Flight Dispatcher's World 11th Edition

INTERNATIONAL FEDERATION AIRLINE DISPATCHERS ASSOCIATIONS

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All IFALDA Members and Friends   **November 2020**

This is the Eleventh edition of "**FLIGHT DISPATCHER'S WORLD**" (FDW). FDW is meant to keep our membership and friends of IFALDA up to date on issues affecting flight dispatchers as well as our current efforts in the global Flight Dispatcher and Flight Operations Officer community. Articles are intended to be the basis for professional conversations and to solicit input from our membership.

SOME COMMENTS FROM THE EDITOR

I continue to serve IFALDA as President Russ Williams's Special Assistant (Special Assistant to the President-SATTP). As such I do the best I can to keep up with and keep Russ informed about new technology and procedures. Much international effort has involved moving away from prescriptive technical standards and towards performance-based standards in both aircraft operations (navigation, communication, fuel management amongst other things) and air traffic management, taking advantage of SWIM (System Wide Information Management) and FF-ICE (Flight & Flow Information for a Collaborative Environment), an ICAO-level concept to support future ATM Operations.
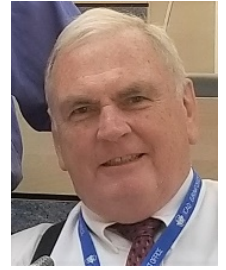
Dave Porter
Editor/Publisher FDW
SATTP IFALDA

The bad news
This past year has been full of drama and disappointments within the airline industry as the result of the COVID-19 pandemic. As I write this in mid-November, the number of cases and the resulting death toll has spiked sharply as the fall/winter season kicks in. Because of this, demand for passenger air travel has pretty much bottomed out resulting in considerable cutbacks in industry including widespread layoffs, furloughs, and reduced compensation schemes for flight dispatchers. Adding to our misery is the grounding of the B-737 MAX since 2019. This has affected many airlines around the world with huge fleets parked in the desert.

The good news
On the brighter side, it appears that several vaccines under development in Europe and North America are on the fast-track for approval. Additionally, after massive testing and re-engineering by Boeing and its suppliers, the U.S. FAA has just approved the MAX to resume air carrier operations.

The impact on IFALDA
The overall impact on IFALDA is uncertain since our membership base will no doubt shrink because of layoffs and furloughs and early retirements. Interestingly, the impact on IFALDA's internal funding has been minimal for the simple reason that, since March 2020, all IFALDA Board meetings and all ICAO working group meetings have gone virtual via WebEx, with little or no expense to IFALDA. Our VP Finance Rick Ketchersid has done an outstanding job in his stewardship of IFALDA's funds, spending only when absolutely necessary. As a result of Rick's efforts, we are currently in good shape financially.

IFALDA relationships and working groups
We continue to collaborate with our colleagues at the U.S.-based Airline Dispatcher's Federation (ADF), the European-based European Federation of Airline Dispatcher's Association (EUFALDA) and APADA (Argentine Professional Aircraft Dispatchers Association), our South American colleagues. Our French member association – FRALDA, has done an excellent job in representing IFALDA at the ICAO Paris office where several of our technical working groups are based. We also continue to work with our colleagues in Nigeria in setting up a West African flight dispatcher organization.

We are involved in about a half dozen technical working groups under the ICAO umbrella.
- NATSPG – North Atlantic Systems Planning Group
- NATPOG – North Atlantic Procedures and Operations Group
- VOLCEXSG – EUR/NAT Volcanic Ash Exercises Steering Group
- NATIMG – North Atlantic Implementation Management Group
- EURSAR-TF – European Search and Rescue Task Force
- NATTIG – North Atlantic Technology and Interoperability Group

From IFALDA President Russ Williams:

To all our members and fellow Flight Dispatchers worldwide. Unfortunately, we are still in a pandemic and, as we know, our industry has been very severely hit. We are now in the second wave and the current state is bleak. Having said that, at least we can look forward to a few glimmers of light in the distance. These include the development of a vaccine, improved testing at Airports on a global basis and the future willingness of leisure and business travelers alike to travel, with these considerations. We just need the member states to open up their borders and eliminate quarantine restrictions. I'm confident this will happen in 2021.

With all of the above in mind, IFALDA has been ongoing in our efforts to promote Operational Control for the International Industry. Our annual AGM is slated from May 3-5th in Toronto, Ontario, Canada. Although, this is currently planned mostly as a Zoom event, we will have local staff at the Hotel facility (Four Points by Sheraton) and will remain committed to the event. Should travel restrictions be lifted, we will have the ability to allow more to attend in person. You will find details, as they are updated, contained on our website.

We recently submitted a paper to ICAO towards the amendments of DOC 007 for the North Atlantic Operations. The expectation is we will hear back in January, with a presented draft of the new document. We remain involved in the Search and Rescue committee within ICAO, with regular attendance and reports. Our very lengthy commitment to the ICAO Flight Dispatcher Training manual has led to the drafting of the manual with schedule editorials ongoing. This has been a great effort led by Joern Sellhorn-Timm. The document will be in a position to be updated regularly. We look forward to this ongoing ability and the continued development of this manual in the years to come.

In normal times, we would be having our Winter Board meeting in January in Atlanta. This year, it will be hosted by Zoom on January 18th, 2021. All are welcome to attend. Details will be provided on the website or communicated directly to our members.

We look forward to events returning to more normalcy in 2021. In the meantime, we will continue to foster the worldwide development of Operational Control through our ongoing industry participation.

I look forward to seeing our members at industry events in 2021.

A quick report from VP Finance Rick Ketchersid:

Due to all the restrictions from the COVID-19 pandemic, pretty much all IFALDA expenses incurred for traveling to technical meetings and professional working groups as well as Board meetings have been suspended. We conduct all business virtually via TELCONs and Zoom meetings. Our basic expenses include our ongoing website expenses, rental of our Montreal office and our BoA account fees. These overhead expenses continue regardless of our professional activities.
So far in 2020 we have incurred, on a monthly basis:

Annual renewal fee $596.57 = GoDaddy Website (several items are on auto renewal)
Monthly $ 80.89 = Regus (Montreal Virtual Office)
Monthly $ 15.00 = Bank of America

As of December 1, 2020, we have enough balance in our treasury between now and the AGM in May to sustain us, however, as the COVID-19 vaccines become available between now and next May, we will once again need to budget for on-site meetings so our revenue stream must remain healthy...between dues from our membership and sponsorships from our partners.

IFALDA Submission to North Atlantic Procedures Operations Group (NAT POG)
By David Porter – SATTP IFALDA

Representing IFALDA President Russ Williams, I developed a Working Paper (WP) for presentation to the NAT-TIG (North Atlantic - Technology and Interoperability Group) meeting via WebEx in early October, 2020 (NAT TIG/10). The WP deals with NAT Doc. 007 – The North Atlantic Operations and Airspace Manual, specifically with Chapter 17 – Guidance for Dispatchers. We proposed adding language that would address enroute diversions when operating in the NAT.

The essence of it is that 2-engine aircraft crossing the NAT are generally operating under 180-minute ETOPS/EDTO and usually name coastal enroute alternates. This has proven effective in the past in the event of engine failure or loss of pressurization however there are other reasons a flight may need to divert...regardless of the number of engines on the aircraft...sometimes to the nearest adequate airport which is often an island or a remote airport. Our proposal addresses this. The entire proposal, in the form of a Working Paper (WP) including attachments is 8 pages.

The proposal was redirected by the Secretariate of the NAT-TIG to the NAT-POG meeting later in October. The WP was accepted by the NAT-POG as WP06 and was briefed to the meeting by IFALDA President Russ Williams.

A review of NAT Doc 007 is planned for January 2021 and our proposal will be acted upon at that time. The entire WP is available for IFALDA members on our website. I have included excerpts from it on the following pages.

European and North Atlantic Office

NORTH ATLANTIC PROCEDURES AND OPERATIONS GROUP (NAT POG)

TENTH MEETING

(a series of virtual meetings, 26-30 October 2020)

Agenda Item 3:   Review and update documentation

3.d) Other ICAO documents

PROPOSED REVISION TO NAT DOC 007 CHAPTERS 13 (SPECIAL PROCEDURES FOR IN- FLIGHT CONTINGENCIES) AND 16 (GUIDANCE FOR DISPATCHERS)

(Presented by IFALDA)

SUMMARY

This paper proposes a revision to NAT Doc 007 – North Atlantic Operations and Airspace Manual, covering in-flight contingencies in Chapters 13 (Special Procedures for In-Flight Contingencies) and 16. (Guidance for Dispatchers).

The current global COVID-19 pandemic drives this proposal since care must be exercised in the choice of diversion airports (when a choice is possible) to ensure that the receiving airport/State is capable and willing to accept the diversion. The over-arching issue, of course, covers many other scenarios where sound judgement is required, in the public interest.

The proposal covers operational diversions and is mainly concerned with Chapter 16 and the role Flight Dispatchers and those engaged in the control and supervision of flights in the exercise of operational control of airline flights in the North Atlantic. This proposal also affects Chapter 13 by reference. This proposal is not concerned with named alternates, which are a part of the flight plan and subject to preplanning. This proposal concerns unplanned contingency diversions.

Current guidance regarding enroute, mid-ocean diversions in Chapters 13 and 16 deals mainly with technical navigational procedures and interaction with the ATS provider. There is little discussion about why a flight should divert and to where the flight could or should divert. There are multiple considerations, and the ultimate decision is generally made by the pilot-in- command in collaboration and with the concurrence with the flight dispatcher in some states or the person designated by the operator for the control and supervision of flights.

1. Introduction

1.1   IFALDA recognizes that the operator is responsible for the operational control of the flight, as stated in ICAO Annex 6, Part 1, Chapter 3.

   a)   Some States use the Flight Dispatch system described in ICAO Annex 6, Part 1 Chapter 3 for the control and supervision of flights, using either Flight Dispatchers or Flight Operations Officers, in collaboration with the pilot-in-command, for the exercise of operational control.

   b)   States not using the Flight Dispatch system described above require the operator to designate one or more individuals for the control and supervision of flights.

   c)   For the sake of expediency and simplicity in this proposal, IFALDA will refer to those engaged in the control and supervision of flights as Dispatchers.

   d)   IFALDA asserts that the decision made to divert an enroute flight is an intrinsic part of the exercise of operational control.

