

# The Notam Tic ! (Problematic)

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Direction Générale de l'Aviation Civile

Ministère de la Transition écologique et solidaire

# Notices to Airmen, Also known as “Just a bunch of garbage”



**"Notams: Just a bunch of garbage"**

• *Robert Sumwalt, Chairman, US National Transportation Safety Board  
About Air Canada Flt 759 near crash over San Francisco taxiway*

# A trip back in time

Quizz – When was the Notam concept introduced?

→ 1920

Major changes in information technology since 1920

1963: Introduction of ASCII format, bringing lowercases

1998: Introduction of XML, human- and machine-readable

2010: Release of the first iPad, first major selling tablet

Major changes to Notam since 1920

1947: “Notice to Airmen” officially replaced by “Notam”

1953: ICAO Annex 15 introduces the Notam format



We fly M\$ airplanes & using 1920's info presentation



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# The Notam Problematic

## 1 – The format is awful

No one wants to read walls of non-formatted uppercase text

Q) VOMF/QMWHW/IV/BO/A/000/999/1  
714N07826E005

Have we changed since 1920 ?



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# The Notam Problematic

## 2 – The amount of Notam has soared

1920: First *Notice to Airmen*

2006: 500.000 Notam have been published

2013: 1.000.000 Notam

2018 : **4.000.000** Notam Published (lido & jeppesen sources)  
(ICAO TF “NOTAM non Proliferation”)

Since 2006 : 8 times more airports in the world?

Since 2006 : 8 times more relevant changes and updates?

Or ...

Are there much irrelevant information?

Is it just an umbrella festival ?



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# The Notam Problematic

## 3 Highlighting critical information to crews is hard

In order to assist crews, companies try to put smart rules in their Notam processing.

However: Prioritizing Notam is difficult.

- Notam are often not properly categorized
- Q Codes are unreliable
- Too many erroneous Q Codes.
- Too many lazy publishers using Q XXXX.

Highlighting the essential information is difficult.

Too many abbreviations.

*Unserviceable? U/S? US? Unsrvcbl? Unsrvcble? U/Serviceable?*



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# The Notam Problematic

## 4 – The content can appear irrelevant for pilots

But the goal is often miss interpretaded :

A1956/18 NOTAMR A1897/18

- Q) GOOO/QFAHG/IV/NBO/A/000/999/1233N01617W005
- A) GOGG
- B) 1812101310 C) 1901101305EST
- E) GRASS CUTTING. WORK IN PROGRESS.PRESENCE OF WORKERS.CAUTION ADVISE.

A0469/19 NOTAMR A3173/18

- A) VOHS
- B) 1902261148
- C) 1905311230
- D) DAILY 0300-1230
- E) GRASS CUTTING AND PESTICIDE SPRAYING WIP ON BASIC STRIP OF RUNWAY AND TWY. PILOTS TO EXER CTN.

Grass cutting information asking for caution and readiness is sadly miss understood by pilots!



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- A0144/19 - CTN PROBLEMS IN THE ASPHALT FOLDER IN TWY BRAVO EAST OF THE AXIS  
NEXT TO THE JULIETT ACCESS. 05 MAR 14:25 2019 UNTIL 08 MAR 19:00 2019. CREATED:  
05 MAR 14:32 2019

# TIME IS MONEY, RESOURCES, PRESSURE & CAN BE DANGEROUS !

COOR WITH ATS. TUE 05 WED 06 THU 07 FRI 08 BTN 1100/1900, 05 MAR 11:00 2019  
UNTIL 08 MAR 19:00 2019. CREATED: 04 MAR 00:13 2019

