The Global Voice of Pilots

IFALPA

An international not-for-profit organization, IFALPA represents over 100,000 pilots in nearly 100 countries.

The mission of the Federation is to promote the highest level of aviation safety worldwide and to be the global advocate of the piloting profession; providing representation, services, and support to both our members and the aviation industry.

IFALPA's Technical and Safety Role

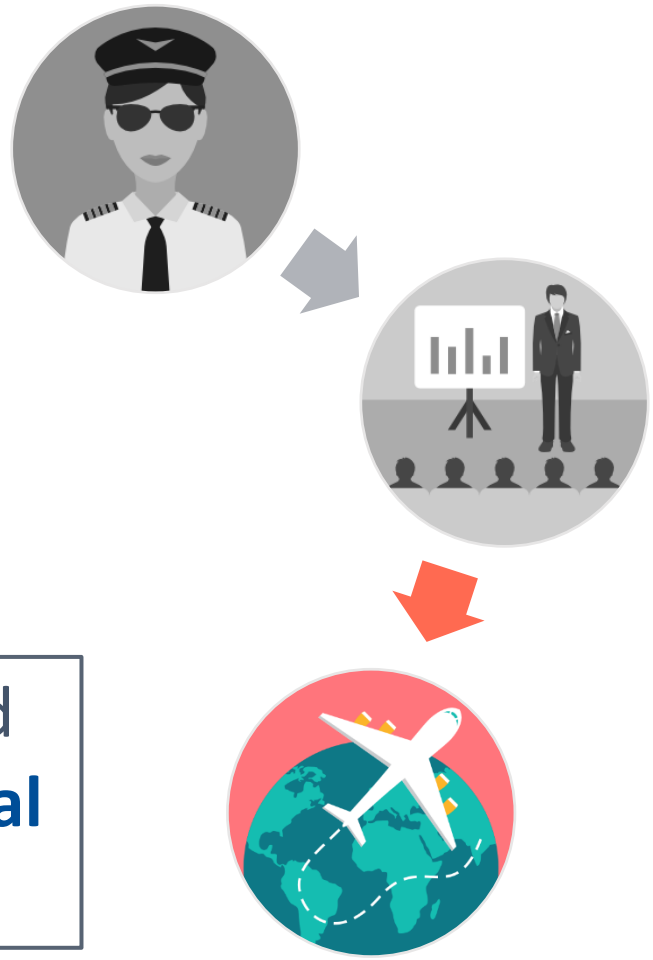
- Identify areas for improvement and development
- Provide expert input for international SARPs and guidance material
- Produce specific safety publications
- Participate in safety workshops and seminars

Working Together

A cycle for safety improvement

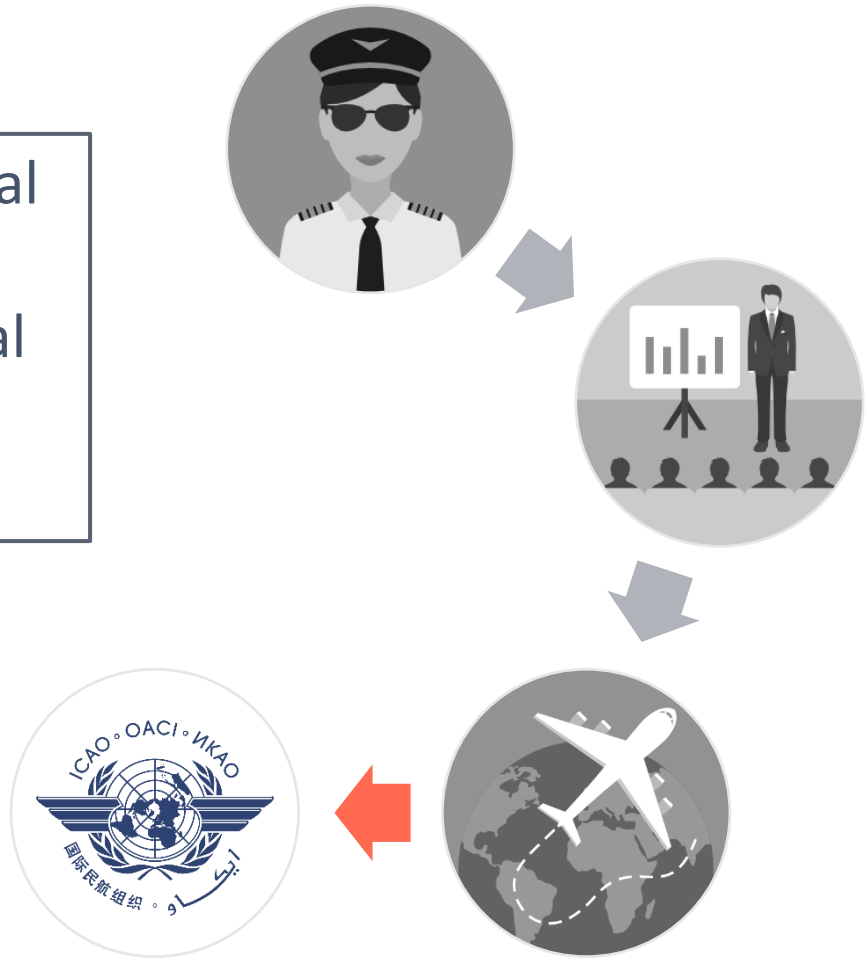
Air line **pilots** identify an area where safety and/or efficiency could be improved

They bring their ideas to national and international **technical committees** for discussion and improvement



These ideas are reviewed and accepted by the **global pilot** community

Once accepted, IFALPA technical experts work with **ICAO** and **States** to improve international standards and recommended practices



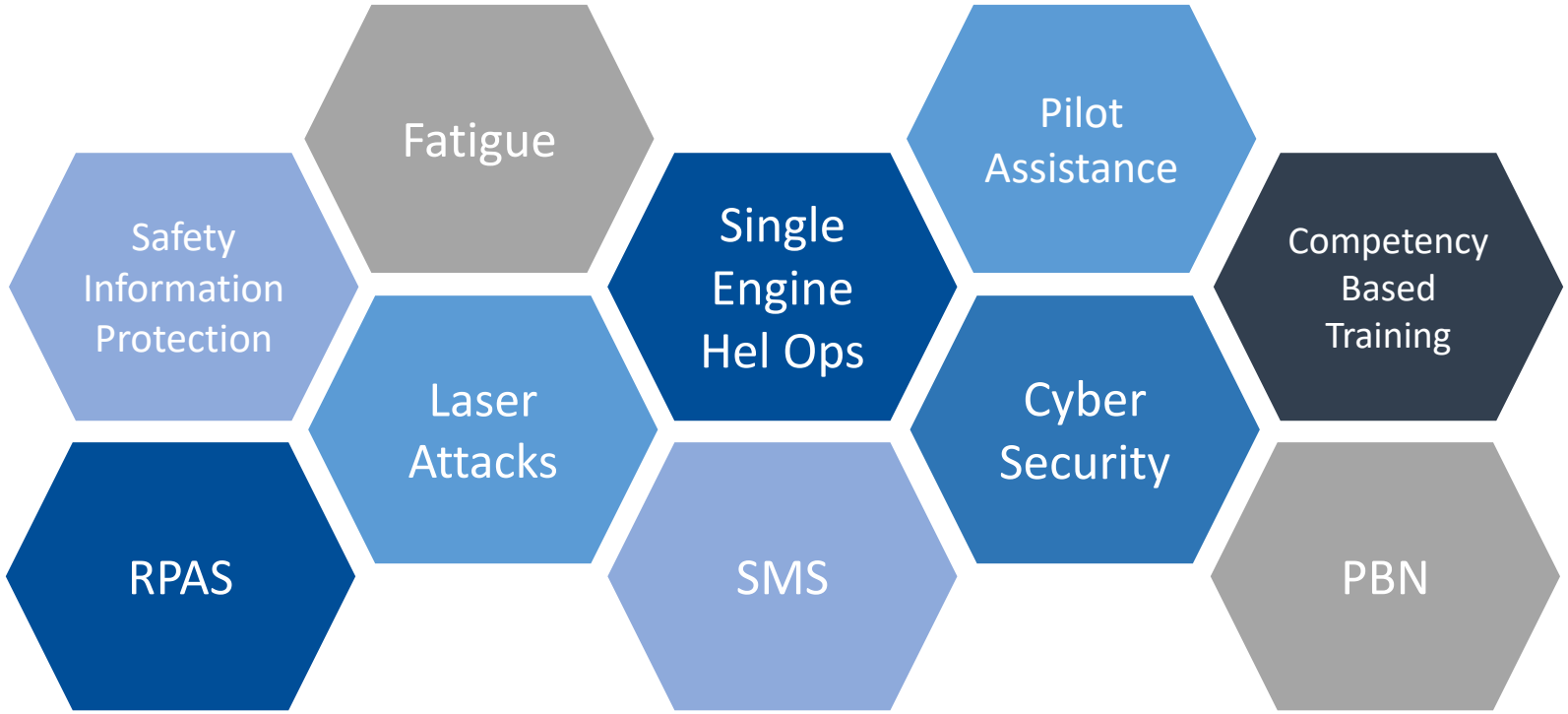
ICAO Member **States** adopt the new Standards into their national aviation legislation