1.2   IFALDA duly notes the current guidance in Chapters 13 and 16 in NAT Doc 007 regarding collaboration between the Pilot-in-Command, ATS and the Dispatcher insofar as diversions from the flight plan track/route to maintain separation is concerned.

1.3   The procedural guidance in Chapters 13 and 16 does not adequately address the reasons for a decision to divert to an enroute airport while in the NAT, nor does it address the viability and suitability of possible diversion airports, which would depend largely on the reason for diversion.

2. Discussion

2.1   The NAT encompasses seven Oceanic Control Areas (OCAs) / Flight Information Regions (FIRs), each of which includes airports that may be considered for an enroute diversion.

   a)   The reason for the decision to divert an enroute NAT flight will be a major factor in choosing the diversion airport. These reasons include but are not necessarily limited to:

   i.   Fire

   ii.   Engine loss

   iii. Structural issues

   iv.   Flight control issues

   v.   Loss of critical navigation/communication systems

   vi.   Fuel issues including inadequate fuel remaining for a planned redispatch/re-release.

   vii. Security issues

   viii. Cockpit crew incapacitation

   ix.   Cockpit/cabin crew illness/injury

   x.   Passenger illness/injury

   xi.   Political unrest/war issues

   b)   Not all airports within each OCA/FIR are adequate or suitable for airline diversions, regardless of the reason for diverting.

   c)   IFALDA considers an airport to be adequate for a diversion if it has one or more runways of appropriate length, width and load-bearing capacity for the aircraft involved in the diversion. These attributes are prescriptive in nature.

   d)   IFALDA considers an airport to be suitable for a diversion if it meets the requirements of an adequate airport, as well as certain performance-based requirements:

i. It has a published approach procedure appropriate for the specific flight and aircraft

ii. The airport is forecast to have landing minima required for the approach procedure, for the specific flight and aircraft at the expected time of arrival

iii. It is expected to have field conditions that will support a safe landing for the specific flight and aircraft at the expected time of arrival

iv. NOTAMS for the airport, including the approach procedure required do not preclude a safe landing

v. The proposed diversion airport may have environmental issues including but not limited to:

  (a) Pandemic restrictions which could result in denial of landing permission.

    (i) Use of a pandemic-based NOTAM database would be very useful to the pilot and dispatcher.

  (b) Inadequate medical facilities in the event of a diversion for passenger/crew illness or injury

  (c) Local natural disaster including but not limited to volcanic ash, earthquake, and flooding

  (d) Civil unrest

  (e) ARFF

vi. With consideration to the issues listed in 2.1, the selected airport can safely support the diversion.

2.2   IFALDA notes that some NAT operators, the U.S. in particular, operate under specific <u>Flag</u> CARs, as opposed to Domestic CARs.

a) Subpart T of 14 CFR 121…. §121.535 c)2 (Flag) regarding the responsibility of aircraft dispatchers specifically states: "Issuing necessary instructions and information for the safety of the flight; and….."

i. While ICAO, in Annex 6 Part 1 Chapter 4, and individual States, generally task the Dispatcher with issuing necessary information for the safety of the flight, U.S. Flag dispatchers…including those exercising their authority in the NAT…are also specifically responsible for also issuing instructions as well.

ii. In order for a Dispatcher to issue instructions regarding the safety of the flight in a diversion scenario, he or she must have the most current and accurate information available and a reliable and rapid means of acquiring it.

2.3   If a decision is made to divert to an enroute airport the PIC or Dispatcher must determine if it is necessary to declare an emergency.

a) If so, who should declare the emergency?

i. While generally the PIC would declare the emergency, under certain circumstances…notably if the dispatcher cannot contact the aircraft, the Dispatcher is required and responsible for declaring the emergency. (U.S. 14 CFR Part 121.557a & b)

b) To whom is the emergency declared?

c) Which agencies must be advised of the diversion, and emergency if applicable, by the Dispatcher?

i. The ATS current provider?

ii. The ATC sector where the flight is diverting?

iii. The diversion airport authority?

iv. The ground handler at the diversion airport?

3.   Action by the Meeting

IFALDA is pleased to offer revisions to NAT Doc 007 - North Atlantic Operations and Airspace Manual, Chapters 13 and 16 (Attachments A and B) that address these concerns, at the next revision cycle. Attachment A (Chapter 13) adds 13.1.3 which is a reference statement drawing the reader to Chapter 16. Attachment B (Chapter 16) adds 16.6.31-.39 which contain guidance for the flight dispatcher in selecting the appropriate diversion airport with consideration to the urgency of the diversion and meeting the requirements for the decision to divert. The changes are in blue font.

3.1   It may be further noted that these revisions would be appropriate regardless of the system of operational control/control and supervision of flights is concerned.

3.2   For these reasons, IFALDA believes the revisions proposed would serve safety, in the public interest.

3.3   The NAT POG is invited to:

    a)   consider and accept this proposal,

    b)   Form a working group within the NAT POG to identify all airports within or adjacent to the seven NAT OCA/FIRs,

       i.   determine the resources available within each OCA/FIR

      ii.   determine which of these airports are <u>adequate</u> to support air carrier diversions

     iii.   in collaboration with the NAT TIG, establish a data-base accessible to Dispatchers that would provide near real-time information about each adequate airport that would allow the Dispatcher and the PIC to determine if the airport was actually <u>suitable</u> for the diversion.

     iv.   Develop or acquire a pandemic-based NOTAM system for NAT users that identifies all States including specific airports that are affected by a pandemic with regard to availability t o handle air carrier traffic whether regular scheduled traffic or contingency diversion traffic.

    c)   Revise Chapters 13 and 16 in NAT Doc 007 as necessary at the next revision cycle. See Attachments A and B.

FRALDA REPORT - ICAO EURSAR/TF

By FRALDA President and IFALDA Representative Francois Eraud
www.fralda.fr

ICAO EURSAR/TF REPORT EUROPEAN
SEARCH AND RESCUE
TASK   FORCE

The fourth ICAO EUR SAR Task Force (EURSAR/TF) meeting was held via WebEx on October 26th, 2020, following the EASPG Decision 1/4 of the establishment of a SAR Task Force and following the result of the previous meetings of EURSAR/TF.

The fourth meeting, chairman Mr. Nikola Sarancic, was attended by 31 participants from participating states and international organizations that participate as observers in the work of EURSAR/TF.

The aim of the fourth meeting, organized as a telecon, was to continue work on the conclusions from previous meetings of EURSAR/TF, and according to the adopted ToRs (Terms of Reference).
As a reminder the EURSAR/TF is expected to deliver within 2 years

- STP Standardized Training Program for the SAR inspectorate staff
- Specific chapter for inspector's handbook to cover standardized inspection procedures
- GM Guidance Material for the implementation and monitoring of PSCS* and promote the enhancement and improvement of Regional SAR capability within the EUR Region.

*PSCS are the **non-mandatory** expectations on all EUR Region States to enhance SAR systems in order to meet a minimum level of SAR capability (EUR SAR Plan, EUR Doc 039, Chapter 7. Performance Improvement Plan)

> For those tasks, 2 subgroups have been created and I'm participating in both groups as far as possible.

As requested by me on the first meeting on April 2020, a space is dedicated to the TF on ICAO PORTAL under SARTF denomination. During intermediate meetings Russia and France offered their help on helping this TF. Both subgroup progress slowly but with determination.
Next plenary meeting will be a WebEx around 15/16 Dec.
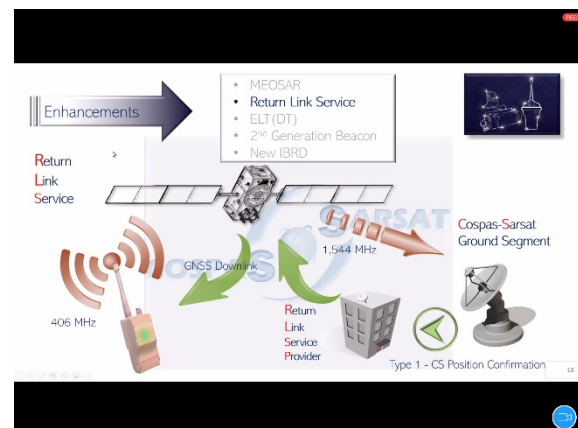
ICAO Secretariat informed the members that all five series are finished with links to the recordings of these SAR Webinar Series (link : https:/www.icao.int/Meetings/webinar-series/Pages/Search-and-Rescue-Webinar-Series.aspx%20)

From my point of view some those webinars are very interesting and deserve to be seen notably: COSPAS SARSAT, GALILEO SAR and GADSS
Furthermore, a special webinar will be held by EuroControl on 9 to 10 December. Everyone can register on this page
Link : https://www.eurocontrol.int/event/european-gadss-webinar

Report from Catherine Jackson – President ADF

Greetings from the Airline Dispatchers Federation,

I hope this message finds you and those important to you keeping safe and staying healthy. This is certainly not the year end update I was expecting to deliver. I wish I was sharing a recap of a hugely successful 30th Anniversary Summit. I wish I could tell you about great speakers, compelling presentations and a marvelous tribute to our inspired founders and proud history. Mostly I wish we were celebrating the personal and professional growth that happens when a community of passionate aviation professionals gathers together to share comradery, friendship, knowledge and experience. But 2020 had other plans.

In response, Dispatchers did what Dispatchers do. We flexed, we adapted, and we figured it out. New work schedules were enacted, and environments evolved to accommodate social distancing. Committee work has continued, albeit at a different pace, and certainly over new platforms. Early retirements, furloughs, position changes and company support have affected many committees and workgroups.

Work continues with the Aviation Rulemaking Advisory Committee (ARAC), the Air Carrier Training Aviation Rulemaking Committee (ACT-ARC), and RTCA's SC-206 Aeronautical Information Services and Meteorological Data Link Services. We participated on a panel for the PIREP Summit and the SRPM process to designate G-AIRMET as the advisory to depict hazards that do not meet SIGMET criteria and discontinue the TAC AIRMET. We remained actively involved with AMS, WIMAT and FPAW and wrapped up work with Equip 2020. ADF was proud to partner with our scholastic donors to award 6 scholarships this year.