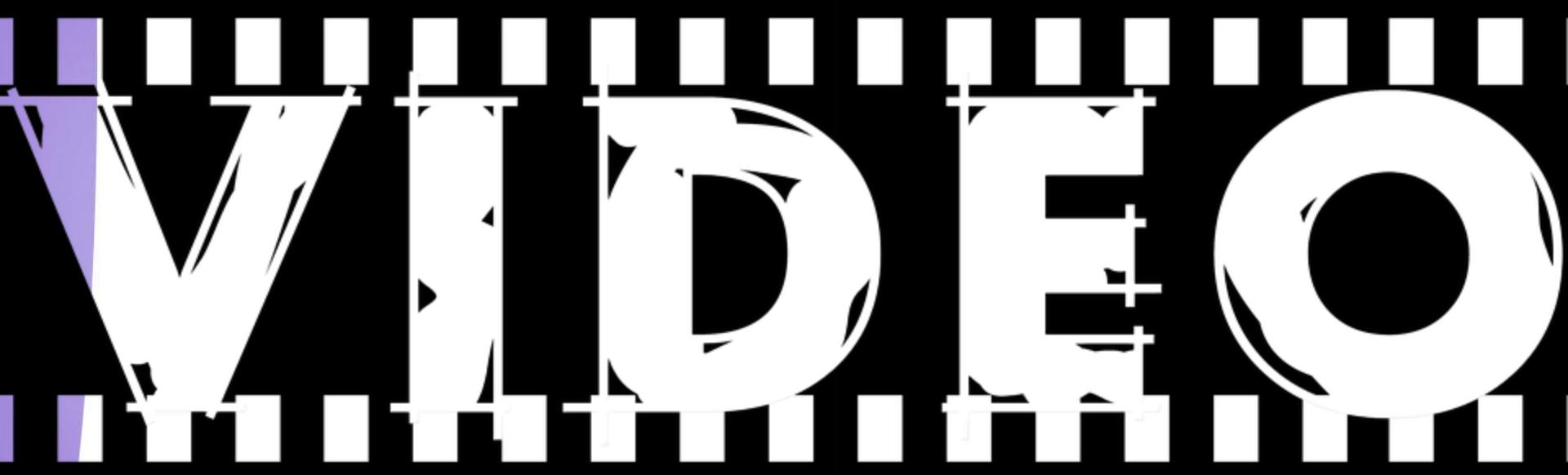
- A0118/19 - IAC OSCAR ILS RWY 20  
WHERE IT SAYS: CEILING 300FT  
MUST SAYS: CEILING 200FT  
REF AIP PARAGUAY AD 21-21



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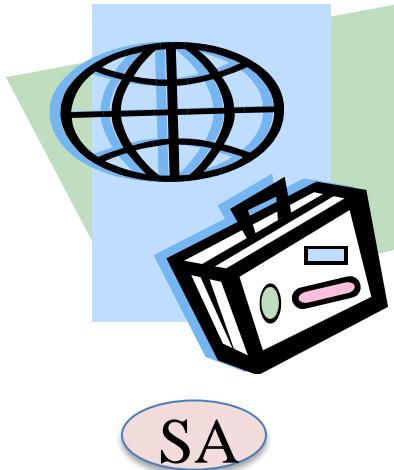


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# KEY ACTION : SITUATIONAL AWARENESS



NOTAMS



SA  
NOTAMS



SA

# The Notam Problematic

**Statements and rules expectation are not standard**

*ICAO Annex 15 - A NOTAM shall 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.*

## Notam

ICAO Annex 6 « Relevant »

EU 965/2012 « Appropriate »

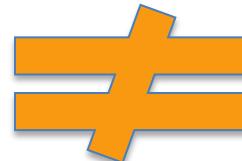
CCAS « Necessary »

EASA SAFA RAMP « Considered Necessary »

## Ops

« Adequacy »

« Accessibility »



# The content can be too many & sadly organised

Afficher Tout sélectionner Annuler sélection Imprimer tout Imprimer la sélection Modifier		LFFA-A3386/17 Q) LFFF/QFAHX/IV/ BO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Jul 31 12:02 C) 2017 Aug 31 23:59 E) FORTE CONCENTRATION D'OBSTACLES SUR LES ABORDS DES PISTES
Nombre de NOTAM : 11		LFFA-A3624/17 Q) LFFF/QFALT/IV/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 21 21:30 C) 2017 Aug 31 04:00 D) 2130-0400 E) AD NE PEUT PAS ETRE PRIS EN TERRAIN DE DEGAGEMENT
<b>LFPO PARIS ORLY</b>		LFFA-A3689/17 Q) LFFF/QICAS/ I/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 24 12:59 C) 2017 Dec 09 15:00 E) ILS RWY 24 HORS SERVICE CAUSE MAINTENANCE : NE PAS UTILISER POSSIBLES FAUSSES INDICATIONS
<input checked="" type="checkbox"/> LFFA-A2285/17 Q) LFFF/QPDCH/ I/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 May 24 14:27 C) PERM E) NIVEAUX DE MONTEE INITIALES DES DEPARTS NORDS CONFIGURATION EST (OPALE NURMO ATREX 6X ET 6Z) I FL080 POUR LES REACTEURS ET FL070 POUR LES HELIC AU LIEU DE FL130 REACTEURS ET FL110 HELICES		LFFA-A3689/17 Q) LFFF/QICAS/ I/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 24 12:59 C) 2017 Dec 09 15:00 E) ILS RWY 24 HORS SERVICE CAUSE MAINTENANCE : NE PAS UTILISER POSSIBLES FAUSSES INDICATIONS
<input checked="" type="checkbox"/> LFFA-A2330/17 Q) LFFF/QXXXX/IV/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 May 29 13:00 C) 2017 Dec 01 22:30 E) LES RAPPORTS D'EBOLOUSSEMENTS PAR LASERS POR NOMBREUX, IL EST DEMANDE AUX EQUIPAGES DE SIGNAL CES EVENEMENTS AU SERVICE DU CONTROLE DE LA NAVI EN PRECISANT SI POSSIBLE LE LIEU DE PROVENANCE		LFFA-A3704/17 Q) LFFF/QMXLT/IV/ M/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 25 12:00 C) 2017 Sep 05 03:30 E) FEUX RETIL VOIES DE DEGAGEMENT W43, W44, W45, W46 INDISPONIBLES.
<input checked="" type="checkbox"/> LFFA-A2630/17 Q) LFFF/QPIAU/ I/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Jun 22 04:00 C) 2017 Sep 13 21:30 E) PROC FNA ILS/LOC 26 LFPO SUSPENDUE :		LFFA-A3708/17 Q) LFFF/QMRLL/ I/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 25 12:00 C) 2017 Sep 25 03:30
		LFFA-A3653/17 Q) LFFF/QFATT/IV/ BO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 23 11:25 C) 2017 Aug 30 23:59 E) NOTAM TRIGGER - AMDT AIRAC AIP PERM NR 09/17 : MODIFICATION RETIL - PAPI RWY 06 - POINTS INS MODIFICATION PROC RNAV ET ILS 24 MODIFICATION DES FL EN CLR INITIALES DES SID OPALe ATREX ET NURMO RWY 06 ET 08
		LFFA-A3689/17 Q) LFFF/QICAS/ I/NBO/ A/000/999/4843N00223E005 A) LFPO PARIS ORLY B) 2017 Aug 24 12:59 C) 2017 Dec 09 15:00 E) ILS RWY 24 HORS SERVICE CAUSE MAINTENANCE : NE PAS UTILISER POSSIBLES FAUSSES INDICATIONS