Pilots, **operators** and **States** benefit from the improved safety and efficiency of international civil aviation

IFALPA on the International Stage

The pilot voice at ICAO

Some of the subjects



What Else Do We Do?

International cooperation and leadership

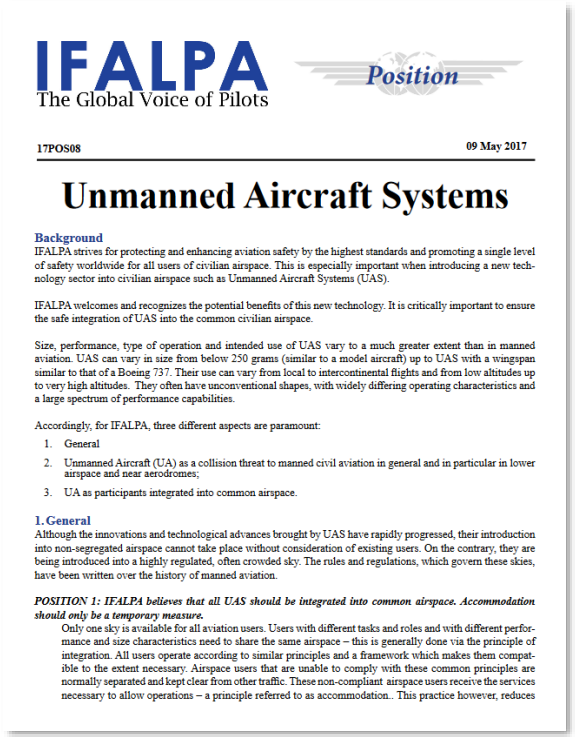
Technical and Safety Publications

Information for pilots by pilots.

Standing Committees and IFALPA Staff prepare various types of publications for the benefit of our members and the aviation community.

These are used to provide the pilot perspective outside of the formal ICAO structure.

Technical and Safety Publications



IFALPA
The Global Voice of Pilots

Position

17POS08 09 May 2017

Unmanned Aircraft Systems

Background
IFALPA strives for protecting and enhancing aviation safety by the highest standards and promoting a single level of safety worldwide for all users of civilian airspace. This is especially important when introducing a new technology sector into civilian airspace such as Unmanned Aircraft Systems (UAS).

IFALPA welcomes and recognizes the potential benefits of this new technology. It is critically important to ensure the safe integration of UAS into the common civilian airspace.

Size, performance, type of operation and intended use of UAS vary to a much greater extent than in manned aviation. UAS can vary in size from below 250 grams (similar to a model aircraft) up to UAS with a wingspan similar to that of a Boeing 737. Their use can vary from local to intercontinental flights and from low altitudes up to very high altitudes. They often have unconventional shapes, with widely differing operating characteristics and a large spectrum of performance capabilities.

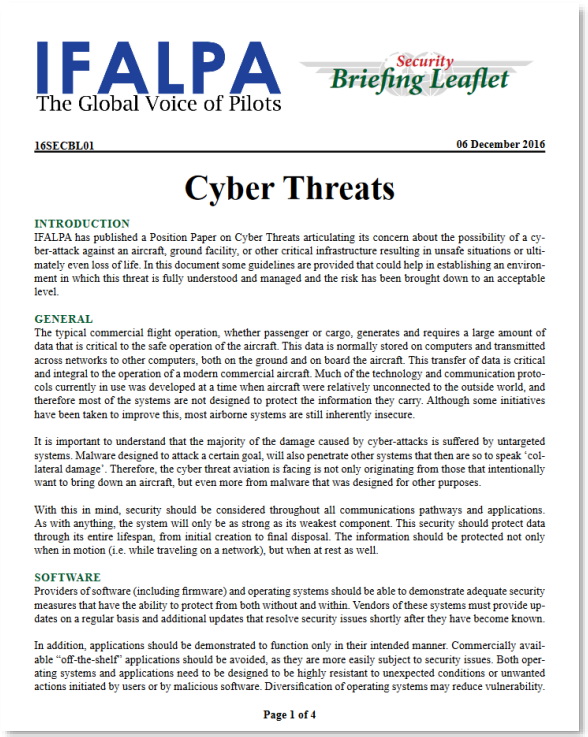
Accordingly, for IFALPA, three different aspects are paramount:

1. General
2. Unmanned Aircraft (UA) as a collision threat to manned civil aviation in general and in particular in lower airspace and near aerodromes;
3. UA as participants integrated into common airspace.

1. General
Although the innovations and technological advances brought by UAS have rapidly progressed, their introduction into non-segregated airspace cannot take place without consideration of existing users. On the contrary, they are being introduced into a highly regulated, often crowded sky. The rules and regulations, which govern these skies, have been written over the history of manned aviation.

POSITION 1: IFALPA believes that all UAS should be integrated into common airspace. Accommodation should only be a temporary measure.

Only one sky is available for all aviation users. Users with different tasks and roles and with different performance and size characteristics need to share the same airspace – this is generally done via the principle of integration. All users operate according to similar principles and a framework which makes them compatible to the extent necessary. Airspace users that are unable to comply with these common principles are normally separated and kept clear from other traffic. These non-compliant airspace users receive the services necessary to allow operations – a principle referred to as accommodation.. This practice however, reduces



IFALPA
The Global Voice of Pilots

Security Briefing Leaflet

16SECBL01 06 December 2016

Cyber Threats

INTRODUCTION
IFALPA has published a Position Paper on Cyber Threats articulating its concern about the possibility of a cyber-attack against an aircraft, ground facility, or other critical infrastructure resulting in unsafe situations or ultimately even loss of life. In this document some guidelines are provided that could help in establishing an environment in which this threat is fully understood and managed and the risk has been brought down to an acceptable level.

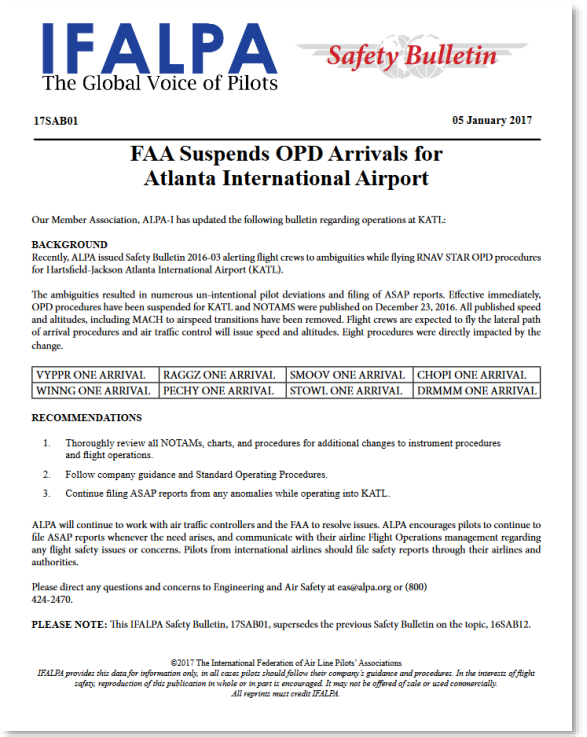
GENERAL
The typical commercial flight operation, whether passenger or cargo, generates and requires a large amount of data that is critical to the safe operation of the aircraft. This data is normally stored on computers and transmitted across networks to other computers, both on the ground and on board the aircraft. This transfer of data is critical and integral to the operation of a modern commercial aircraft. Much of the technology and communication protocols currently in use was developed at a time when aircraft were relatively unconnected to the outside world, and therefore most of the systems are not designed to protect the information they carry. Although some initiatives have been taken to improve this, most airborne systems are still inherently insecure.