Progress with vaccines is exciting and recent holidays have proven the desire for travel and gathering together live and in person is still strong. In closing, our thoughts and prayers are with our friends and colleagues who are suffering loss during this time. Best wishes for healing and recovery for all.

Best regards,
Catherine Jackson
President, ADF

Report from Bernard Gonsalves – IFALDA Director Global ATM

TBO – Trajectory Based Operations

"The pure and simple truth is that it is rarely pure and never simple"

― Oscar Wilde

Introduction

TRAJECTORY BASED OPERATION (TBO) means different things to different business groups driven by their operational needs. There has also been a proliferation of working groups, task forces in the recent past. Multiple processes, data flows and sharing model definitions led by ICAO working groups, primarily the ATM Requirements Panel (ATMRPP) have been instituted.

ICAO's Global Air Navigation Plan suggests a paradigm shift of modelling dynamic flight trajectories from the time they are generated by airline dispatchers into an Air Traffic Controller's scope through a theoretical concept of achieving a higher airspace throughput from Takeoff to Landing. Driving this boost in airspace capacity planning is the ubiquitous concept of Trajectory Based Operations for end-to-end 4D Trajectory optimization over the entire duration of a flight life-cycle.

The ICAO Global Air Navigation Plan (GANP) and companion Aviation System Block Upgrade (ASBU) program offers TBO as a planning module.

ICAO Doc.9854, The Global Air Traffic Management Operational Concept (GATMOC) defines the capability for a Dispatcher to define a preferred 4D flight plan as also the interaction of a Dispatcher with ATC thereafter. The Controller's role in handling the business trajectory after it has been filed by the Dispatcher as an ICAO Flight Plan is described as follows:

"ATM considers the trajectory during all phases of flight and manages the interaction of that trajectory with other trajectories or hazards to achieve the optimum system outcome, with minimal deviation from the user-requested flight trajectory, whenever possible".

What then is TBO?

ICAO defines TBO as "*A concept enabling globally consistent performance-based 4D trajectory management by sharing and managing trajectory information. TBO will enhance planning and execution of efficient flights, reducing potential conflicts and resolving upcoming network and system demand/capacity imbalances early. It covers ATM processes **starting** at the point an individual flight is being planned through flight execution to post flight activities*".

And this is why it is overly critical to emphasize here that the TBO concept is firmly entrenched in the process of ***getting the Plan right***. The TBO concept can only be successfully executed with the Flight Dispatcher positioned at the starting point of planning **TBO** as a truly 4D Business Trajectory. The Dispatcher would thereafter use the **FF-ICE** data process to File, Release and Follow each flight through its landing and close. In doing so, the Dispatcher would also leverage a variety of **SWIM** data services be they Aeronautical, Airspace, Meteorological or Traffic Management to receive actionable insights and communicate with other stakeholders such as Airports, Air Navigation Service Providers (ANSPs), upline and downline Centers. TBO Operations start with the Flight Dispatcher.

Getting the Plan Right

CONCEPT	DATA PROCESS	SHARING OF DATA
• **TBO** Trajectory Based Operations Through the entire life-cycle	• **FF-ICE** Uses Flight & Flow Information for a Collaborative Environment	• **SWIM** System Wide Information Management Services

Industry studies indicate that nearly 50% of all
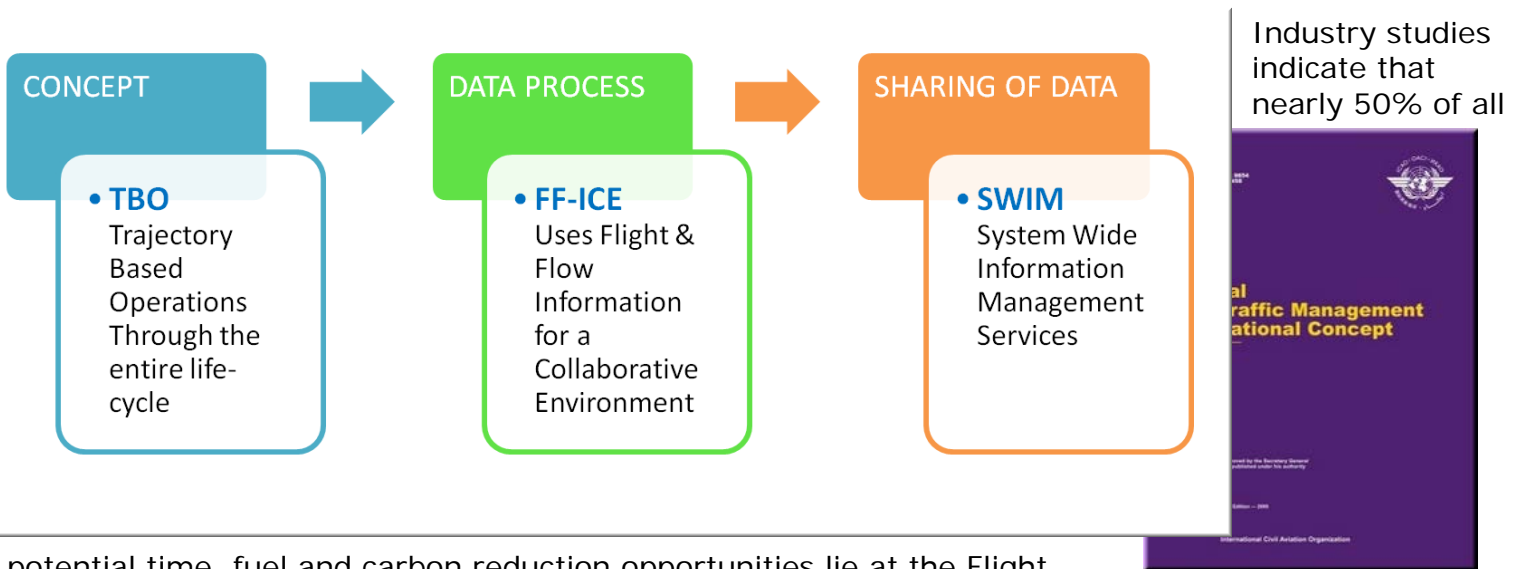
potential time, fuel and carbon reduction opportunities lie at the Flight Planning phase -i.e before the Flight Plan is filed with ATC , the Flight Release issued, the airplane fuelled and the 4D route loaded into the Flight Management System (FMS). And it is only logical to think so. This is because the flight plan once fuelled and filed with ATC; leaves little or no room for further optimization save minor improvements in speed and flight level optimization.

ICAO Concepts and Principles for Dispatcher Flight Planning

For a Dispatcher, simply put, TBO means the ability to create a 'Preferred Business Trajectory' a few hours minus takeoff, under certain assumptions of payload and forecast weather. An inspiring ICAO Concept document – ICAO Doc.9854 GATMOC establishes this baseline for a common operating environment rather well. It calls for systemic airspace changes in the current status-quo of fixed airways, ground based NavAids, static restricted areas and large separation buffers to a flexible and needs-based paradigm of facilitating **Airspace User** (AU) Operations (particular emphasis to paras c and d):

Part 2.1.6 : "Airspace user operations refer to the ATM-related aspect of flight operations. Key conceptual changes include:
a) the accommodation of mixed capabilities and worldwide implementation needs will be addressed to enhance safety and efficiency;
b) relevant ATM data will be fused for an airspace user's general, tactical and strategic situational awareness and conflict management;
c) relevant airspace user operational information will be made available to the ATM system;
d) individual aircraft performance, flight conditions, and available ATM resources will allow dynamically-optimized 4-D trajectory planning;

> *e) collaborative decision making will ensure that aircraft and airspace user system design impacts on ATM are taken into account in a timely manner; and*
> *f) aircraft should be designed with the ATM system as a key consideration.*

These ICAO Dispatch planning principles thus enable Dispatchers to create gate-to-gate Trajectories that are qualified by a preferred runway for takeoff, a SID to a given Transition point and thereafter a fully optimized flight path that will more importantly comply with all airspace and Significant weather constraints – and also optimize fuel burn, time costs and flight time to meet its commercial objectives of arriving at their destinations on time. The 4th dimension of a (Dispatcher) 4D TBO plan is therefore equally important where the speed of the entire flight is optimized so that if a flight is arriving early (and vice-versa), the speed is adjusted in a way to slow the airplane, fly a lower cost index, reduce fuel burn, save CO_2 emissions and yet get customers to their destination on time.

Filing the Dispatch Release

ICAO hosts the *Manual on Flight and Flow — Information for a Collaborative Environment (FF-ICE) (Doc 9965)*, more commonly referred to as "FF-ICE". This is designed as an enabler for TBO and meant to support data capabilities and a bridge for Dispatchers to collaborate, file and negotiate dynamic flight plan and inflight information with ATC and with the Airplane being the focal node.
It is this author's opinion that the ICAO planning groups have unfortunately ignored the Dispatcher in this key planning process to a large extent.

The "legacy" ICAO 2012 Filed Flight Plan (FPL) still dominates today's operational landscape. There are 'pockets' of FF-ICE trials underway in some parts of the world, albeit at low-key and limited to single or small groups of ANSP. Trials are limited to testing "flight plan" data elements and certainly do not reflect a complete 4D Flight Trajectory generation and optimization capability. In this regard, the FAA must be commended for a credible job with their SWIM program deployment which includes the use of a globally unique flight identification (GUFI) and deploying the Flight Information Exchange Model (FIXM) as a flight data exchange model.

History and Context of Business Trajectories

In early 2000 – the very early days of standing up the Concept of Operations of the Single European Sky (with ATM research added to become SESAR) and the US NGATS (now known as NextGen), two very profound Trajectory definition concepts emerged.

SESAR: In the initial planning years of SESAR, sincere and meaningful methodologies for airspace management and organization were proposed. These including processes for dynamic airspace design efficiencies with Functional Airspace Blocks, sharing of military airspace and/or flexible use of airspace. This efficient airspace design would allow airline Dispatchers to create an equally efficient Preferred Business Trajectory. In addition, SESAR master plans included improved demand and capacity balancing by developing CDM processes to ensure that the ATM network is able to meet the demands of all users.

