of this working paper. IFALDA has thereby noted the requirements under the mandate of Annex 6, Amendment 39 and the included circular as they apply to the global Flight Dispatchers/Officers and states them as follows:

- a) a requirement to identify those areas of flight operations where aircraft position reports are delivered to ATC at intervals at or greater than 15 minutes;
- b) ensure Flight Tracking software is available and deployed whereby Network Control operations are logging an automated aircraft position report at least every 15 minutes and in all oceanic areas (i.e. outside the 12nm territorial limit);
- c) define and comply with Air Operator Procedures for retention of aircraft tracking data;
- d) ensure State Regulatory approval for the air operator procedures as above for retention of tracking data;
- e) an automated determination of the last-known position of the aircraft (to assist with Search & Rescue (as published in the State AIPs) to support SAR procedures and in association with designated (Rescue Coordination Center) RCC locations;
- f) the procedure and the method, frequency and retention of tracking data by the air navigation service provider and the air traffic service provider notwithstanding, nothing in the proposal relieves the dispatcher or the person designated by the operator for the control and supervision of flights, from the responsibility to exercise operational control. In order to exercise operational control the operator must know the position of its flights at all times;
- g) a method for Flight Dispatch and those engaged in the control and supervision of flights under a given and established/published company procedure of System Operational Control to:
 - 1) determine and establish an event when the aircraft position derived from the automated tracking system as in 2.1.5 can no longer be made;
 - 2) thereafter, attempt to establish communications with the aircraft;
 - 3) thereafter, determine the Area Control Center controlling that portion of the airspace;
 - 4) notify that ATS Unit.

2.2 In view of the foregoing, IFALDA would highlight an unrealistic operational control and flight following burden that these prescriptive requirements impose on the Dispatcher community and which in turn could result in a number of unintended consequences to operations particularly where the procedures required for normal aircraft tracking cannot always be met or become unavailable. IFALDA also lauds the role of the Air Navigation Commission in reviewing and affirming the need for additional complementary work to facilitate the practical implementation of these provisions. These additional provisions and guidance material due with the promulgation of Amendment 40 to Annex 6, Part I would address outstanding issues and ranging from applicability to cargo aircraft, certain operations with limited flights over oceanic areas; situations beyond the control of the Dispatcher where elements required for normal aircraft tracking become unavailable (e.g. communication service provider outage); and timely access to air navigation services provider (ANSP) and operator contact information.

2.3 Additionally the ANC agreed to the introduction of complementary Standards and Recommended Practices (SARPs) that offered risk-based variations under State oversight that would selectively and conditionally permit certain flights lacking normal tracking capability to be released, based upon the method the control and supervision of flights described in Annex 6, Part 1 Chapter 3. 2.4.

2.4 In this context, it would therefore be pertinent to highlight the key roles and responsibilities that the Flight Operations Officer/Flight Dispatcher community would serve through the course of Normal Flight but also will play in bridging the is gap under certain in flight conditions where normal aircraft tracking requirements as required under the current (Amendment 39) “Normal Aircraft Tracking Requirements” for risk-based variations under State oversight are required to be met and indeed satisfied.

2.5 The Assembly is invited to note the critical role of the Flight Operations Officer/Flight Dispatcher community as prescribed in the requirements under ICAO Annex 1, Ch. 4.6 (Flight operations officer/flight dispatcher licence) will play in satisfying the intent and objectives of the complementary provisions of Annex.6 Part I. The relevant extracts are attached in Appendix A for easy reference. The issue and currency of the Flight Dispatcher License inter-alia prescribes normal duties and roles & responsibilities to include Knowledge, Skills, Human Performance (including principles of threat and error management) Operational and Communication procedures and:

- a) training, qualification and critical skills to understand the description of and use of all Flight Dispatch and Operational Control ground-based procedures and processes in the Operations and Dispatcher Manuals
- b) carefully considering the overall capability of the aeroplane and its systems for dispatchability and flight following
- c) ensuring availability of a means to determine the position of and communicate with the aircraft by ACARS, VHF and phone-patch
- d) situational awareness of frequency and duration of gaps in automated reporting along each flight route
- e) follow clearly defined and specific loss of flight position and mitigation measures and contingency procedures.

2.6 Additionally, IFALDA would also offer that such procedures where validated within the IOSA audit and ISARPs would proportionately reduce the burden on States in ensuring compliance and conformity with the SARPS and assist in meeting their applicability date. These ISARPs would include the necessary changes to the air operator certification and/or surveillance programmes to include any specific new requirements in relation to the area of operations. These updates could also include the policy and procedural changes to the Operator’s Manuals, Training procedures and systems in order to comply with applicable requirements. This would align with the USOAP protocol questions accordingly.