It is important to understand that the majority of the damage caused by cyber-attacks is suffered by untargeted systems. Malware designed to attack a certain goal, will also penetrate other systems that then are so to speak 'collateral damage'. Therefore, the cyber threat aviation is facing is not only originating from those that intentionally want to bring down an aircraft, but even more from malware that was designed for other purposes.

With this in mind, security should be considered throughout all communications pathways and applications. As with anything, the system will only be as strong as its weakest component. This security should protect data through its entire lifespan, from initial creation to final disposal. The information should be protected not only when in motion (i.e. while traveling on a network), but when at rest as well.

SOFTWARE
Providers of software (including firmware) and operating systems should be able to demonstrate adequate security measures that have the ability to protect from both without and within. Vendors of these systems must provide updates on a regular basis and additional updates that resolve security issues shortly after they have become known.

In addition, applications should be demonstrated to function only in their intended manner. Commercially available "off-the-shelf" applications should be avoided, as they are more easily subject to security issues. Both operating systems and applications need to be designed to be highly resistant to unexpected conditions or unwanted actions initiated by users or by malicious software. Diversification of operating systems may reduce vulnerability.



IFALPA
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Safety Bulletin

17SAB01 05 January 2017

FAA Suspends OPD Arrivals for Atlanta International Airport

Our Member Association, ALPA-I has updated the following bulletin regarding operations at KATL:

BACKGROUND
Recently, ALPA issued Safety Bulletin 2016-03 alerting flight crews to ambiguities while flying RNAV STAR OPD procedures for Hartsfield-Jackson Atlanta International Airport (KATL).

The ambiguities resulted in numerous un-intentional pilot deviations and filing of ASAP reports. Effective immediately, OPD procedures have been suspended for KATL and NOTAMS were published on December 23, 2016. All published speed and altitudes, including MACH to airspeed transitions have been removed. Flight crews are expected to fly the lateral path of arrival procedures and air traffic control will issue speed and altitudes. Eight procedures were directly impacted by the change.

VYPPR ONE ARRIVAL	RAGGZ ONE ARRIVAL	SMOOV ONE ARRIVAL	CHOPI ONE ARRIVAL
WINNG ONE ARRIVAL	PECHY ONE ARRIVAL	STOWL ONE ARRIVAL	DRMMM ONE ARRIVAL

RECOMMENDATIONS

1. Thoroughly review all NOTAMs, charts, and procedures for additional changes to instrument procedures and flight operations.
2. Follow company guidance and Standard Operating Procedures.
3. Continue filing ASAP reports from any anomalies while operating into KATL.

ALPA will continue to work with air traffic controllers and the FAA to resolve issues. ALPA encourages pilots to continue to file ASAP reports whenever the need arises, and communicate with their airline Flight Operations management regarding any flight safety issues or concerns. Pilots from international airlines should file safety reports through their airlines and authorities.

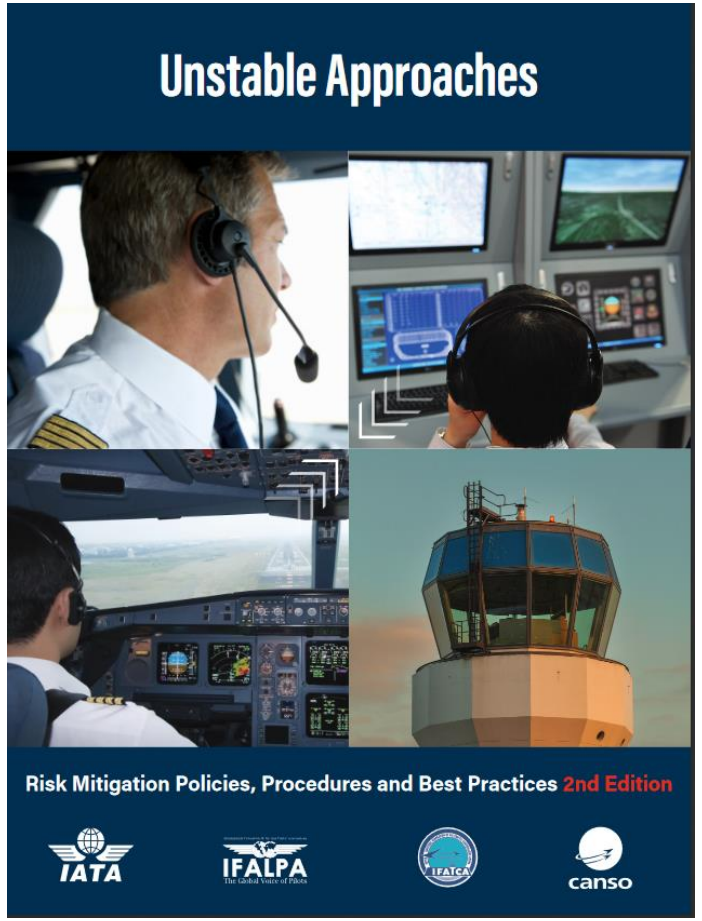
Please direct any questions and concerns to Engineering and Air Safety at eas@alpa.org or (800) 424-2470.

PLEASE NOTE: This IFALPA Safety Bulletin, 17SAB01, supersedes the previous Safety Bulletin on the topic, 16SAB12.

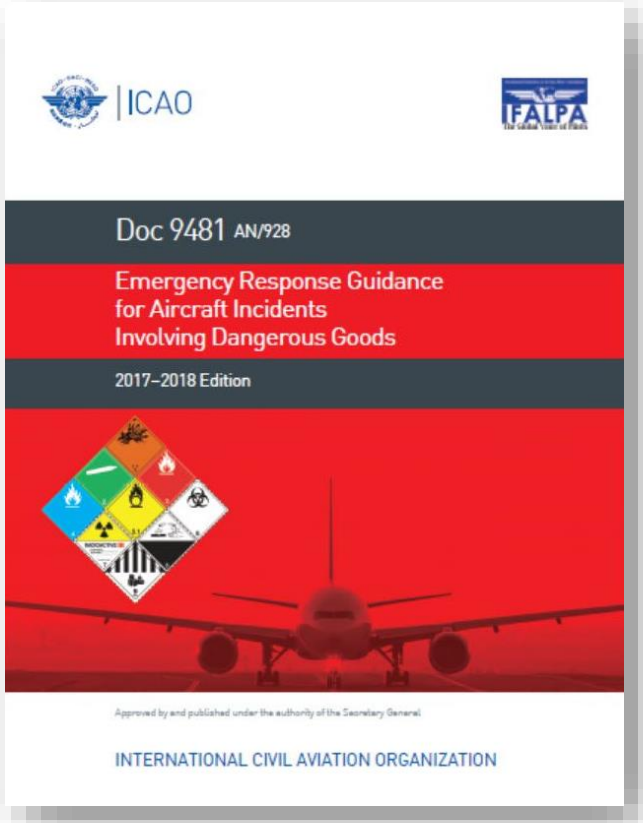
International Guidance

Recognizing the value of **multiple viewpoints** in the development of guidance material, the **community** of international aviation safety organizations are **working together** to produce effective guidance material.

IFALPA technical experts provide the **Pilots' perspective** for this important work.