At the core of which was the Dispatcher under a (pre-flight) planning and definition process where the focus was on morphing the Preferred Business Trajectory into a Shared Business Trajectory. The ensuing collaborative process would then involve all stakeholders including ANSPs by creating a flexible airspace structure conducive to accommodating to the best extent possible the Dispatcher generated (pre-flight) flight preferences, and thereafter published as a Reference Business Trajectories (RBT) as a common context for both Dispatcher, Pilot and Controller to file and follow. Following acceptance of a flight, ATFM Units would thereafter agree on a process to deploy operating procedures that would ensure a seamless integration of the Reference Business Trajectory into the live ATM environment. The actual 4D trajectory will be initiated and generated by the individual airlines flight planning system

NextGen: The NextGen Program was designed to introduce user-generated 4D trajectories on a gate-to-gate operations basis that could be integrated into the ATM system. By supporting 4D trajectories, the ATM system will benefit from increased airspace throughput, improve safety and make a major contribution to increased fuel efficiency. As the core enabler in the NextGen program, 4D Trajectory Management is supported by Collaborative Decision Making all of which are predicated on the user role in defining the preferred 4D trajectory.

The NGATS (NextGen) definition of a Flight Object states: "*The flight object is a software representation of the relevant information about a particular flight. The Information in a flight object includes aircraft identity, CNS and related capabilities, flight performance parameters, flight crew capabilities including for separation procedures, and the flight plan (which may or may not be a 4DT), together with any alternatives being considered.*
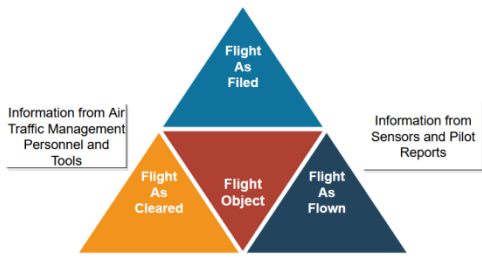

Once a flight is being executed, the flight plan in the flight object includes the "cleared" flight profile, plus any desired or proposed changes to the profile, and current aircraft position and near-term intent information. For VFR aircraft, the level of detail on the flight profile varies (e.g., it may consist of only information needed for SAR operations). Allocation of responsibility for separation management along flight segments is also likely to be stored".

The Air Traffic Controller - TBO or Trajectory Control?

In its current state, the notion of TBO now seems morphed into a highly tactical real-time controller automation toolkit to address the uncertainty in knowing an airplane's future position. This predicament can probably be better described as Trajectory Control rather than TBO. This need for Trajectory Control is best explained by the evolution of ground-based traffic management systems and their related separation methodologies being:

- **Procedural Control**: The need for a Controller to 'guess' an airplane's current and future positions

- **Radar (ATS Surveillance) Control**: The ability to know the current position of an airplane and 'guess' its future positions

- **Trajectory Control**: Fuse airborne avionics and ground automation to know all current and future airplane positions
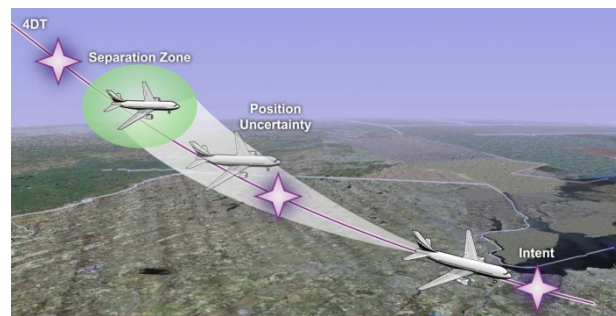
The uncertainty factor faced by a Controller is overcome by the notion of the airplane sharing its present position and future intent in real time, thus allowing the controller a means to establish a common intent baseline for the flight to follow. This ability to establish the airplane's intent in real-time allows for reduced separation between aircraft pairs and hence an increase in potential airspace capacity. Let's take a closer look for what TBO means to a Dispatcher.

A TBO Reality Check

It would be fair to state that almost all the industry investments and efforts in realizing a trajectory-based operations (TBO) environment has been focused thus far on getting avionics and ATM ground systems to be paired in order to determine current and future positions of aircraft with a very high degree of detail and accuracy.

The FF-ICE program has seemingly bypassed the 5 critical stages of developing a meaningful 4D Reference Business Trajectory as depicted in the diagram above and now focused entirely on post-takeoff flight and flow information exchange. This process carries the sole objective of supporting airborne trajectory negotiation between the Airplane and ATM ground units. Case in point, several

common point suppliers such as Thales are retailers for avionics and Flight Management Systems on the airplane as well as ATM systems used on the ground by Controllers. Many R&D "work packages" mainly in Europe have been spearheaded by such common-point suppliers. The SESAR Joint Undertaking under the auspices of the Horizon 2020 program has issued grants worth several millions of Euros and it will remain a moot point if any of these benefits will support genuine 4D Trajectory operations, support the Dispatcher role in 4D trajectory design and deliver benefits as envisioned under the ICAO Doc. 9854 GATMOC so that *"individual aircraft performance, flight conditions, and available ATM resources will allow dynamically-optimized 4-D trajectory planning "*.

Summing it up

Unfortunate but true, the key and active distractions to the TBO program today are driven by the avionics and ATM ground system vendors. This is also where a large part of the SESAR funded R&D tax euros might be making its way to with questionable benefits to airlines, airspace users and ultimately the taxpayer.

This in their misbelief will be the panacea of the Single European Sky problem, that will safely allow them to reduce the separation 'bubble' around the airplane, increase airspace capacity and in doing so, deliver service levels for the $ 13 billion in ATC charges that are collected globally from airlines each year. Worse, the focus of industry efforts and the spending of large sums of R&D has now come to be narrowed down to few real-time minutes of the inflight phase that associate with the functional concept of Separation Management rather than Trajectory Management. As will be seen in the graphic below, the longer-term ATM planning process of optimizing the overall 'business trajectory' over the Long Term (years), Mid Term (months) and Pre-flight (hours) has been completely bypassed.

The Single European Sky problem as is well known is really not an ATM problem as much as it is a political quagmire of a splintered ATM network of 43 countries that refuse to regroup based on the Chicago Convention; the concept of Flight Information regions (FIRs) as a means of delineating homogenous regions of airspace to efficiently cover route structures rather than political boundaries.

IFALDA would urge that the TBO program is refocused on reviving the several sequential phases of the TBO operation – starting with Airspace Management, followed by Strategic Planning during the weeks and months before a flight departure. The TBO process endures when the Dispatcher gets involved in the hours before a flight departure with a pre-tactical planning exercise followed by a CDM Process whereby the preferred 4D trajectory is negotiated with ATC and comes to represent a common reference for the Flight Release.
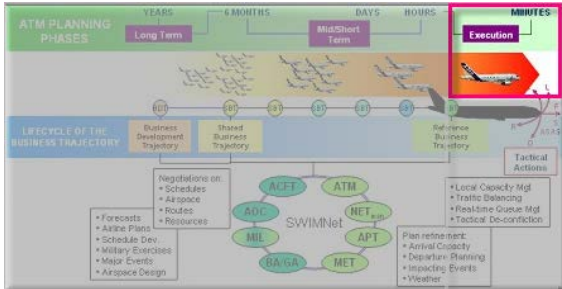
And finally, the Controller steps in to play their role in flight execution whereby *"ATM considers the trajectory during all phases of flight and manages the* interaction of that trajectory with other trajectories or hazards to achieve the optimum system outcome, with minimal deviation from the user-requested flight trajectory, whenever possible".
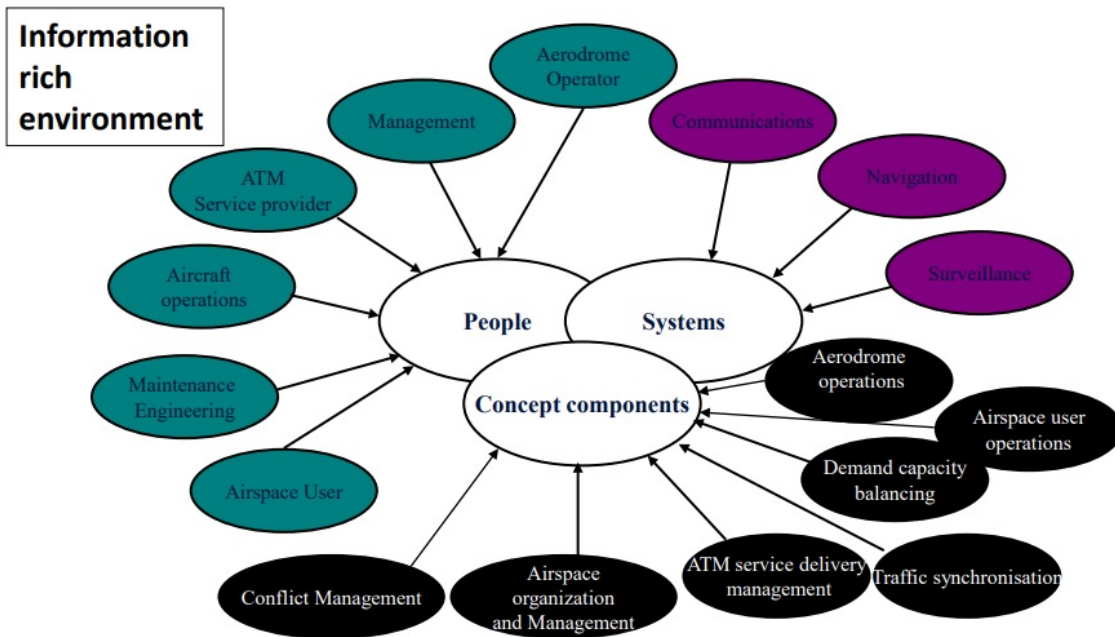
ICAO Global Reporting Format of the Runway Conditions

By Sevda Tantan – IFALDA Vice President East

IFALDA VP-East Sevda Tantan has been working with ICAO and IATA on the ICAO Global Reporting Format for Runway Surface Conditions (GRF-RSC) which was to be mandated on Nov. 5th, 2020. Sevda advises that the mandate it has now been pushed to Nov. 4, 2021.