Issue : Among some current tools  
Number and order of NOTAM appearance make the flight preparation  
**uneasy & unsafe**

- Interest of Highlighting information relevant for the flight (priority)

**Ex: Information « this aerodrome cannot be chosen as an alternate aerodrome » is displayed 11<sup>th</sup> and after obstacles NOTAM**



# French DGAC actions

- Ops classification
- Feasability and adaptation to ICAO existing doc
- Implementation in SOFIA briefing app.
- CASH follow up

(Collaborative Aerodrome Safety Highlights)



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# **Actions already launched :**

- 5th March : Workshop with DGAC/IATA/Ops/Lido/Jepps
- Following actions within the WG
- Better « know the other » meeting
- ICAO Notam WG with an insider (group member)

**DGAC purpose works with a no cost strategy :**

- Pilots at flight preparation to better improve:  
Situation Awareness → decision-making → minimize errors
- AIS obligation : No cut in provided list of NOTAM !



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# First step : Sort NOTAM with OPS strategy !

## Adequacy

(opening, closing, operational limitation ...)

Question : « Can this aerodrome be used and reached ? »

## Accessibility

(minima, instrument procedures, means of approach, markup ...)

Question: “Does this aerodrome publication affect the performance of my flight ?”

## Environment

(obstacles impacting performance, works, particular platform conditions such as ground limitations, noise abatement procedures...)

Question: “Do I have to follow restrictive or adaptive elements ?”

## Informations nice to have / or warnings

(bird hazard, activity zones aerobatics, para jumping ...)

Question: “Nice to know not impacting the operational a priori character ?”



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# Regulatory Compliance

- Aim : based on regulation, having the same benefits as sorting by operational category

**Goal:** new algorithm

3rd letter of the

The 4th and 5th

**Example:** Q)LFFF

- Decision to group

6-B-2

*Aeronautical Information Services Manual*

## INDEX OF CATEGORIES OF THE NOTAM CODE BASED ON THE SECOND LETTER

AGA — LIGHTING FACILITIES (L) .....	6-B-3
AGA — MOVEMENT AND LANDING AREA (M) .....	6-B-13
AGA — FACILITIES AND SERVICES (F) .....	6-B-24
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CNS — GNSS SERVICES (G) .....	6-B-47
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Doc 8126  
AN872



# Final order for SOFIA Briefing : New Algorithm

**1st sort by category**  
**ICAO Manual 8126**

Aerodromes: Categories order	FIR: Categories order
Aerodromes and services	Airspace Organization and Air traffic procedures
Maneuvering area	
Parking area	
Lighting facilities	Air traffic and VOLMET services
Instrument and microwave landing systems, terminal navigation facilities and GNSS Services	Communication and surveillance facilities
Air Traffic Procedures	GNSS services and terminal and en-route navigation facilities
Organization, communication and surveillance facilities	Airspace restrictions
Meteorological services and equipment	Warnings
Airspace restrictions	Obstacles
Warnings	Other information
Obstacles	
Other information	