International Guidance



NOTAMS

A pilot´s perspective

Preflight preparations

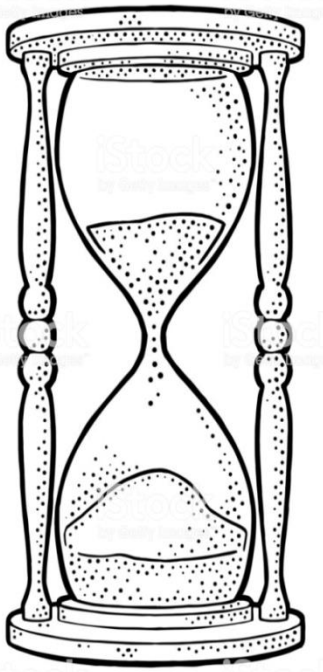
- 60 – 90 minutes before scheduled time of departure
  - Flight information
  - Status of aircraft
    - Possible defects
    - Minimum Equipment List-items (MEL) affecting operability
  - Operational information / Crew Information System
  - Weather information and NOTAMs
    - Departure airport
    - Destination airport
    - Alternate airports
    - FIRs
  - Use information to create general awareness of operational status of airspace and airfields planned for use

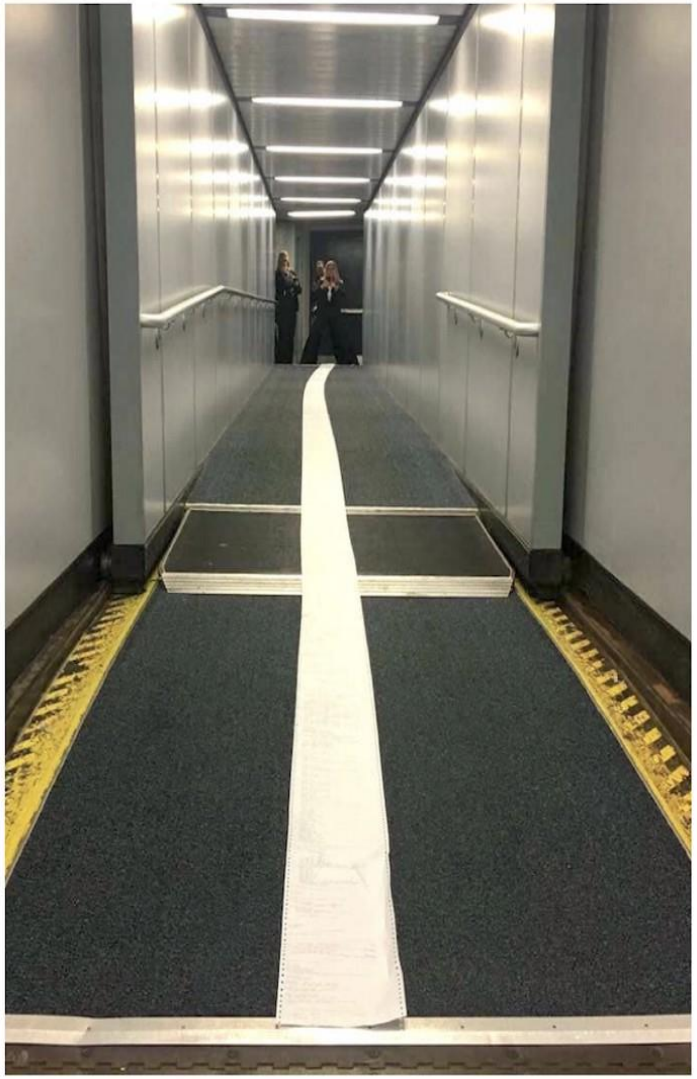
What are we looking for?

- Aerodrome/ATC availability?
- RWY/NAV aid availability?
- TWY closures, non-standard routing?
- Anything affecting normal traffic flow?
- Any other items affecting normal operations?

➢ ***Create and improve situational awareness***

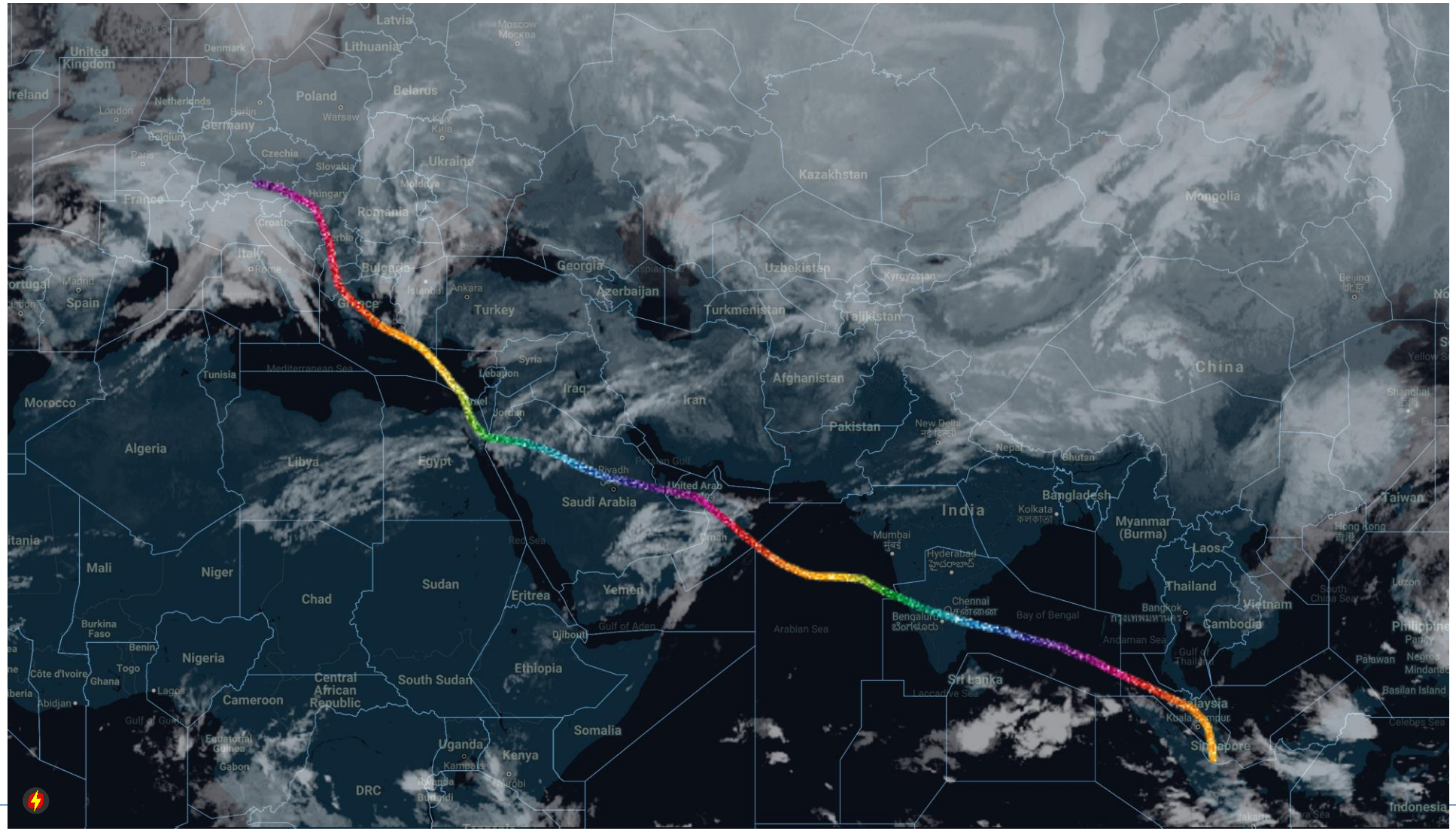
➢ ***Irregularities requiring anticipation => FUEL***





Let’s generate a brief for an example flight: An Airbus 330 flying from Munich to Singapore.

