



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



Priority Indicator	GG										
Address	EHZZNNLX ESZZNNLX EOZZNNLX ENZZNNLX... (etc.)										
Date and time of filing	021432										
Originator's Indicator	EADVVVX										
Message Series, Number and Identifier											
NOTAM containing new information NOTAM (series and number/year) A0062/20 A0062/20										
NOTAM replacing a previous NOTAM NOTAMR (series and number/year) (series and number/year of NOTAM to be replaced)										
NOTAM cancelling a previous NOTAM NOTAMC (series and number/year) (series and number/year of NOTAM to be cancelled)										
Qualifiers											
FIR	NOTAM Code	Traffic	Purpose	Scope	Lower Limit	Upper Limit	Coordinates / Radius				
Q	E A C C / U F A L C / Z V /	N S O / A /	O O O /	O O O /	S 2 2 2	N O S 1 S S	U O O S				
Identification of ICAO location indicator in which the facility, airspace or condition reported on is located							A) EADS				
Period of Validity											
From (date-time group)	B)	2	0	0	S	0	S	2	3	0	0
To (PRM or date-time group)	C)	2	0	0	S	0	0	0	1	0	0
Time Schedule (if applicable)	D)										
Text of NOTAM; Main-Language Entry (using ICAO Abbreviations)											
E) AD CLSD											
Lower Limit	F)										
Upper Limit	G)										
Signature											

*Delete as appropriate

Global NOTAM Campaign

Dr. Alexander Pufahl

Technical Officer, Information Management

SAM Regional Office, NOTAM Workshop

7-9 September 2022



Presentation Outline

01

Global NOTAM Campaign

Working together to eliminate old NOTAM

02

SAM Region NOTAM Analysis

Statistics and trends

03

Creating Quality NOTAM

What the regulations say

04

Improving the Quality of NOTAM for Safe Flight Operations

Implementation Package

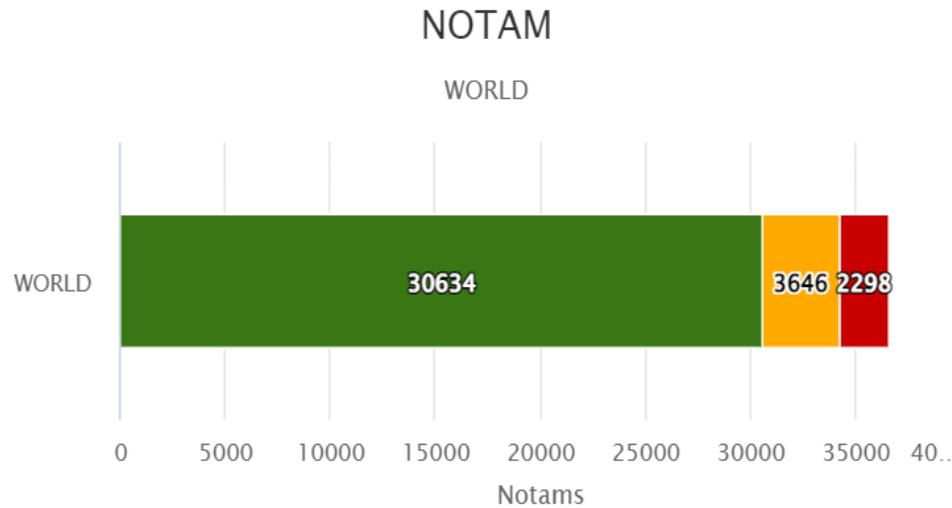
01

Global NOTAM Campaign

Working together to eliminate old NOTAM

NOTAM2021

Working together to eliminate old NOTAM



● Current ● Old ● Very old

Snapshot at 2022-08-01

Global NOTAM Campaign

Background

Launched on 08 April 2021

One of the largest ICAO webinars ever (with more than 1,000 participants)

Opening by Mr. Stephen Creamer, ICAO Director, Air Navigation Bureau

Several presentations providing perspective of end users, regulations, NOTAM statistics, as well as regional challenges