The following information from Mr. Anthony van der Veldt, IATA Assistant Director Safety & Flight Operations – Europe via Mr. Mathieu Khoury, Manager SFO Training Development - IATA Training was passed to Sevda:

"This is to raise your attention on the global introduction as per 5 Nov 2020 of the ICAO Global Reporting Format of the Runway Condition Code which information will be used by pilots to calculate the landing and take-off performance of their aircraft at runways which are WET and covered with WINTER CONTAMINANTS (e.g. snow, slush, ice)

An ICAO workshop was held on 10-11 July 2019 in Paris on this topic of which you will find the highlights below, which could be of relevance and assistance in understanding the new Global Reporting Format (GRF) of the Runway Condition and in preparation of its usage by your pilots.

To this end, our IATA Head Quarters is developing GRF training material which is planned to become available at the end of this year.
Our IATA Office is planning to organize a GRF workshop for pilots and operational staff in January 2020 for which you will receive an invitation soon.

1. Background of the GRF and Regulatory Requirements by ICAO and EASA

- Over the past decade operational shortfalls had been identified in the reporting of the runway condition during winter situations which had led to runway excursion
- This has led to the development of an ICAO led Global Reporting Format (GRF) which is described and available in the last two years in the ICAO documentation, i.e. Annex 14 Aerodromes, PANS Aerodromes ICAO DOC 9981
- EASA Opinion 3/2019 on GRF was published on 24 June 2019 and is expected to be approved by the EC by end of this year, but it does not stop all stakeholder to start implementation. EASA
    is strongly advising all stakeholders to start Training of personnel
- EASA has transposed the ICAO GRF requirements into the European (EC) Aerodrome and Aircraft Performance Regulations, but has adopted the following additions:
- Two NEW terms for describing runway surface conditions have been developed by EASA, i.e.
    - Specially prepared winter runway, covered with compacted snow or ice, which has received special treatment and has improved friction characteristics for RWYCC >3. The GRF also allows an airport to upgrade the RWYCC from 1 to 2 or 3, but this is mainly valid for Nordic States who are operating airports during the long winter periods and who have considerable operational experience which is obviously also valid for experienced airlines/pilots with winter operations)
    - Slippery wet, associated with RWYCC 3 when the runway is wet and below the minimum friction level
- Two Obligations for Pilots have been introduced
    - Landing Distance assessment at the time of arrival
    - Report actual braking action to ATC when braking action encountered is worse than reported by the Airport Operator
- Obligations for ATCOs

- Report to the Airport Operator when a pilot indicates that the braking action is not as good as the reported RWYCC to initiate a new assessment
- Report the worse braking action to pilot of the successive aircraft
- EASA will monitor the GRF implementation, including inspection reports, number of accidents/incidents; discussion with aerodrome operators and aircraft operators will take place
  later. On the latter IATA offered its assistance. Any change to the current GRF is not done at this
  moment. All experience will be collected and analyzed for submission to ICAO

2. Role of the Airport Operator

- A runway condition assessment for each third of the runway will be made by Airport inspectors in terms of:
  1. Percent coverage (must be > 25%)
  2. Depth of the contaminant; and
  3. Type of the contaminant

- With the help of the Runway Condition Matrix (RCAM), a Runway Condition Code (RWYCC), ranging from 0 to 6, will be established. This RWYCC is directly related to the expected aircraft performance
- A Runway Condition Report, consisting of RWYCC, runway coverage, contaminant depth and type will be promulgated through SNOTAM; to ATC and be provided on ATIS
- Publication of friction measurement values and dissemination to the pilot will not be allowed anymore as its value appeared to be confusing and does not have any correlation with the aircraft performance. Friction measurement values can be used in a comparative way for upgrade or downgrade of the RWYCC, but always in combination with other observations

3. Aircraft Performance and Pilot role

- The ICAO Aircraft Performance Manual has now a clear focus on the GRF, and contains a chapter on operations on contaminated runways, including training syllabus for pilots. The performance manual ensures harmonized landing distances at time for arrival.
- ICAO requirement is to mandatory promulgate at least the following information, i.e . the airport code; the RWYCC and the type of contaminant, plus additional info like depth of the contaminant.
- The pilot will use this info (per one third of the runway) to calculate the aircraft landing / take-off performance. The required landing distance need to be shorter than landing distance available (regulatory dispatch requirements)
- ICAO Annex 6 is requiring
  1. an in-flight check of the landing performance with appropriate margin before starting the approach and
  2. PIREPs when conditions are worse than reported. PIREPS will be promulgated through the ATC tower and/or ATIS to the pilot

4. Involvement of ATC by CANSO

- Pilot should have the info (SNOWTAM) when the pilot is approaching the runway, comparable with dissemination of RVR values. The pilot is receiving or is requesting the runway condition
  information
- ATCO will provide runway condition to the pilot through ATIS and providing a "deteriorated" braking action report from the pilot who just has landed
- The keys to GRF success are harmonized and standardized training

5. Experience with the GRF in the USA since 2016 by the FAA
- Since Oct 2016, the USA has adopted the GRF and has built up two years of experience. Long-haul pilots from other regions have become familiar with GRF
- The FAA had started an awareness campaign and was concerned about having enough time to meeting the implementation expectations
- The FAA is applying RWYCC upgrade/downgrade policies
- FAA is working with FAQ and is answering on-going questions throughout its implementation process since then.
- FAA is gathering data reports as a source for GRF analysis. They compare Airport derived RWYCC with weather data and pilot reports
- https://www.faa.gov/about/initatives/talpa/

6. The Importance of Training
- ACI has an on-line training course available at a cost, ICAO, IATA, IFATCA, CANSO are developing similar training materials
- It is recognized that assessments of the runway condition are made by human beings, i.e. the Airport Inspectors. Training of personnel at a global scale based on harmonized and commonly developed information therefore is of utmost importance to minimize differences in assessments
- Runway condition assessments are likely to be conservative, but are largely dependent on the training of airport personnel

7. Recommendations for Airlines by IATA
- Start an GRF awareness and implementation team or committee in each State composed of experts (pilots, ATCO's, Airport inspectors etc.) organizing leaflet materials, symposia, seminars as necessary but to reach all operational stakeholders. Home based carriers to promote and activate such an initiative
- Start planning the amendment of Aircraft Performance Manuals and other relevant Manuals and obtain appropriate approval from your NAA

- Start planning the GRF Training to be ready before the deadline of 5 Nov 2020.
- Communicate GRF details to your flight crew and other operational personnel (airline support and back offices)
- Consider the GRF training material developed by IATA to ensure global consistency and harmonized implementation
- Consider attendance of GRF workshops as listed below

8. Other workshop / seminars on GRF by the Industry
- 11-12 Dec 2019 in Frankfurt by Fraport
- 21-22 Jan 2020 in Madrid by IATA (tentative)
- 27 – 29 Jan 2020 in Helsinki by Finavia
- Kazachstan, Russian Federation, dates to be determined by ICAO

ICAO NATTIG/10 REPORT

By FRALDA President and IFALDA Representative Francois Eraud

The Tenth Meeting of the ICAO NAT Technology and Interoperability Group (NAT TIG/10) was held via teleconference sessions (WebEx) from 21 to 25 September 2020.

The Meeting was chaired by Mr. Bjarni Stefansson from Iceland. Mr. Abbas Niknejad from the ICAO EUR/NAT Office was the Secretary, supported by Ms. Catherine Daly.

The Group, while recognizing that some of the work programme items were very difficult to advance via teleconferences, noted that the NAT TIG/10 meeting had to be conducted via teleconference, due to ongoing pandemic crisis.

Review of the latest developments

it was noted that no change has been introduced to the ADS-C periodic intervals in the Bodö, Gander, Reykjavik, Santa Maria, Shanwick, and New York flight information regions (FIRs) and that there is no current plan for any such change.

Investigate if media advisory message data can be provided to Iceland to enable calculation of the performance of the Airbus and Boeing media advisory policies. Iceland will specify the data required, the Group noted that, due to legal reasons, the requested data could not be provided without consent of the operators. It was agreed that the Rapporteur will check with IATA on the possibility to help resolving the issue.

Data link performance monitoring and analysis

NAT Data link Performance Update

a) NAT aggregate performance:

i. the 95% criteria were met for RSP 180 and RCP240 for the aggregate NAT and for the individual NAT FIRs;

ii. the 99.9% criteria were met for RSP 180 at the currently accepted level of 99.0% for the aggregate NAT and for the individual NAT FIRs;

iii. . the 99.9% criteria were met for RCP 240 at the currently accepted level of 99.0% for the aggregate NAT and for the individual NAT FIRs.

b) **By media type**:

i. The 95% criteria for RSP180 ASP and RCP240 ACTP, ACP and PORT were met for the aggregate as well as both satellite and VHF media populations;

ii. The 99.9% criteria for RSP180 ASP and RCP240 ACTP, ACP were met at the currently accepted level of 99.0%;

iii. Neither the 95% nor the 99.9% criteria for RSP180 ASP or RCP240 ACTP, ACP were met for HF during this period;

iv. In general, the ACP criteria continue not to be met for any subpopulations of mixed media RCP transactions.

c) Remote Ground Station (RGS) / Ground Earth Station (GES):

i. Performance associated with Iridium (IG1 and IGW1) was observed below the 95% criteria for RSP180 and RCP240 in Reykjavik FIR. It is noted that this is mainly related to one operator's fleet of B752 aircraft.

d) Monitoring results by aircraft type:

– No specific issues related to this category to report.

e) Monitoring Results By Airframe:

– Note that the observed filing status for RCP240 and RSP180 is starting to be included in these results.

– There were 5,920 airframes observed using data link in one or more of the NAT FIRs.

– There were 4,273 of these airframes observed as filing P2/RSP180 in one or more of the NAT FIRs.

– Airframes identified with at least 100 data points and an ASP below the RSP180 95% criteria and/or an ACP below the RCP240 95% criteria, as well as filing P2/RSP180, in at least 1 of the FIRs: 237

NAT TIG Analysts Update

Proposed changes to the filtering of actual communication performance (ACP) data recommended in Edition 2 of ICAO Doc 9869, PBCS Manual, based on analysis that showed negligible impacts to the calculated results and the potential exclusion of meaningful data; proposed a new method for estimating pilot operational response time (PORT) and actual communication technical performance (ACTP); and identified an area that was not sufficiently addressed in the PBCS Manual but impacts continuity - CPDLC uplinks without a response, the meeting agreed that those issues would be addressed by the newly formed NAT PBCS Post-Implementation Monitoring Project Team (NAT PBCS PIM PT).