START BRIEFING



IFALPA

FLIGHT BRIEF

A330-243

EDDM-WSSS

FUEL:61,746 kg

RUNNING PLAN

ADDING WEATHER

GETTING NOTAMS

MORE NOTAMS

EVEN MORE NOTAMS

BRIEFING READY

FLIGHT BRIEFING

NOTAMS

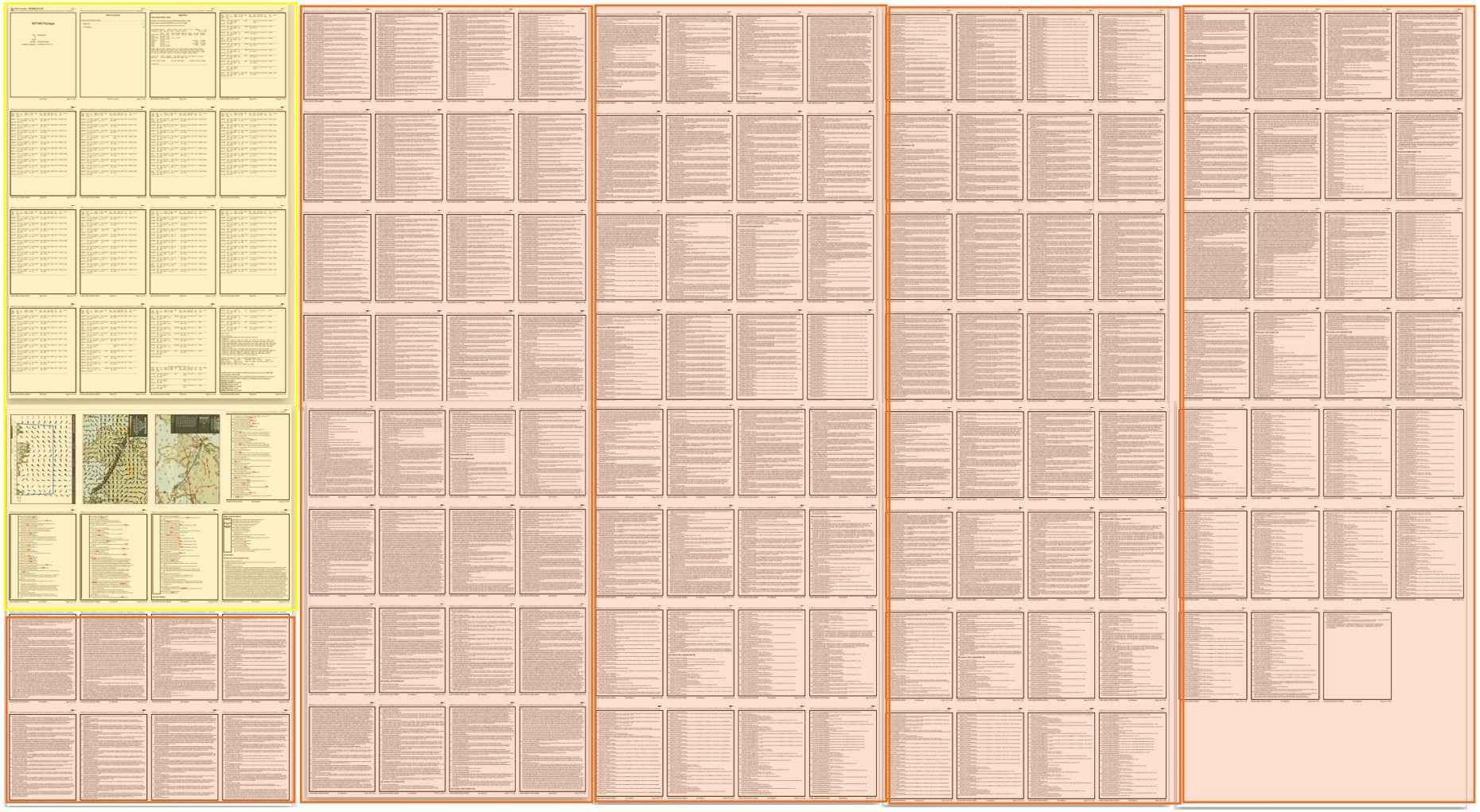
NOTAMS

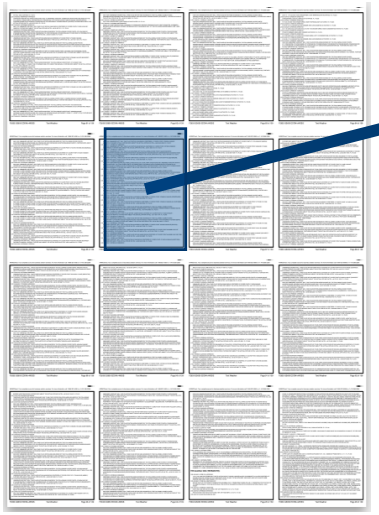
NOTAMS

NOTAMS

NOTAMS

Here's the brief we made: let's take a look.