Reduction of old NOTAM throughout the year with progress webinars on 16 June and wrap-up on 28 October 2021

Introduction of the NOTAMeter (Ref 01 Jan 2021)

Dedicated website at www.icao.int/notam2021



NOTAM2021
Working together to eliminate old NOTAM

ICAO | CAPACITY & EFFICIENCY **NOTAM2021**

The Story of old NOTAM

Presented by
Mark Zee, Founder OPSGROUP
Capt. Lauri Soini, Airline pilot, IFALPA

ICAO | CAPACITY & EFFICIENCY **NOTAM2021**

What do the regulations say?

Presented by

The NOTAM Problem

- Flight crews are presented with **all NOTAM** on their route – sorting and filtering not reliable.
- The **number of NOTAM** has grown from 250,000 in 2000, to **1.7 million** in 2020.
- Pre-flight briefings are 30-200 pages long. Critical information is missed.
- **Air Canada 759** serious incident at SFO brought global attention to NOTAM problem.



*NTSB calculated that AC759 cleared three aircraft on the taxiway by only 14 feet, and was **1 second** from collision during go-around.*

A critical NOTAM had been missed by the crew!



Bloated Briefings

- A typical medium range, 3hr flight can generate **30 pages** of NOTAM
- A typical long range, 12hr flight can generate more than **200 pages** of NOTAM