Report of the Network Outage Detection and Reporting Project Team (NODAR PT)

Finalization of the template and services list and corresponding proposal for actions needed by ICAO to formally coordinate the changes with other ICAO regions

Coordination by **IFALDA** with the dispatch community to provide information to the NODAR PT on how the CSP notifications are currently provided to the dispatchers, whether they are considered useful in their current format, and whether any system modifications would be needed if the format were to change.

IFALDA indicated that there are no direct messages from CSPs to dispatchers and that the

main source of information on outages comes via NOTAMS from air traffic service providers (ATSPs). Therefore, no impact was expected for the dispatch community.

Identification of any impacts that the changes proposed by the NODAR PT may have on the operators, with the support of IATA

Provision by the CSPs of information concerning the implications of the proposed change to the non-aviation customers and any flexibility there may currently be with using different formats.

Analysis of Problem Reports

It was noted that between preparation of the previous PR briefing for the NAT TIG/9 meeting and preparation of this PR briefing, ATS data link stakeholders submitted 64 PRs via the NAT DLMA website. Of those 64 PRs, 27 PRs (42%) were reported in the North Atlantic Region. This is a similar percentage to the proportion of the previous report (which was 41%). The total number of PRs for 2020 is markedly lower than previous years, which could be because of the reduction in air travel that had occurred this year due to the world-wide COVID-19 pandemic.

Update on Pegasus I FMC Re-Display Issue

The Group noted that due to heightened concern in the domestic US Data-Comm airspace, all aircraft operating with Pegasus I FMC were deemed ineligible for enroute datalink operations. These aircraft were still able to participate in the departure clearance phase of the program. Following this determination of ineligibility, Boeing worked with the Data-Comm stakeholders (including the FAA and airline operators) to provide an acceptable interim mitigation until a long-term solution could be made available. Two methods were proposed which would result in power removal from the FMC:

> Method 1: Power down the entire aircraft to remove power from all flight deck systems for at least 15 seconds and then re-power the aircraft.

> Method 2: Cycle power to the FMCs only by opening the respective circuit breaker for at least 15 seconds

Method 1 was approved by the FAA and several aircraft operators had since re-entered the DataComm enroute phase while utilizing this procedure and no issues had been reported.

Boeing made a proposal to FAA on Pegasus I FMC software update which would address only the redisplay issue that is applicable on the existing hardware. FAA agreed to this approach and Boeing and Honeywell are proceeding with this update while the FAA finalizes their analysis of the approach. It is expected to have a service bulletin available to customers for installation in February 2021. The service bulletin is expected to be available at no cost. It is expected that the FAA will require operators to apply the update within 6 months of it being available and EASA is expected to follow suit.

NAT ADS-B Issues

The Group noted that the EUROCONTROL Network Manager has recently established Surveillance RF and Avionic Anomaly Resolution (**SURFAR**) Group, co-chaired by EUROCONTROL and EASA. The roles of the **SURFAR** group are, with the support of stakeholders, including Air Navigation Service Providers (ANSPs):

a) To propose means to resolve anomalies, including equipment, procedures and users, encountered in the Network affecting:

b) To propose means to resolve anomalies encountered in the 1030/1090 MHz RF environment and develop actions to ensure good

c) To propose, contribute and support regulatory activities that will ensure interoperability and correct operation of the Surveillance function of the Network.

Voice Communication Performance Monitoring and Analysis

Report of the SATVOICE Project Team (SATVOICE PT)

In regard to discussion on dual dissimilar installation of SATCOM, IATA reminded the group that given the current financial stress of all operators, the cost to equip would be prohibitive.

SATVOICE Project Team:

a) there are no current initiatives on the NAT that would necessitate increased usage of SATVOICE.

b) at this time SATVOICE has not been proven to be acceptable as a stand-alone back-up for CPDLC due to infrastructure challenges and shortfalls. This should be taken into consideration when determining the need to maintain the HF infrastructure in the NAT;

c) if there is a desire to enable SATVOICE as a stand-alone back-up for CPDLC, there would first need to be development of requirements for SATVOICE to function as a primary backup to CPDLC. This would subsequently enable Stakeholders (including CSPs

d) SSPs, aircraft and avionic manufacturers, etc.) to determine what modifications to infrastructure and/or configurations are needed to meet such requirements; and

e) the recommended clarification of the communication requirements by the POG should adequately address the acceptable usage of SATVOICE on the NAT.
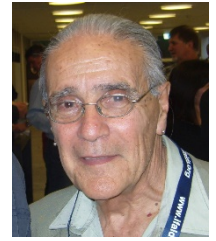
Next meetings

The Group agreed that the next meeting will be held from **1 to 5 March 2021 in Paris**, France. NAT TIG/12 was planned to be held from 27 September to 1 October 2021, hosted by Portugal in Santa Maria

Francois Eraud President FRALDA
Representing IFALDA

Vlo a China (Flight to China)

A report by Marcelo Sana – Secretary APADA and Director – South America IFALDA

Aerolineas Argentinas planned eight flights to Shanghai in April 2020, looking for medical supplies that could be brought to Argentina.

An Airbus A330-200 ETOPS Certified, was chosen for this flight, and accomplished on April 17th, (AR1070), from EZE to AKL, and PVG final destination.

Flight Dispatchers Claudio Grasso and Matias Gonzalez, working on the Flight

Following the 180 minutes' rules to an alternate aerodrome could be reached. For our Airline it was a flight without history. So, all the Opns Sector was commissioned to the flight path could be planned. Sector, which is integrated with a great quantity of Licensed Flight Dispatchers.
The planned flight time was 16 hours from EZE to AKL, and 12 hours from AKL to PVG. As was a round trip flight, the estimated time was around of net 56 hours of flight time. In three days.

Flight diagram, in two stages

The Crew was integrated by four Pilots, eight First Officers, four Maintenance Personnel, one Cargo and General Purpose in charge, and the most important thing for us, (APADA), one Flight Dispatcher on board, because the Dispatch was performed "IN SITU". in a managerial decision.

Mrs. Analia Fronti, Flight Dispatcher and an APADA Associate and member of IFALDA also, was chosen for this flight after volunteering. All Dispatch's elements were carried on board, Procedures Manuals, PC, Load Sheets and Abacus, (in paper), data was transcribed from PC to paper, for

Analia Fronti - Flight Dispatcher and member of APADA/IFALDA

Analia Fronti with the Dispatch papers

Analia Fronti on the scale doing the dispatch

better manipulation inside the plane, double check, and if a Manual Dispatch it would have been necessary because a data malfunction it could have happened. All contingencies were covered.

For our Association APADA (…and for IFALDA …Editor's note!) it's a gigantic pride, that a woman and Flight Dispatcher too was chosen for this incredible flight, for the first time made by an Argentine Airline.

Analia Fronti at the Shanghai Apron

A job well done! It makes us proud to be Dispatchers!

Update
Manual on Flight Operations Officer/Flight Dispatcher Competency- Based Training and Assessment
### ICAO Doc 10106

IFALDA Director – Training Jörn Sellhorn-Timm (DLH Germany) reports the FOO/FD competency-based training manual project has been completed and sent to ICAO for publication. It is listed on the ICAO website for sale as ICAO Doc 10106 and costs U.S. $200. It is currently available in English. The current edition is an "Unedited" version meaning that it is subject to editing before the final form is approved. These edits are normally minor and mostly formatting in nature.

IFALDA is indebted to Joern's team which includes Professor Lu Feng E (Lucy) of CAFUC in China and Mr. Ray Ellis, Manager of Dispatcher Training, Delta Airlines in Atlanta. They spent several years in the development and production of the manual.

The manual is <u>not</u> intended to be an update of the previous 1998 Edition of the FOO/FD Training Manual – ICAO Doc 7192 D-3. It is not intended to cover training subject matter in detail but rather it provides guidance in administering an FOO/FD training program based upon assessments to determine competency.

It recognizes that FOO/FDs…Dispatchers, if you will… are essentially synthesizers… assembling core competencies to make aeronautical decisions, including flight planning and flight monitoring. These include situations with which they are familiar and as well, situations they've never encountered before. Training programs cannot train dispatchers to manage every situation imaginable but rather, with an assembly of core competencies, they have the building blocks…tools, if you will… to make the aeronautical decisions required to operate flights safely.

The manual also notes that flight dispatchers are a highly technical subset of the overarching function of the flight operations officer, who also engage in other operations control functions in an airline operations control center (OCC). The previous training manual, ICAO Doc 7192 D3, was intended to lead a student to an FOO/FD license. The new manual goes beyond that to include other, non-licensed, OCC staff that support the overall operation of airline flights.
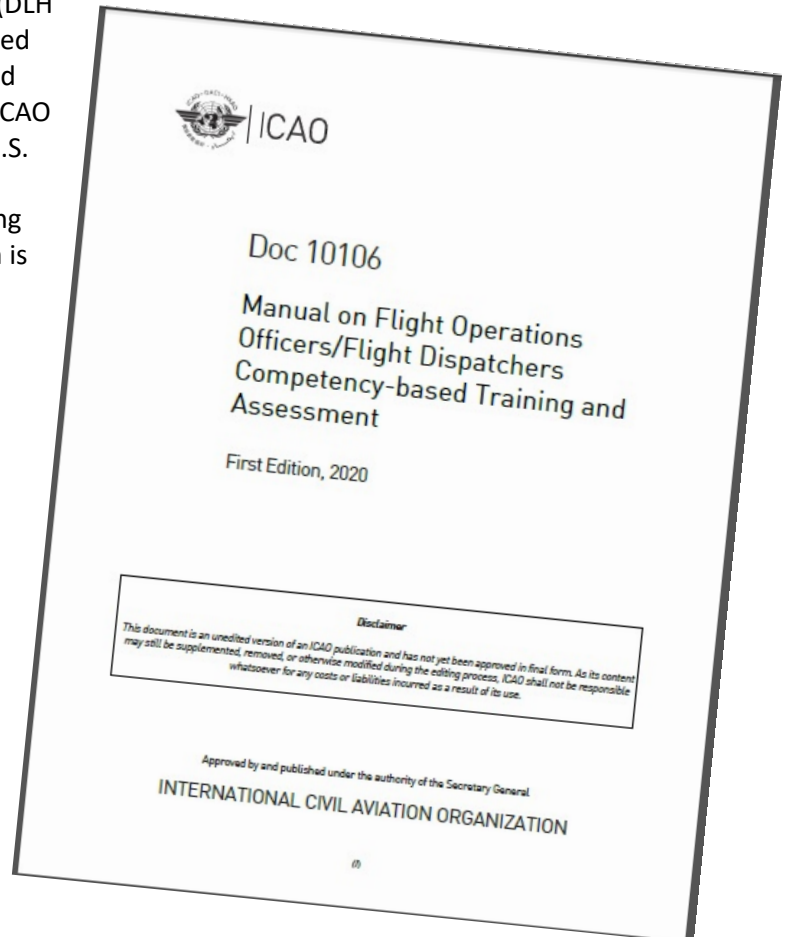
From Matthias Duerbeck – President EUFALDA

European Federation of Airline Dispatchers Associations

Member of IFALDA

Dear IFALDA members worldwide,

we are living in confusing and difficult times. There has never been such a time in aviation before. The worst that could happen to our business came true: The airplanes cannot fly and are being kept on the ground. Our airlines are all fighting to survive; we all fear for our own survival. Still, we as EUFALDA board want to inform you of our activities since 2019.