3. CONCLUSION

3.1 IFALDA fully supports the complementary SARPs as an effective means to ensure the safety and efficiency of Air Operator flights in certain areas and such flight durations where normal tracking provisions cannot be fully met. These gaps are actually addressed by leveraging the active role of

the licensed and unlicensed Flight Operations Officer/Flight Dispatcher and complemented by a competency-based approach in using all available software and communication means deployed in their operational control function.

3.2 IFALDA actively supports other industry bodies such as IATA in developing IOSA requirements and will continue this support in ensuring the practical implementation of these complementary SARPs,

3.3 IFALDA is actively engaged with ICAO and other stakeholders in the review and rewrite of Doc.7192 Part D3 (Flight Operations Officers/Flight Dispatchers) and eventually evolving towards a competency and performance based approach for inclusion thereafter under Doc 9868 PANS-TRG. (attachment).

APPENDIX

APPENDIX A – EXTRACTS FROM ICAO ANNEX 1

4.6 Flight operations officer/flight dispatcher licence

4.6.1 Requirements for the issue of the licence

4.6.1.1 *Age*

The applicant shall be not less than 21 years of age.

4.6.1.2 *Knowledge*

The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight operations officer licence, in at least the following subjects:

Air law

- a) rules and regulations relevant to the holder of a flight operations officer licence; appropriate air traffic services practices and procedures;

Aircraft general knowledge

- b) principles of operation of aeroplane engines, systems and instruments;
- c) operating limitations of aeroplanes and engines;
- d) minimum equipment list;

Flight performance calculation, planning procedures and loading

- e) effects of loading and mass distribution on aircraft performance and flight characteristics; mass and balance calculations;
- f) operational flight planning; fuel consumption and endurance calculations; alternate aerodrome selection procedures; en-route cruise control; extended range operation;
- g) preparation and filing of air traffic services flight plans;
- h) basic principles of computer-assisted planning systems;

Human performance

- i) human performance relevant to dispatch duties, including principles of threat and error management;

Note.— Guidance material to design training programmes on human performance, including threat and error management, can be found in the Human Factors Training Manual (Doc 9683).

Meteorology

- j) aeronautical meteorology; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;
- k) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information;

Navigation

- l) principles of air navigation with particular reference to instrument flight;

Operational procedures

- m) use of aeronautical documentation;
- n) operational procedures for the carriage of freight and dangerous goods;
- o) procedures relating to aircraft accidents and incidents; emergency flight procedures;
- p) procedures relating to unlawful interference and sabotage of aircraft;

Principles of flight

- q) principles of flight relating to the appropriate category of aircraft; and

Radio communication

- r) procedures for communicating with aircraft and relevant ground stations.

4.6.1.3 *Experience*

4.6.1.3.1 The applicant shall have gained the following experience:

- a) a total of two years of service in any one or in any combination of the capacities specified in 1) to 3) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year:
 - 1) a flight crew member in air transportation; or
 - 2) a meteorologist in an organization dispatching aircraft in air transportation; *or*
 - 3) an air traffic controller; or a technical supervisor of flight operations officers or air transportation flight operations systems; *or*
- b) at least one year as an assistant in the dispatching of air transport; or
- c) have satisfactorily completed a course of approved training.

4.6.1.3.2 The applicant shall have served under the supervision of a flight operations officer for at least 90 working days within the six months immediately preceding the application.

4.6.1.4 *Skill*

The applicant shall have demonstrated the ability to:

- a) make an accurate and operationally acceptable weather analysis from a series of daily weather maps and weather reports; provide an operationally valid briefing on weather conditions prevailing in the general neighbourhood of a specific air route; forecast weather trends pertinent to air transportation with particular reference to destination and alternates;
- b) determine the optimum flight path for a given segment, and create accurate manual and/or computer generated flight plans;
- c) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather conditions, as appropriate to the duties of the holder of a flight operations officer licence; and
- d) recognize and manage threats and errors.

Note.— Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (Doc 9868, PANS-TRG), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

4.6.2 Privileges of the holder of the licence and the conditions to be observed in exercising such privileges Subject to compliance with the requirements specified in 1.2.5, the privileges of the holder of a flight operations officer licence shall be to serve in that capacity with responsibility for each area for which the applicant meets the requirements specified in Annex 6.

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