| ICAO

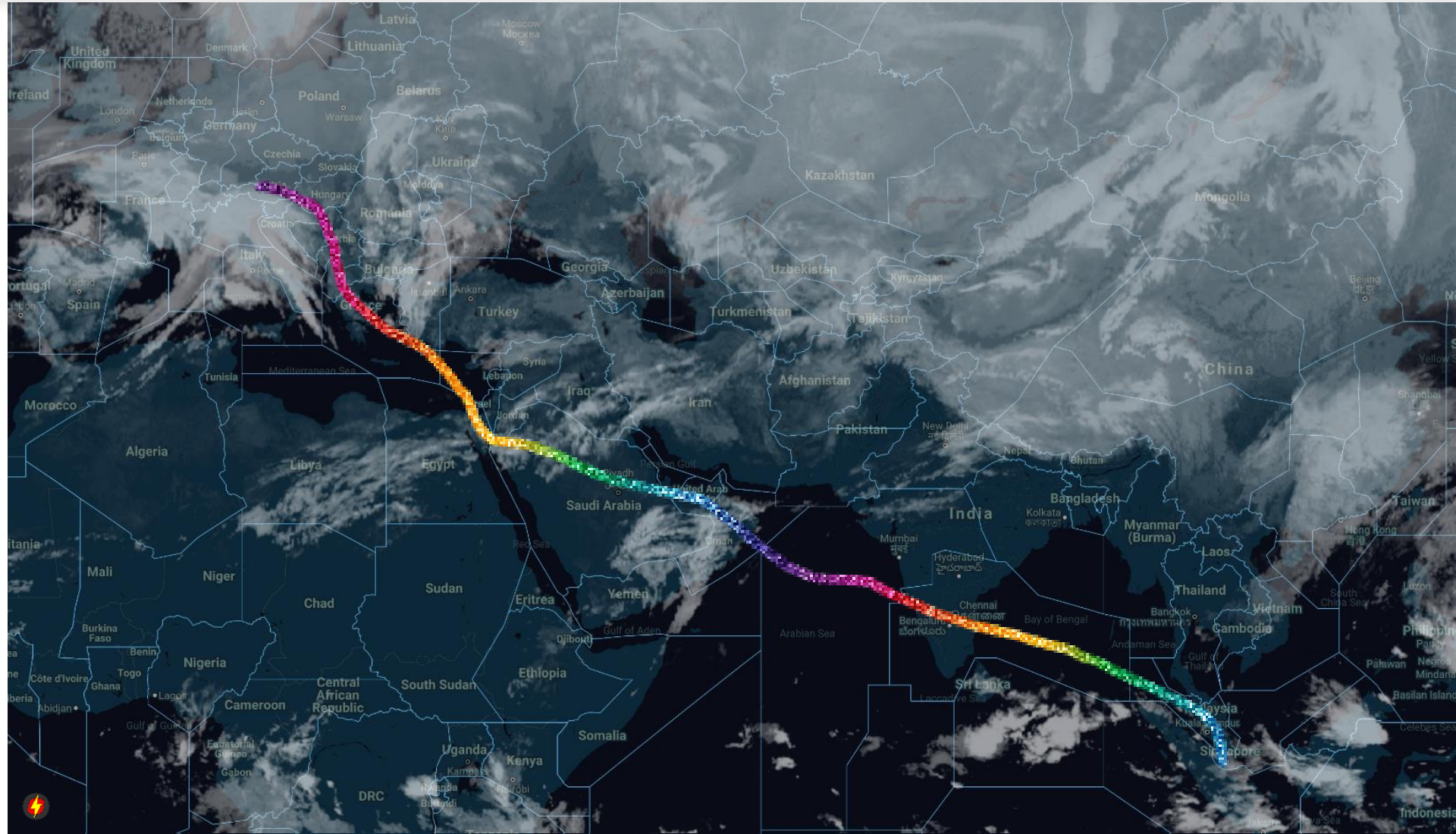
CAPACITY & EFFICIENCY

NOTAM2021

Sample pre-flight briefing:

Airbus A330

Munich to Singapore



FLIGHT BRIEF

A330-243

EDDM-WSSS

DIST: 6225 nm

GSPD: 502 kts

GC TRK: 117°

FUEL: 61,746 kg

RUNNING PLAN 

ADDING WEATHER

GETTING NOTAM

MORE NOTAMs

EVEN MORE NOTAMs

BRIEFING READY



FLIGHT BRIEFING

NOTAMS

NOTAMS

NOTAMS

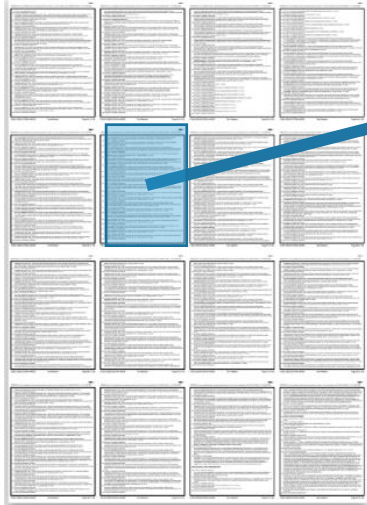
NOTAMS

NOTAMS



Here's the briefing:
let's take a look.

The image displays a large grid of NOTAMs (Notices to Airmen) organized into columns. The first column is highlighted with a yellow border and contains several rows of text, including a section with three maps. The remaining columns are highlighted with an orange border and contain dense text in a grid format. This visualizes the volume of NOTAMs that pilots would need to read during a flight briefing.



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 DONGABHAL 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: DARBHANGA 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 FL 100 / FL250
 VECF G0019/21 13JAN1045-27JAN2359 EST
 CONTROL ZONE FOR DARBHANGA (AF) 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: 232241.28N 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 AG 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 G0186/09 29OCT1130-PERF
 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-PERF
 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 should:

1. Read
2. Understand
3. Decide if relevant to flight

How long does this take for each NOTAM ...