AGMs 2020 and 2021 and 2022

Sadly, our combined AGM with IFALDA needed to be cancelled because of the COVID-19 pandemic. Elections for the board could not be held, too, but we still need to keep up our work. Therefore, all officers of the board confirmed to continue their work until new election can be held. Meanwhile IFALDA and EUFALDA agreed to give a **Toronto AGM** another chance in **2021, MAY 3-5**. Our colleagues from France, actually planned to hold the AGM 2021, will organize the AGM in 2022 in Paris, France.

EUFALDA will hold a video AGM this year on December 19th, 2020 at 15.00 UTC

EASA (FS.TEC and RMT.0392)

Even though travel restrictions have been executed in Europe, there is still a lot we could do for the federation: In November 2019, I was able to represent EUFALDA at the FS.TEC-meeting of EASA in Cologne. This happed really short-term, because unfortunately Ken and Jörn were not able to attend the meeting. FS.TEC's chair kindly accepted me as substitute. See our comment within the FS.TEC for **EPAS – European Plan for Aviation Safety** given in July 2019 already. In February 2020, Ken participated in the first of two annual FS.TEC-meetings. The seat within this FS.TEC group enables us to continuously be represented within EASA. Although discussions about our relevant topics take time, it is important to remain this position. After this meeting, Ken announced that we definitely need to comment on **Rule Making Task (RMT.0392 – check chapter 3.8)**. Ken, Jörn, and I got together to work out a strategy paper, which contains our PRE-

RIA from 2014 as well. The work with the EASA-department was very cooperative. Our PRE-RIA was accepted as part of our comment and we were invited to conduct to the training standards for operational personnel with our expertise. This is an important step for EUFALDA, it puts us in a responsible position. This is the first time that we as a federation are able to influence training standards within EASA.

Our comment was presented in April 2020. Last Monday November 23rd, 2020, Jörn and Ken joined the fall FS.TEC meeting with EASA. Also this week November 24th, 2020 during EUFALDA's board meeting we set up 2 expert groups from EUFALDA as asked by EASA. One for Flight Operations Control personal training and one for ETOPS planning. In both groups Jörn Sellhorn-Timm, Ken Kronborg, Frodi Kristiansson and me are representing EUFALDA.

.

Furthermore, a telephone conference with EASA was held with Jörn and me as participants in March 2020. There, EASA had plans which were discussed to include operations personnel like us to ground-handling. We see ourselves within flight operation. EASA gave this task to structure ground handling to a consulting company. They understood our reserved enthusiasm for those plans. Because of COVID-19 restrictions, all operations within EASA take even more time, than we are already used to. We hope that we soon will be invited into the group flight operation personnel and that we are able to influence these concepts to meet our standards. There are opponents against our plans. They want to keep these standards as low as possible, concerning costs and duration of training. I want to personally thank Ken and Jörn, for putting so much effort into improving the work between EUFALDA and EASA.

We can promise you that EUFALDA-board is still working and active. We hope to see you all soon in person. Stay safe and healthy.

With best regards on behalf EUFALDA-Board

Matthias Dürbeck
President EUFALDA

Frankfurt, Germany November 29th, 2020

NOTAMS

"We cannot solve our problems with the same level of thinking that created them" **Albert Einstein**

Introduction

According to Eurocontrol's EAD service, the number of International NOTAM issuances in 2020 are headed to cross the 2 million mark. That is about 5 times more of International NOTAMS than we worked with as Dispatchers in the last decade. Handling time-critical airspace, airport and aeronautical data is a daunting task to a Dispatcher at the best of times both at planning and also in the process of exercising Operational control. The onset of COVID-19 has further added complexity with 192 ICAO member States issuing a multitude of airspace and airport notifications with varying effective & expiry dates; many with far-reaching operational & safety implications.

"You can have data without information, but you cannot have information without data." **Daniel Keys Moran**

The Problem

The sheer volume and numbers of International NOTAMS being issued may not really be the culprit at play. Machines are built to and can cope very well with petabytes of data. That said, there is some good work being done by the FAA, Eurocontrol and other States on a global basis to "digitize" NOTAMS based on internationally agreed specifications. With NOTAMS essentially promulgated by individual ICAO member States, the SWIM distribution platform is also being leveraged through a standards-based AIXM protocol and disseminated through Web Services. And that's great progress from the "production" side

REGION	2000	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Increase 2000-2019
Europe (L+E+B)	117.560	200.384	232.105	255.959	264.972	305.851	298.312	286.987	298.367	298.876	308.226	320.976	340.514	381.270	383.090	326%
Pacific (A+N+Y)	16.919	27.642	31.462	38.897	39.405	42.056	45.462	41.129	42.310	42.200	45.367	46.297	48.323	48.717	50.240	297%
Asia (R+V+W+Z)	30.452	47.624	51.104	56.565	64.937	69.344	70.530	73.274	81.974	89.133	113.364	128.595	147.062	157.723	153.298	503%
Russia + Central Asia (U)	3.817	10.220	10.675	11.838	11.949	15.534	22.109	28.054	28.429	35.397	41.587	60.282	79.563	90.995	118.684	3109%
Africa (D+F+G+H)	12.242	17.981	19.949	21.868	21.905	23.290	22.668	26.087	25.702	26.612	29.342	29.913	29.187	30.293	31.941	261%
Mid Asia (O)	5.571	12.998	12.973	13.353	14.376	13.800	14.598	13.140	13.404	14.008	15.520	15.392	18.077	20.074	20.986	377%
North America (C+K+P)	78.897	120.441	135.587	221.497	255.040	306.744	338.131	360.358	445.075	554.068	572.196	611.984	782.702	890.566	1.012.150	1283%
South + Central America (M+S+T)	25.614	41.518	44.003	45.226	45.940	47.862	52.416	50.872	57.244	54.976	56.895	58.378	64.089	64.578	96.427	269%
TOTAL	291.072	478.808	537.858	665.203	738.524	824.483	864.226	879.901	992.505	1.115.070	1.182.498	1.271.817	1.509.437	1.684.216	1.830.825	631%

Attention: International NOTAM only!
MIL and National Series not included.

(International) NOTAM Trends

Source - EAD
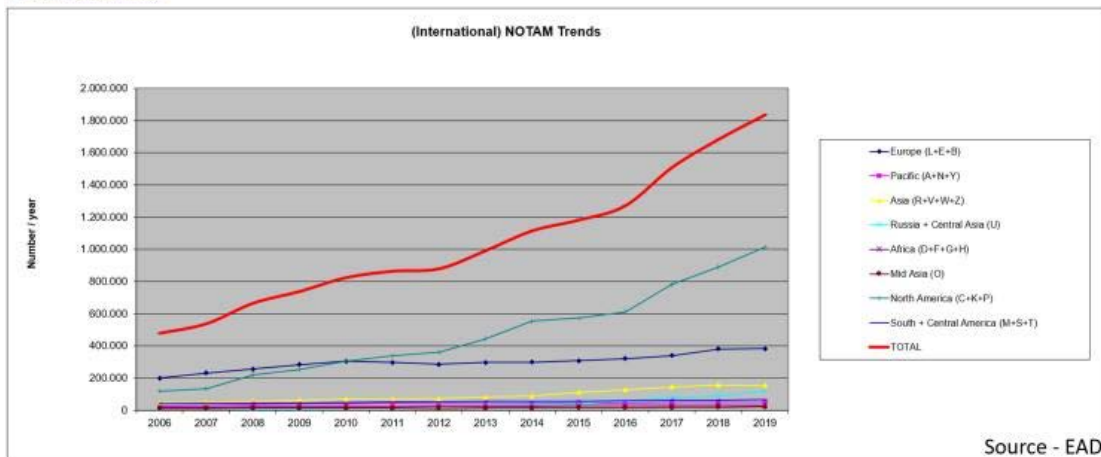
of the NOTAM data chain as it is routed through each Flight Planning Vendor such as Lido, Sabre, Navblue etc.

What about the Dispatcher?

With the Dispatcher placed on the "consumer" side of the NOTAM data chain, there are several 'gotchas' for the inability of airlines to cope with the tsunami of NOTAM data in making informed flight safety decisions. And so too does the FAA Administrator explain the NOTAM conundrum quite eloquently in this video (see min 6: https://www.youtube.com/watch?v=WJpLQPsRu8I).