0230-0930 1330-1630 VED-68 SIKKIM FIELD FRNG RANGE ACT FL / FL199
VECF A0181/21 01FEB0300-06FEB1000
0300-1000 VED-56 DARANGA FIELD FRNG RANGE ACT FL / FL131
VECF A0168/21 01FEB0230-26FEB1230
01-05 08-12 15-19 22-26 0230-1230 DONGABAHAL PROOF RANGE ACT WI COORDS 202000 TO 202400N AND 0831100 TO 0831900E FL / FL030
VECF A0167/21 03FEB0130-27FEB1430
03-05 10-13 15-18 24-27 0130-0830 0930-1430 VED-50 ACT AND BPTA FLY WILL BE CARRIED OUT WI COORD: POINT A 191740.33N 0845512.40E, POINT B 191044.80N 0844722.85E, POINT C 185601.96N 0845238.50E, POINT D 191219.81N 0851455.09E AND POINT A 191740.33N 0845512.40E FL / FL200
VECF A0146/21 01FEB0200-27FEB1300
01-06 08-13 15-20 22-27 0200-0329 1031-1300 ARTILLERY FRNG ACT BY PXE WILL TAKE PLACE WI AREA BOUNDED BY POINT A(212730N 0870200E) POINT C(211140N 0871900E) POINT B(210400N 0865130E) AND THEN TO POINT A(212730N 0870200E) ALONG THE COASTLINE FL / FL249
VECF A0112/21 16JAN0110-31MAR1200
0110-0400 1030-1200 FREE HOT AIR BALLOON FLT ACT WILL TAKE PLACE WI AREA BOUNDED BY 10NM FM COORD 242853.02N 0800123.43E FL / FL050
VECF G0020/21 13JAN1048-27JAN2359 EST
ATS ROUTE CONNECTIVITY FOR FLIGHT PLANNING AND OPERATIONS TO/FROM DARBHANGA AIRPORT (VEDH) IS AS BELOW: VERTICAL LIMIT: FL100/FL250 AIRSPACE CLASSIFICATION: CLASS D LONGITUDINAL SEPARATION: 50NM ROUTE WIDTH: 20 NM DETAILS OF THE ROUTINGS ARE AS BELOW: 1) FROM/TO ATS ROUTES R325/Q18/W105 (BI-DIRECTIONAL): -TAXOP - RUKNI- TR 309/129 - 34.3 NM - MFA /4000 FEET- VEDH (261138.94N 0855455.38E). 2) FROM PPT VOR (UNI-DIRECTIONAL EB ONLY): - PPT VOR - TR051/ - 57.4 NM - MFA/4000 FEET - VEDH (261138.94N 0855455.38E). 3) TO PPT VOR (UNI-DIRECTIONAL WB ONLY): - VEDH (261138.94N 0855455.38E) - TR300/ - 16.2 NM - IPLAS - MFA/4000 FEET - G335 - PPT VOR ATS UNIT FREQ: DHARBHANGA TOWER: 123.5 MHZ PATNA APPROACH: 121.1 MHZ (APP), 118.3 MHZ (TWR) KOLKATA ACC: 133.75 MHZ, 132.25 MHZ, 126.1 MHZ AND 120.1 MHZ FL100 / FL250
VECF G0019/21 13JAN1045-27JAN2359 EST
CONTROL ZONE FOR DARBHANGA (IAF) AIRPORT (VEDH) IS ESTABLISHED AS BELOW: - CIRCULAR AREA CENTRED ON ARP DARBHANGA AIRPORT (261138.94N0855455.38E) WITHIN A RADIUS OF 15 NM. VERTICAL LIMIT: FL65/GND, AIRSPACE CLASSIFICATION: CLASS - D, CONTROLLING UNIT: DARBHANGA TOWER, FREQUENCY: 123.5 MHZ, TELE FAX: 06272-225022 AND WATCH HOURS: HO. FL / FL065
VECF A0085/21 14JAN0200-20FEB1130
0200-1130 AERIAL LIDAR SURVEY WILL TAKE PLACE WI AREA: 241200N0875900E, 241200N0882500E, 225300N0884100E, 220400N0881000E, 220700N0875200E, 231000N0881200E, 232600N0880000E, 241200N0875900E FL037 / FL055
VECF A0053/21 11JAN0130-31MAR1200
0130-0400 1000-1200 FREE HOT AIR BALLOON FLT ACT WILL TAKE PLACE WI AREA BOUNDED BY 12NM FM COORD 234331.02N 0810144.43E FL / FL050
VECF A0052/21 11JAN0130-31MAR1200
0130-0400 1000-1200 FREE HOT AIR BALLOON FLT ACT WILL TAKE PLACE WI AREA BOUNDED BY 12NM FM COORD 220848.01N 0803929.47E FL / FL050
VECF A0033/21 08JAN0430-06FEB1130
0430-1130 HOSTING OF ONE NON-LIT TETHERED SKY BALLOON WILL TAKE PLACE AS PER FLW DETAILS: 1) COORD: 223241.28N 0882033.36E 2) BASE COLOR OF BALLOON: WHITE 3) DIAMETER OF BALLOON: 12FT 4) SHAPE OF BALLOON: PEARL SHAPE FL / FL001
VECF A0032/21 08JAN0430-06FEB1130
0430-1130 HOSTING OF ONE NON-LIT TETHERED SKY BALLOON WILL TAKE PLACE AS PER FLW DETAILS: 1) COORD: 223113.80N 0882403.24E 2) BASE COLOR OF BALLOON: WHITE 3) DIAMETER OF BALLOON: 12FT 4) SHAPE OF BALLOON: PEARL SHAPE FL / FL001
VECF A0016/21 03JAN2359-04APR2359 EST
VHF A/G VOICE COM FREQ 125.775 MHZ WILL BE IN OPS ON TEST BASIS ALONG THE ATS ROUTE SEGMENTS WI INDIAN AIRSPACE AS FOLLOWS. 1. ON A201 BTN ANSOS TO AAT 2. ON B465 3. ON A599 ALTN FREQ 132.25 MHZ GND/FL460 FL / FL460
VECF G0185/08 29OCT1130-PERM
VIDE NOTAM NO.G0013/07 DATED 22ND JANUARY 2007 IT WAS INDICATED THAT IN TERMS OF AIR TRAFFIC CONTROL ENHANCEMENT AND FINANCING SERVICES AGREEMENT EXECUTED BETWEEN IATA AND AIRPORTS AUTHORITY OF INDIA EFFECTIVE 2ND FORTNIGHT OF JAN 2007 THE RNFC FOR AIRCRAFTS OVERFLYING INDIAN FIRS WILL BE INVOICED AND COLLECTED BY IATA ON BEHALF OF AAI. IN TERMS OF SUPPLEMENT/AMENDMENT TO THE ABOVE AGREEMENT,IN ADDITION TO THE ABOVE,IATA WOULD BE COLLECTING CHARGES FOR THE PERIOD 1ST APRIL 1995 TO 15TH JAN 2007 WHICH HAVE BEEN PREVIOUSLY INVOICED BY AAI BUT NOT SETTLED BY THE OPERATORS.
VECF G0047/01 03APR2300-PERM
UNLESS SPECIFICALLY PERMITTED BY DGCA, NO ACFT IS PERMITTED TO ENTER INDIAN AIR SPACE IF DURING THE COURSE OF ITS FLIGHT, IT HAS MADE A LANDING OR IS GOING TO MAKE A LANDING AT ANY PLACE IN THE TALIBAN CONTROLLED AREAS OF AFGHANISTAN. THIS IS IN PURSUANCE OF OPERATIVE PARAGRAPH 11 OF UN SECURITY COUNCIL RESOLUTION 1333. ANY VIOLATION OF THIS PART OF THE RESOLUTION WOULD LEAD TO DENIAL OF FUTURE PERMISSION TO FLY INTO INDIAN AIR SPACE.

1 page = **10-15** NOTAMs

120 pages **= 1200-1800** NOTAMs

For each NOTAM, crew must:

1. Read

2. Understand

3. Decide if relevant to flight

How long does this take <u>for each</u> NOTAM …

1200 NOTAMs (best case)
x 5 seconds each (best case)

↓

Time required:
1 hour 40 minutes

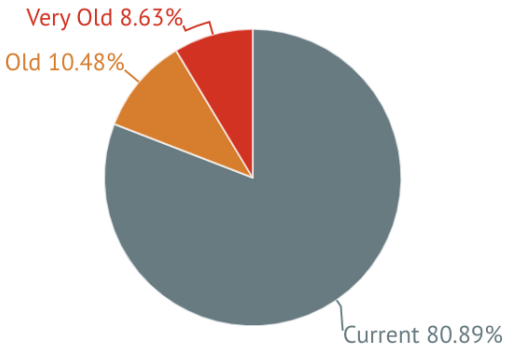
In airline and commercial operations, the time available for the complete crew briefing is no more than 20 minutes. It is not possible to read and digest 120 pages of NOTAMs. The result: **vital, safety-critical information is missed**.

The Old NOTAMs problem

- The key issue is **volume**.
  Year
  2000: 250,000
  2020: 1.7 million NOTAMs issued.

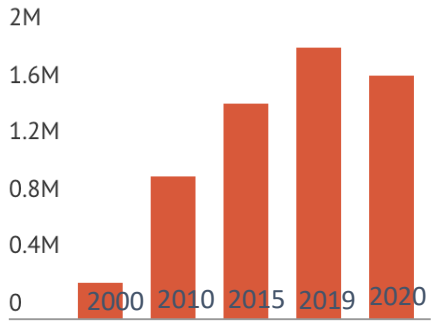
- Volume increasing by ~**100,000** annually on average.

- 20 years ago the briefing package would have been not 120 pages, but more like 40 pages – usable.



2020: 1.7 million NOTAMs issued, up from 250,000 in 2000.