OIIX A0006/21 02JAN0625-24MAR2359

REF AIP SUP 21/19 (24 OCT 19), AWY Z4 CHG AS FLW: FM ULETA TO RABER MAG TR: 056/237, DIST: 18.0 NM, MNM FL 240, RNAV5, LATERAL LIMIT 10 NM, BIDIRECTIONAL. FM RABER TO LUBIX MAG TR: 057/237, DIST: 31.4 NM, MNM FL 200, RNAV5, LATERAL LIMIT 10 NM, BIDIRECTIONAL. FM LUBIX TO SITEL MAG TR: 057/237, DIST: 43.1 NM, MNM FL 200, RNAV5, LATERAL LIMIT 10 NM, BIDIRECTIONAL. FM SITEL TO TABNI MAG TR: 057/238, DIST: 37.3 NM, MNM FL 200, RNAV5, LATERAL LIMIT 10 NM, BIDIRECTIONAL. FM TABNI TO EMESA MAG TR: 058/238, DIST: 32.2 NM, MNM FL 200, RNAV5, LATERAL LIMIT 10 NM, BIDIRECTIONAL. FM EMESA TO MSD DVOR/DME MAG TR: 058/239, DIST: 60.0 NM, MNM FL 200, RNAV5, LATERAL LIMIT 10 NM, BIDIRECTIONAL. NOTE : THIS AIRWAY DEFINED AS TACTICAL ROUTES FOR IRANIAN AIRLINES WHICH MAY BE USED ON PILOT REQUEST AND CONTROLLER APPROVAL BASED ON TRAFFIC SITUATION AND MILITARY RESTRICTION. THIS AWY SHALL NOT BE USED IN FILED FLIGHT PLAN.

LHCC A0182/21 01FEB0000-28FEB2300

0000-2300 TEMPORARY RESTRICTED AREA ESTABLISHED DUE TO MILITARY OPERATIONS AND UNMANNED AIRCRAFT WITHIN AREA BOUNDED BY THE FLW COORD POINTS: 474130N0215420E 474012N0215133E 474138N0214937E 474142N0214617E 474029N0214406E 474038N0214154E 473746N0213931E 473800N0213352E 474349N0213520E 474617N0215143E 474130N0215420E (HAJDUBOSZORMENY). FURTHER INFO ABOUT THE ACTUAL OPR HR VIA TEL: +36 30 247 6142. FL / FL035

LOVV B0042/21 13JAN0703-09APR1500 EST

TEMPORARY CABLEWAY FOR MATERIAL TRANSPORT ERECTED AREA RAURIS SEIDLWINKELTAL KELLGRABEN BOTTOM STATION SUMMIT STATION 471047N 0125823E 471057N 0125746E ELEV AT THE BASE: 1010M/3314FT AMSL 1650M/5414FT AMSL MAX HEIGHT ABOVE GROUND 75M/247FT AGL LENGTH OF CABLEWAY APRX: 860M/2822FT OBST MARKED STRAIGHT LINE DEFINED BY: 471047N 0125823E - 471057N 0125746E FL / FL057

At an optimistic **5 seconds per NOTAM**, how long will it take to read, understand, and decide on **1,200 NOTAM ...**



1,200 NOTAM
x 5 seconds each



Time required:
1 hour 40 minutes

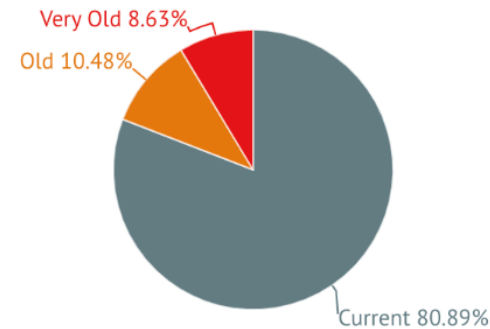


In airline flight operations, the time for the complete crew briefing is no more than 20 minutes. It is impossible to read and understand 120 pages of NOTAM.

The result is that **important and safety-critical information is missed.**

The NOTAM problem

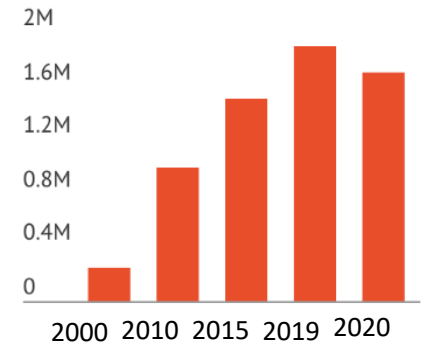
- One problem is **number of NOTAM** issued...
- **2000:** 250,000 NOTAM
2020: 1,700,000 NOTAM
- Average annual increase **100,000** NOTAM
- 20 years ago the briefing package would have been 17 pages, not 120 pages – usable.