# Final order for SOFIA Briefing V1: PIB Route

2<sup>nd</sup> sort by Q code inside the category

Q Code (2 <sup>nd</sup> and 3rd letter)	Aerodrome and services
FA	Aerodrome
FP	Heliport
FF	Firefighting and rescue
FU	Fuel availability
FZ	Customs/immigration
FE	Oxygen
FI	Aircraft de-icing
FJ	Oils

Q Code (2 <sup>nd</sup> and 3rd letter)	Airspace restrictions
RA	Airspace reservation
RO	Overflying
RP	Prohibited area
RR	Restricted area
RT	Temporary restricted area
RD	Danger area
RM	Military operating area

3rd sort by Purpose

1- NBO

2- BO

3- B

4- M



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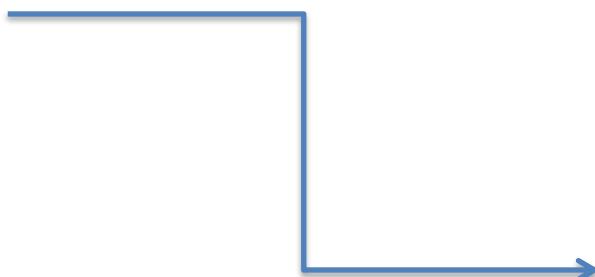
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# Results

**Route LFBD--LFMT**

**Current DSNA Tools: NOTAMWEB**



**Route LFBD--LFMT**  
**New sort**



**Willingness to change order of appearance of NOTAM  
for PIB Route**

**Presentation Order :**

- NOTAM AD departure
- NOTAM AD destination
- NOTAM Other AD
- NOTAM FIR on the route

**& Operational order inside each section**

## SWITCHING to an OPS LOGIC

January 2020

# Collaborative work already in progress

- Operators
- Inspectors
- AI providers
- AIS
- IATA
- DGAC



And even more with « nice to know »  
LST information

# CASH

## COLLABORATIVE AERODROME SAFETY HIGHLIGHTS

- « Situation Awareness Enhancement » safety information
- In a collaborative process
- Under the LST decision
- Compulsory information not available in NOTAMs

**OLIVIA web**

AIC

French regulations

Interesting Links

DGAC web site

**Foreign AIS**  

CASH

SIA e-Shop

STRUCTURE OF SUB-SECTIONS LRR J AND AD T.3 AT AIRAC CYCLE 04/19 (20 MAR 2019).  
The tables [phase\\_2\\_reorg\\_aip\\_france\\_metro](#) and [phase\\_2\\_reorg\\_aip\\_france\\_outremer](#) as well as the AICs [AIC A 27/2018 \(Métropole\)](#), [AIC A 10/2018 \(CARSAMNAM\)](#), [AIC A 04/2018 \(PAC N\)](#), [AIC A 11/2018 \(PAC P\)](#) and [AIC A 11/2018 \(RUN\)](#) provide more detailed information.

NOTAMWEB Consultation tool  
**"En-route" PIB function should not be used for pre-flight planning. Please use "Narrow route" PIB.**

DSNA&Vous - stay up to date  
You have questions on specifics of Air Traffic Management in France?  
You want operational news on the potential impact of solutions implemented by DSNA on your operations?  
You are working for an airline, an airport operator or you are using French airspace?  
Don't wait and join the DSNA&Vous reader community!  
To read the latest issue or all DSNA&Vous releases are available, [click here](#)  
To subscribe and become a DSNA&Vous reader, [click here](#)



I propose to add an aerodrome to the CASH list

LFKB / Bastia-Poretta / BIA

LFOB / Beauvais-Tillé / BVA

LFKC / Calvi Sainte-Catherine / CLY

LFPB / Paris-Le Bourget / LBG

LFPG / Paris-Charles de Gaulle / CDG

Accueil → Aviation civile → Sécurité aérienne → Collaborative Aerodrome Safety Highlights - ENG

# Collaborative Aerodrome Safety Highlights - ENG

f share

t tweeter

in publish

print

fr version

Published on Tuesday 30 October 2018

CASH (Collaborative Aerodrome Safety Highlights) is a collective safety initiative, resulting from a trial made in 2016 and 2017. CASH is intended to

[HTTPS://WWW.ECOLOGIQUE-SOLIDAIRE.GOUV.FR/EN/COLLABORATIVE-AERODROME- SAFETY-HIGHLIGHTS-ENG -](https://www.ecologique-solaire.gouv.fr/en/collaborative-aerodrome-safety-highlights-eng-)



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# NEXT STEPS

- Following a worldwide « ops classification » of NOTAM presented to actors
- Sharing opportunities to reduce the number of Notam
  - Promoting « Collaborative Aerodrome Safety Highlights » in LST
- Moving quickly to a modern new « Notam standard »
- Starting international discussions on the aeronautical information
  - Documentation, communication, transmission.



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# WHY ARE WE DOING THIS ?



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**WE WANT YOU!**

Combined  
Actions  
Required

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