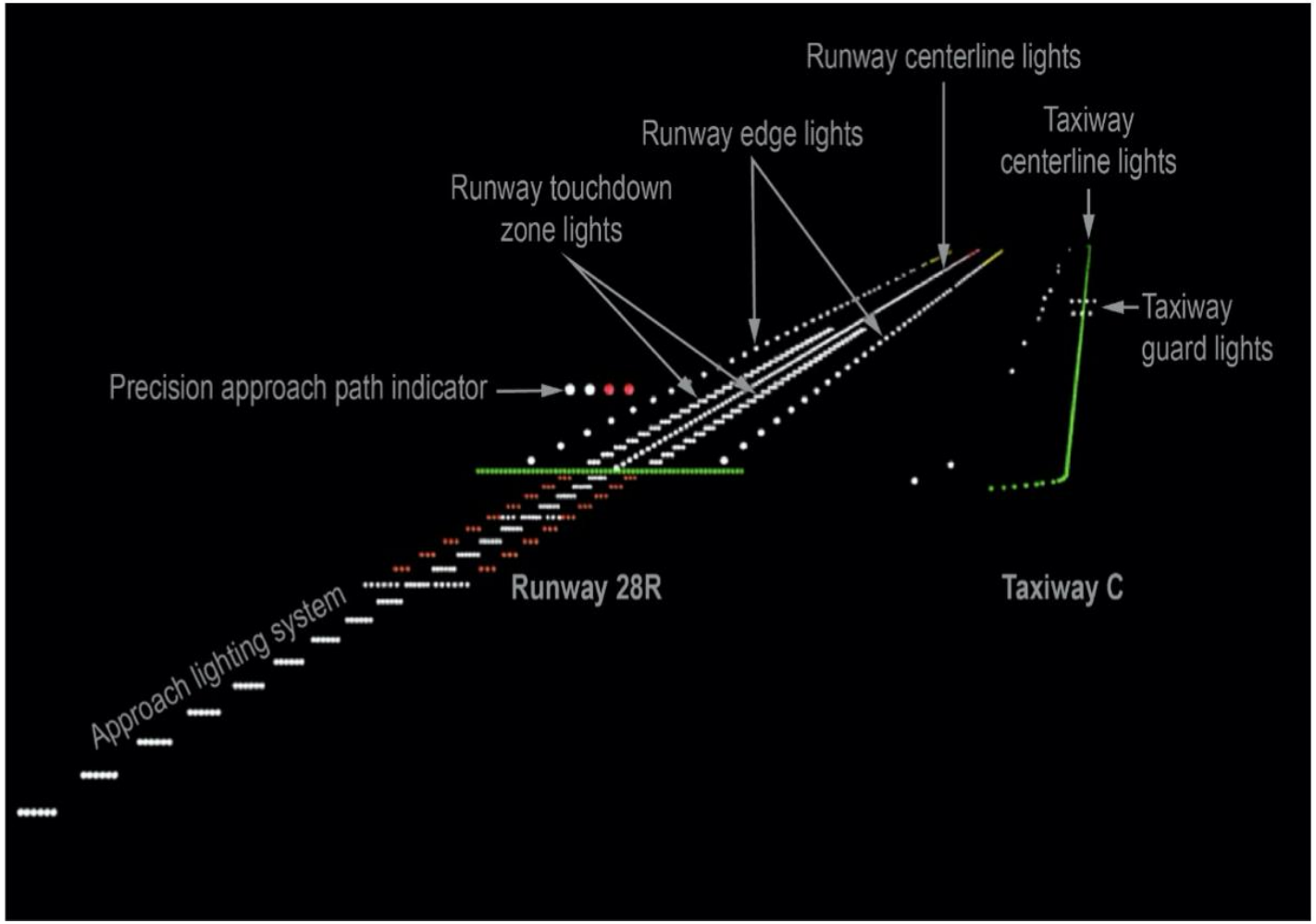
20% (numbering 7,000) of all active NOTAMs are **old.**



NOTAM for AC 759 flight to SFO

ACA 0759 CYYZ/KSFO 08.JUL.2017/0055z [printed: 07JUL/2313z]

SFO 10.Apr.2017 0700z - 30.Nov.2017 1200z DA4069/17
SFO 047/069 SFO **OBST CRANE** (ASN 2016-AWP-2357-NRA) 373703N1222260W
(0.4NM WSW SFO) 251FT (240FT AGL) FLAGGED AND LGTD
1704100700-1711301200



Captain had been awake for 19h

Demanding flight through area of thunderstorms

Failure to use available navigation aids

Procedural errors while flying the approach

Expectation bias

IFALPA´s Participation on NOTAMs

International Civil Aviation Organization

IMP/WG-A/4-WP/15
02/07/2020

WORKING PAPER

INFORMATION MANGEMENT PANEL (IMP)

FOURTH MEETING OF THE
AERONAUTICAL INFORMATION MANAGEMENT WORKING GROUP (IMP/WG-A/4)

Virtual, 06 to 09 July 2020

Agenda Item 3: NOTAM Replacement System

PLEA LETTER TO REDUCE AMOUNT OF NOTAM

(Presented by Lauri Soini)

SUMMARY

This working paper presents a draft plea letter to be published by IFALPA with the objective to act as a short-term solution to reduce the amount of NOTAM. The aim of the letter is to focus on NOTAM which violate the requirement for NOTAM not to exceed three months duration, as spelled out in PANS AIM. The intended outcome of the plea letter is to encourage NOFs to reduce NOTAM with duration in excess of three months.

The International Federation of Air Line Pilots' Associations

IFALPA
The Global Voice of Pilots

22 September 2020

AIS Community

Dear Madam, Dear Sir;

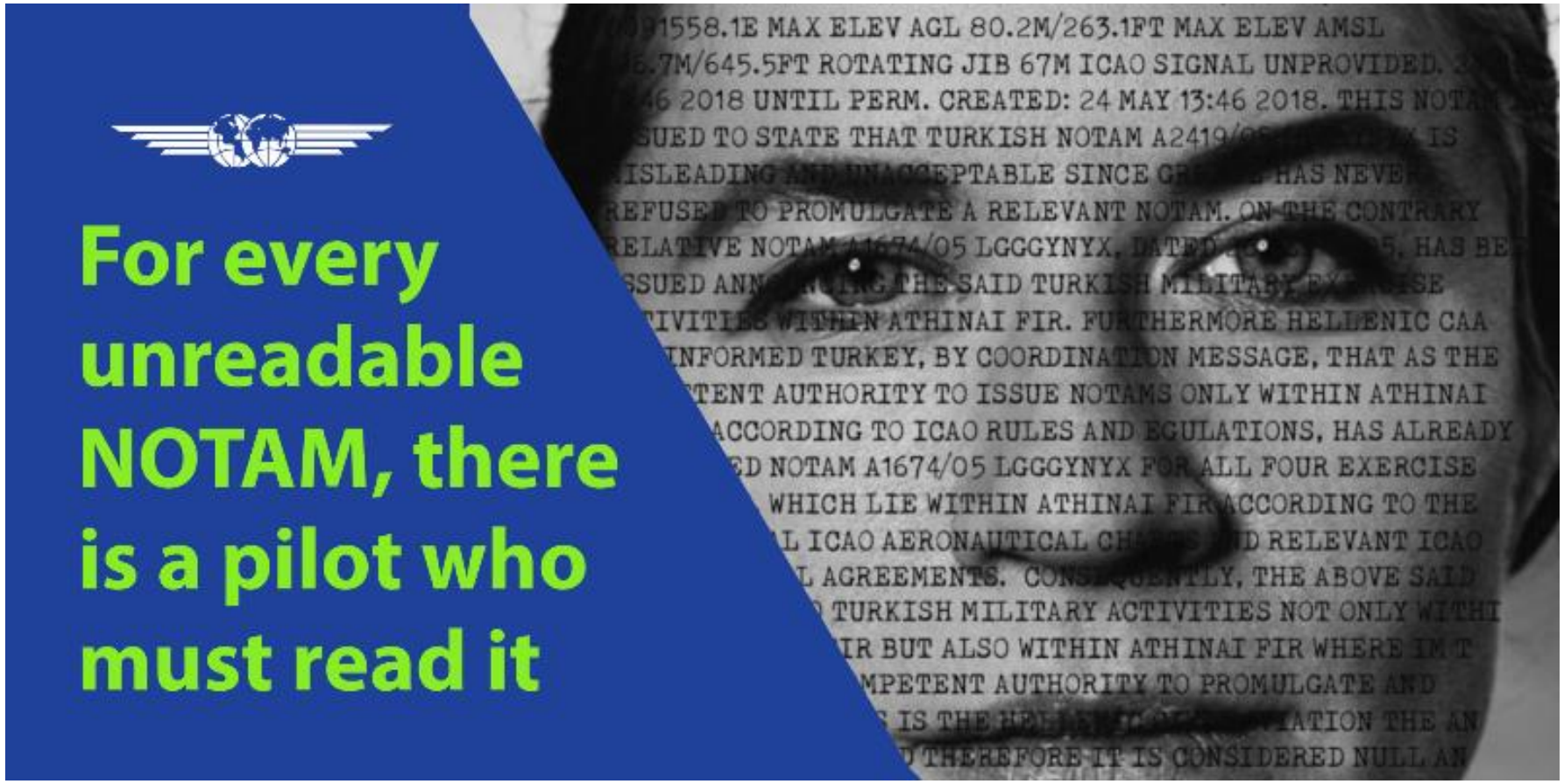
The International Federation of Air Line Pilots' Associations (IFALPA) is the global voice of pilots. An international not-for-profit organization, IFALPA represents over 100,000 airline pilots in nearly 100 countries. The mission of IFALPA is to promote the highest level of aviation safety worldwide.