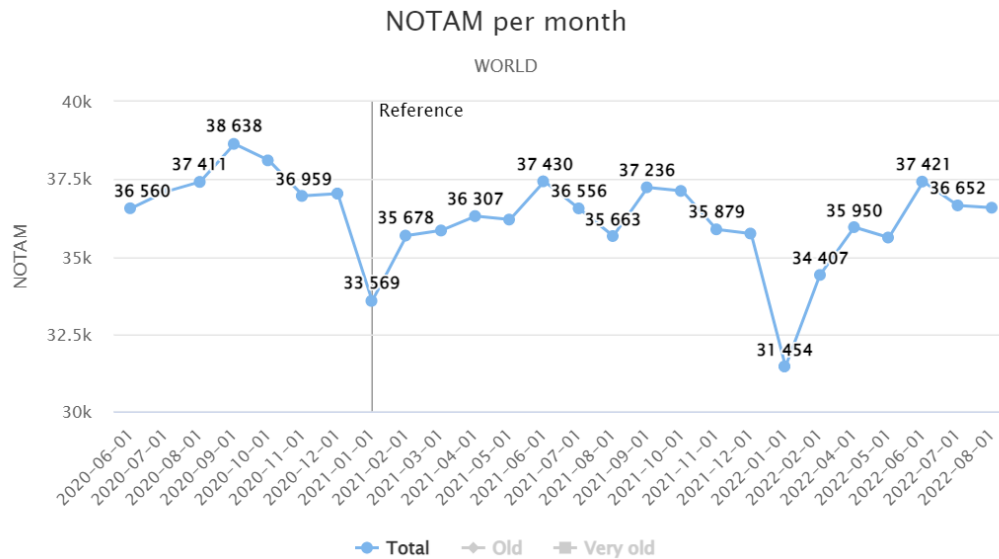
2020: 1.7 million NOTAMs issued, up from 250,000 in 2000.



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



Global NOTAM Campaign – Global statistics (Aug 2022)



Total NOTAM

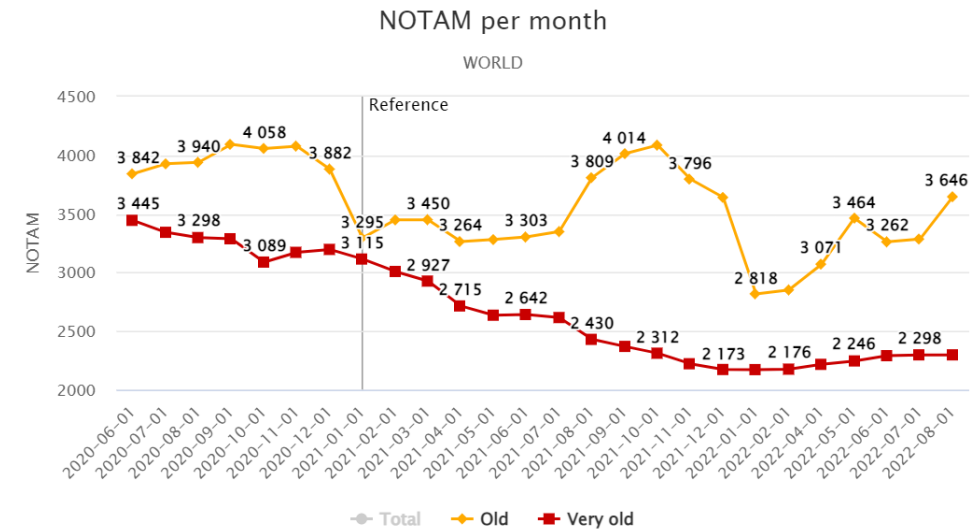
36578

Old NOTAM

3646 (10%)

Very Old NOTAM

2298 (6.3%)