"Data is our ability to handle it, and share it... and turn it into actionable information"

"*The (US) system produces more than 1.3 million NOTAMS every year. That means that when a pilot files a flight plan, that pilot has to wade through an average of about 70 pages of NOTAMS (that's right... 70 pages of NOTAM information). And some of the critical data like runway closures gets buried among pages and pages of data. The information is not sorted or filtered. The pilot has to read every bit of it.*"

Impact on Dispatch

The Safety and Efficiency implications on the daily Dispatcher experience should not be underestimated as this 'flight to nowhere' incident from a few weeks ago will demonstrate. A 'one-line' NOTAM closing Olbia Airport to all aircraft categories with more than 19 seats was missed. The sheer volume of the data churn is complex and confusing to airline Dispatchers planning flights and Pilots for route awareness. There are several 'gotchas' from the inability of Dispatchers to cope with the tsunami of NOTAM data. The onset of COVID-19-related NOTAMS has only made a bad situation even worse with these key pain points

- Ad-hoc Operations- Emergency, Relief, On-demand
- New Routes & non-scheduled operations
- Complex & Confusing NOTAMS
- Far reaching Impact/Implications
- Over 1800 COVID-19 NOTAMS – coming in daily, 192 States
- No central repository, lack geo-ref filters
- Inability for airlines to visualize, get updates
- Dispatchers need to run a flight in flight planning software to look at origin/destination impact

As a Dispatcher colleague quite aptly put it,
" *the human being is not made for reading 134 pages of NOTAMS for the sector London-Dublin*! "

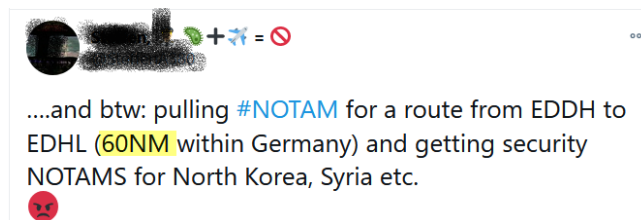The 3 key challenges that International Dispatchers face now more than ever can be summarized as:
1. Lack of access to a global central repository & updates
2. Presentation of data that optimizes for data review & retention
3. Lack of in-house data processing capabilities for big data from State programs (e.g. SWIM)

Safety Implications- Simplicity does not precede complexity but follows it.

Quoting from an NTSB report "Air Canada flight 759 was cleared to land on runway 28R (San Francisco International) but instead lined up with parallel taxiway C where four airplanes were awaiting clearance to take off. Flight 759 descended to an altitude of 100 feet above ground level and overflew the first of

the four airplanes. The flight crew initiated a go-around, and flight 759 reached a minimum altitude of about 60 feet above ground level and overflew the second airplane before starting to climb. "

The pilots failed to catch that note on page eight of the 27-page Digitized iPAD briefing package. This clearly demonstrates that NOTAM data regardless of whether it is in Digitized or Paper form is a known hazard and hopefully can also be mitigated.

" *the **presentation** of that information did not effectively convey the importance of the runway closure information and promote flight crew review and retention. Multiple events in the National Aeronautics and Space Administration's aviation safety reporting system database showed that this issue has affected other pilots, indicating that all pilots could benefit from the **improved display** of flight operations information.* " (FAA Administrator- Steve Dickson)

....and btw: pulling #NOTAM for a route from EDDH to EDHL (60NM within Germany) and getting security NOTAMS for North Korea, Syria etc. 😡

The potentially higher costs especially during the current economic downturn of 'digitizing' SWIM NOTAM data services being passed on by Computer Flight Planning Service Providers (CFSPs) to airlines can only make a bad safety situation worse. As this tweet from an A380 pilot states how unnecessary NOTAMS for countries from half-way around the world showed up on a 60nm flight brief flying from Hamburg to Lubeck, Germany. The pilot goes on to add

" I'm training myself, case my XXXX (Flight Plan Vendor) access is switched off for cost reasons "

NTSB Recommendations

The ACA SFO incident triggered an investigation by the NTSB as well as the Canadian Transportation Safety Board. Equally important was the NTSB Chairman Robert Sumwalt's remark

"*That's what NOTAMS are: they're a bunch of garbage that no one pays any attention to* ". This rather dismissive remark to the safety-critical nature of a NOTAM in the first place was driven by another major problem in today's NOTAM system- i.e. the language they are written in: "that they're often written in a language that only computer programmers would understand ".

The NTSB came back with 6 recommendations; recommendation 2 (of 6) to the FAA that reads....

"*Establish a group of human factors experts to **review** existing methods for presenting flight operations information to pilots, including flight releases and general aviation flight planning services (pre-flight) and aircraft communication addressing and reporting system messages and other in-flight formation; create and publish guidance on best practices to organize, prioritize, and **present this information** in a manner that **optimizes** pilot review and retention of relevant information; and work with air carriers and service providers to **implement solutions** that are aligned with the guidance.* "

This is the link for the NTSB abstract.... https://www.ntsb.gov/news/events/Documents/DCA17IA148-Abstract.pdf

Simplicity is hard to build, easy to use, and hard to charge for.
Complexity is easy to build, hard to use, and easy to charge for.

A typical oceanic operational flight plan laid out in a Jet Bridge and on a pilot's layover hotel room floor. Of the 47 pages, 35 of them are NOTAMs.

Bridging the Production-Consumption Gap

The International NOTAM system today is at the cross-roads of petabytes of 'big-data' being pushed in digital format with airlines and their Dispatchers left with scarce and diminishing resources to be at the receiving end of this 'firehose'. It is the lack of a 'middleware' in the ability of Dispatchers to handle it, share it and turn it into actionable information. The NTSB recommendations quite aptly stressed the need for Dispatchers and Pilots to have a common decision making portal – or a 'one stop shop' which "**present (s) this information** in a manner that **optimizes** pilot review and retention of relevant information".

A good example of how this archaic NOTAM system continues to pervade our brave new world of SWIM and 'big data' is a look at the Eurocontrol Public NOP Portal. Today's (6Dec) COVID-19 NOTAM Summary runs into 137 pages of Dispatch reading in text form.

```
A4732/19 NOTAMN Q) LIMM/QOBCE/IV/M/A/000/999/4526N00916E005 A) LIML B)
1907040000 C) 1907172359 E) REF AIP AD 2 LIML 3-3 NEW OBST ERECTED TWO
CRANE RWY35 PSN 5943.8M AFTER THR35 AND 172.1M RIGHT RCL ON TAKE OFF
DIRECTION COORD (WGS-84): 453022.0N 0091555.0E MAX ELEV AGL 69.2M/227.0FT
MAX ELEV AMSL 185.7M/609.3FT ROTATING JIB 77M ICAO SIGNAL UNPROVIDED.
```

## Who then will assume the leadership?

Fortunately for the Dispatch community, a small yet critical think-tank of leadership has recently emerged. A small focus group led by Fergus Flanagan- UAL, Des Keany (AAL) and Stuart Reddy (QTR) have offered the following 7 Global Planning Principles. IFALDA fully supports this effort.

7 Airline Notam Global Planning Principles

1 Series A
Reserve Series A for Safety of Flight data. Create new Series for Covid-19 and Security Notams

2 Standards
Standards for Content. Eliminate 'lawyer style' Notams. Increase education to ensure Notams are clear, concise and not verbose.

3 Additional Line for Links
Add NOTAM line to include URL/LINKS to attachments, such as AIP, AIC and or online support documents. Addressed is the confusion between NOTAM and AIC/AIP Supplements

4 Oversight Body
Support the creation of a Global AIS/NOTAM oversight body with enforcement and audit capability, to ensure quality and distribution of data. This would be similar to IOSA audits

5 Eurocontrol Site
Create a EUROCONTROL site for NOTAMs similar to the FAA's FNS. Rather than having to subscribe, create free access to the EuroControl NOTAM database

6 Route Validation
Ability to validate route corridor through NOTAM system similar to EuroControl route validator.

7 3D Route Display with Restrictions
Ability to Display the route graphically and also identify the restriction with links to the actual item. Create a 3D route display where restrictions are plotted/displayed.

Note:

Users are fully aware of the development of visual NOTAMS. The above suggestions are designed to fill the gap between our current textual NOTAMS and the delivery of visual NOTAMS.
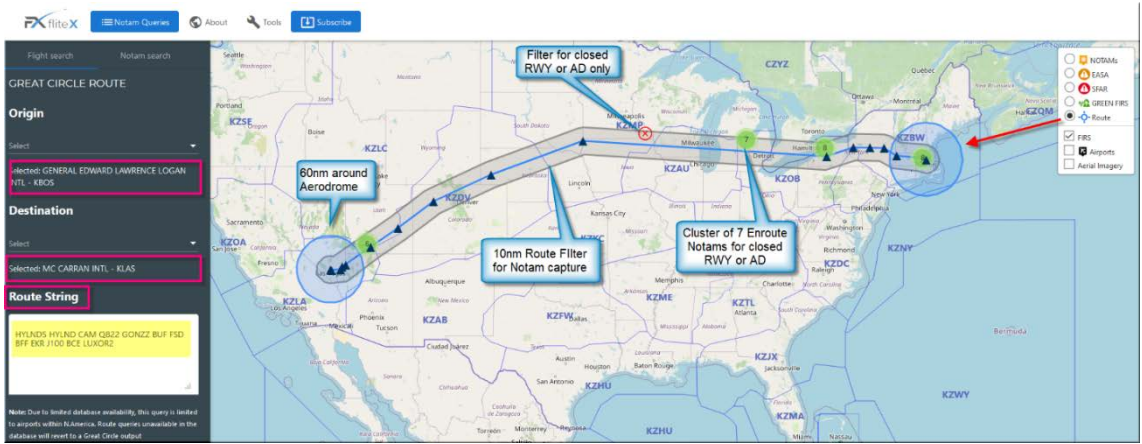
IFALDA/EUFALDA AGM 2021

The
International Airline Flight Dispatchers' Conference
&
IFALDA's 60th Annual General Meeting
EUFALDA's Annual General Meeting
May 3-5, 2021

Toronto, Canada

Four Points by Sheraton Toronto Airport
6257 Airport Road, Mississauga, Ontario L4V 1E4 Canada
Phone Number: +1 905-678-1400

Note…at the time FDW goes to press, the plans are to hold a live meeting at the Sheraton Four Points in Toronto with some sort of ZOOM capability for those unable to travel. As the guidance for social distancing and travel constraints from world health authorities continues to evolve, it may be necessary to change these plans. Please consult the IFALDA website for updates. www.ifalda.org

2021 Nominations for IFALDA Officer Positions:
Vice President, East
Vice President, Administration
Current positions held by:
Sevda Tantan, Vice President, East
Richard Yeates, Vice President, Administration

2020 Election Results:
Russ Williams, President
Sergey Vakhrushev, Vice President, West
Rick Ketchersid, Vice President, Finance

Elections will be held during IFALDA AGM 2021
Nominations will be accepted until time of elections.
Send your nominations to: nominations@ifalda.org

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