On behalf of the global pilots represented by IFALPA, we are reaching out to you with deep concerns regarding aviation safety through information management and presentation, because we believe you play a crucial role in this matter.

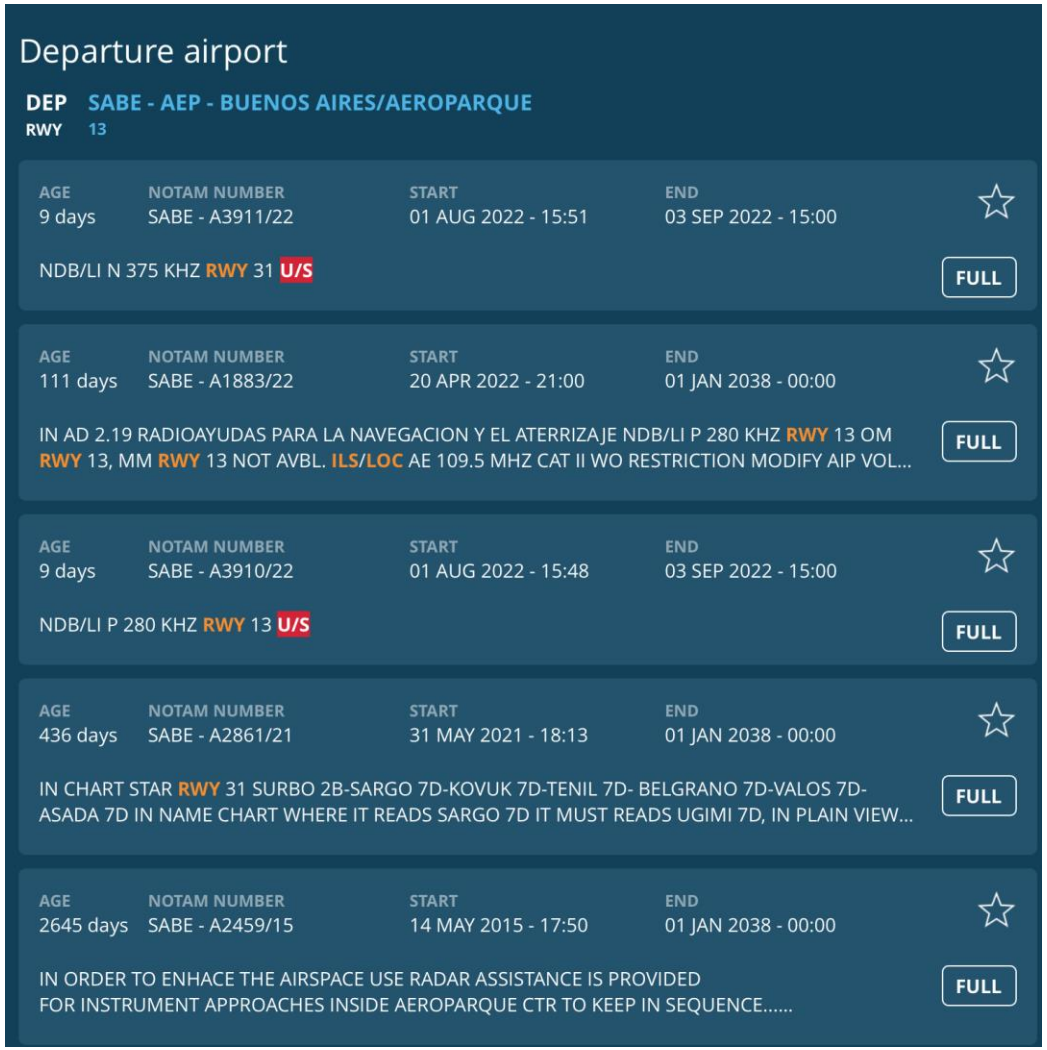
NOTAMs (Notices to Airmen) contain information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations. Pilots depend on this information for the safe conduct of our operations and the safety of our passengers.

Within the last 10 years, there has been a significant increase in the volume of published NOTAMs which has led to a situation where the volume of NOTAMs overwhelms the capacity of the end users i.e. pilots and dispatch officers, to review and assess the information in a timely manner. This has resulted in several incidents where safety-critical information was missed. NOTAMs are supposed to support situational awareness but currently, they do the exact opposite. This simply cannot continue; it is unacceptable.

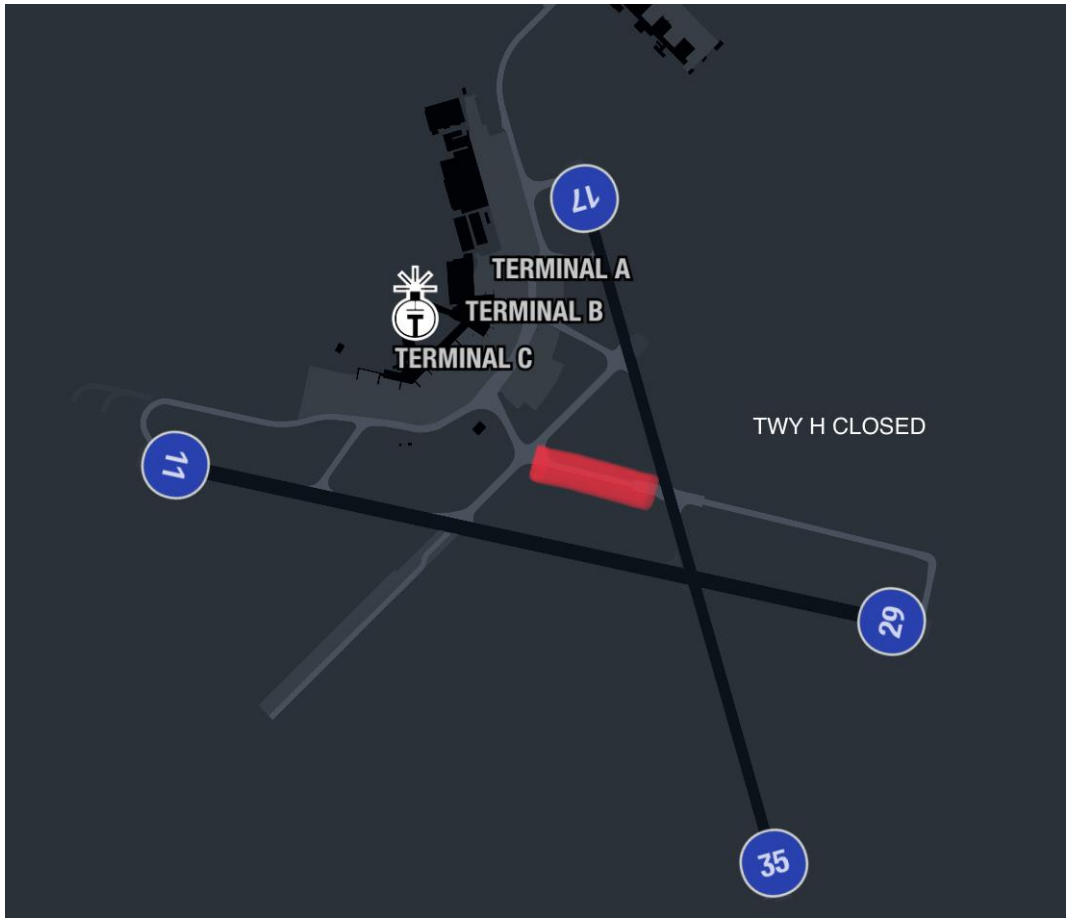
Make (old) Notam History Campaign



Digital Notams



SIMPLE & EASY TO UNDERSTAND



PLEASE FOLLOW IFALPA ONLINE

Thank you!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