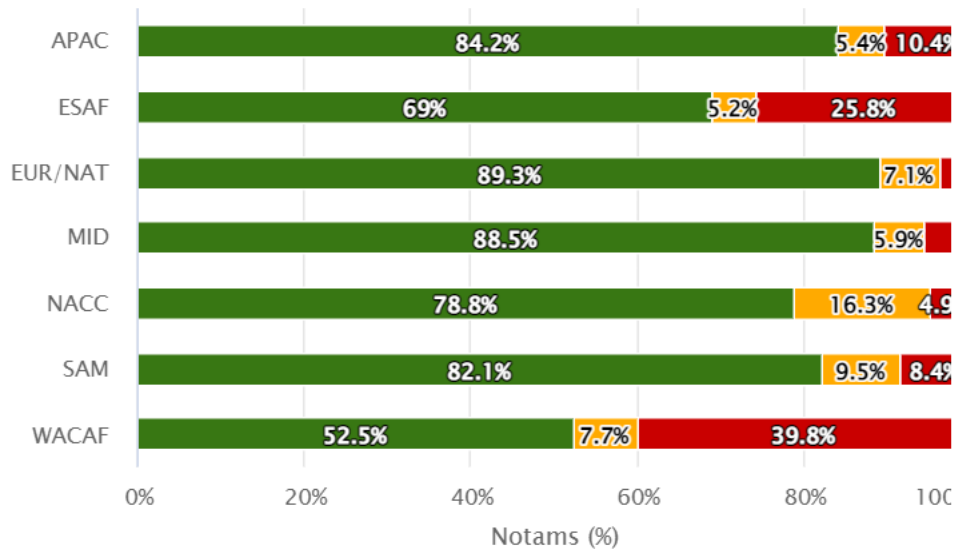
- Jan 2021: 33,569 total of which 3,295 old; 3,115 very old = 6,410, i.e. 19.1% non-compliant NOTAM
- Aug 2022: 36,578 total of which 3,646 old; 2,298 very old = 5,944, i.e. 16.3% non-compliant NOTAM
- Aug 2020: 37,411 total of which 3,940 old; 3,298 very old = 7,238, i.e. 19.3% non-compliant NOTAM
- Aug 2021: 35,663 total of which 3,809 old; 2,430 very old = 6,239, i.e. 17.5% non-compliant NOTAM
- Aug 2022: 36,578 total of which 3,646 old; 2,298 very old = 5,944, i.e. 16.3% non-compliant NOTAM

Global NOTAM Campaign – Regional statistics (Aug 2022)

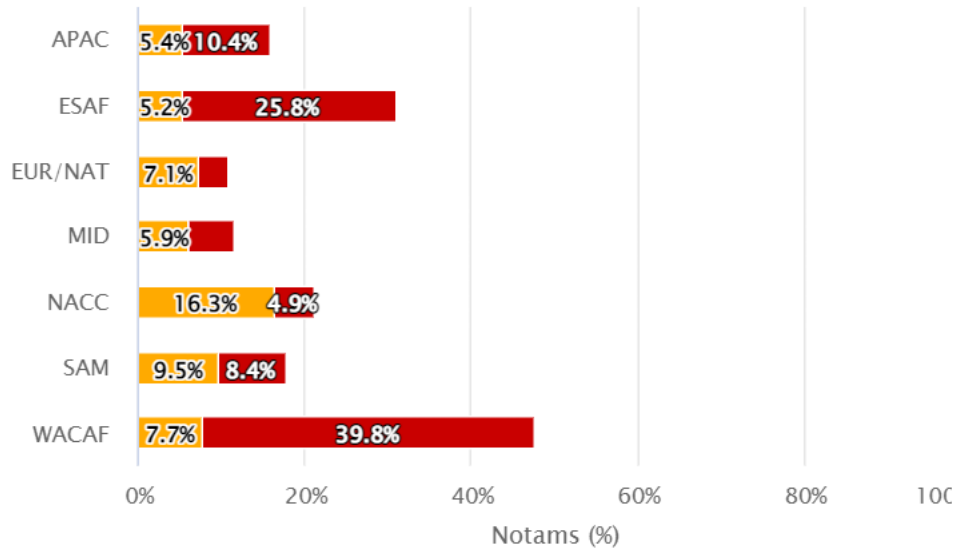


NOTAM Age Distribution

Relative, per region

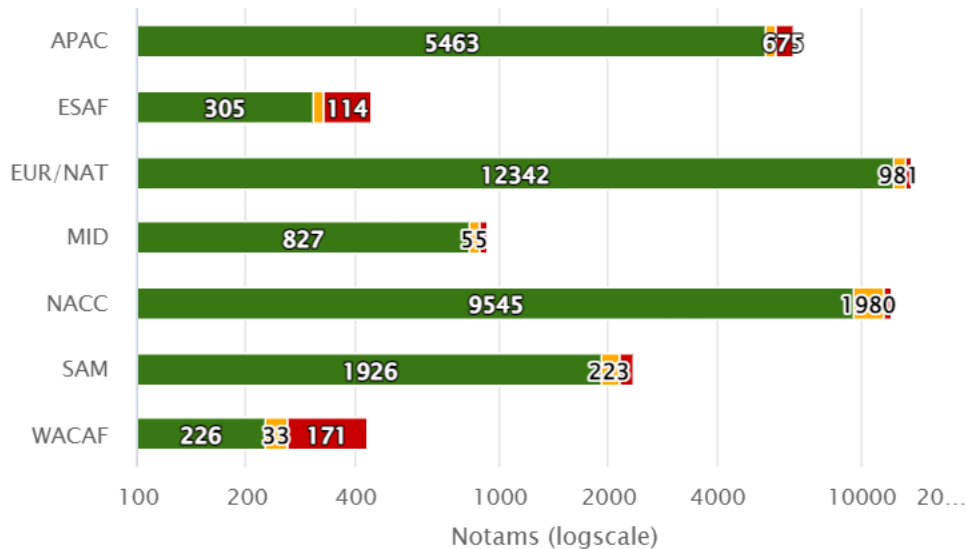


● Current ● Old ● Very old

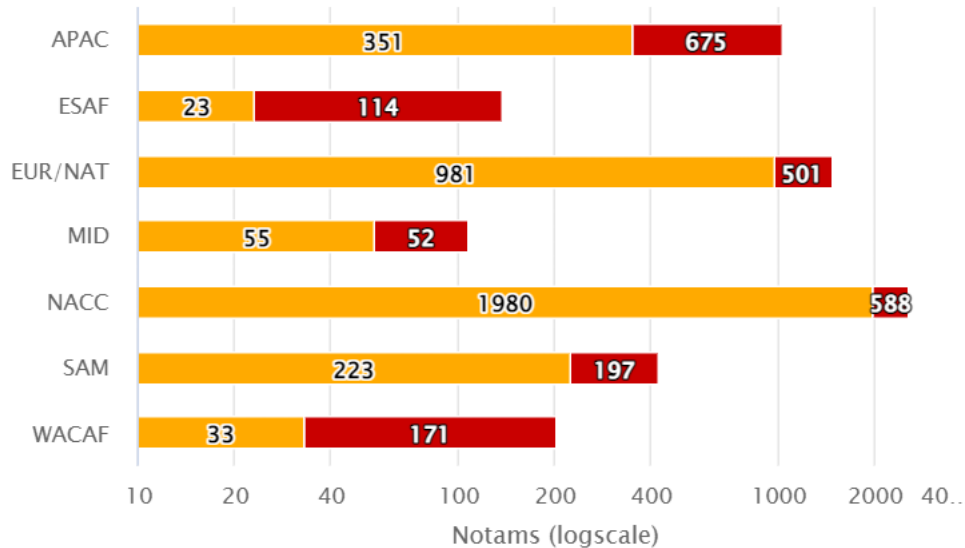


NOTAM Age Distribution

Absolute, per region



● Current ● Old ● Very old



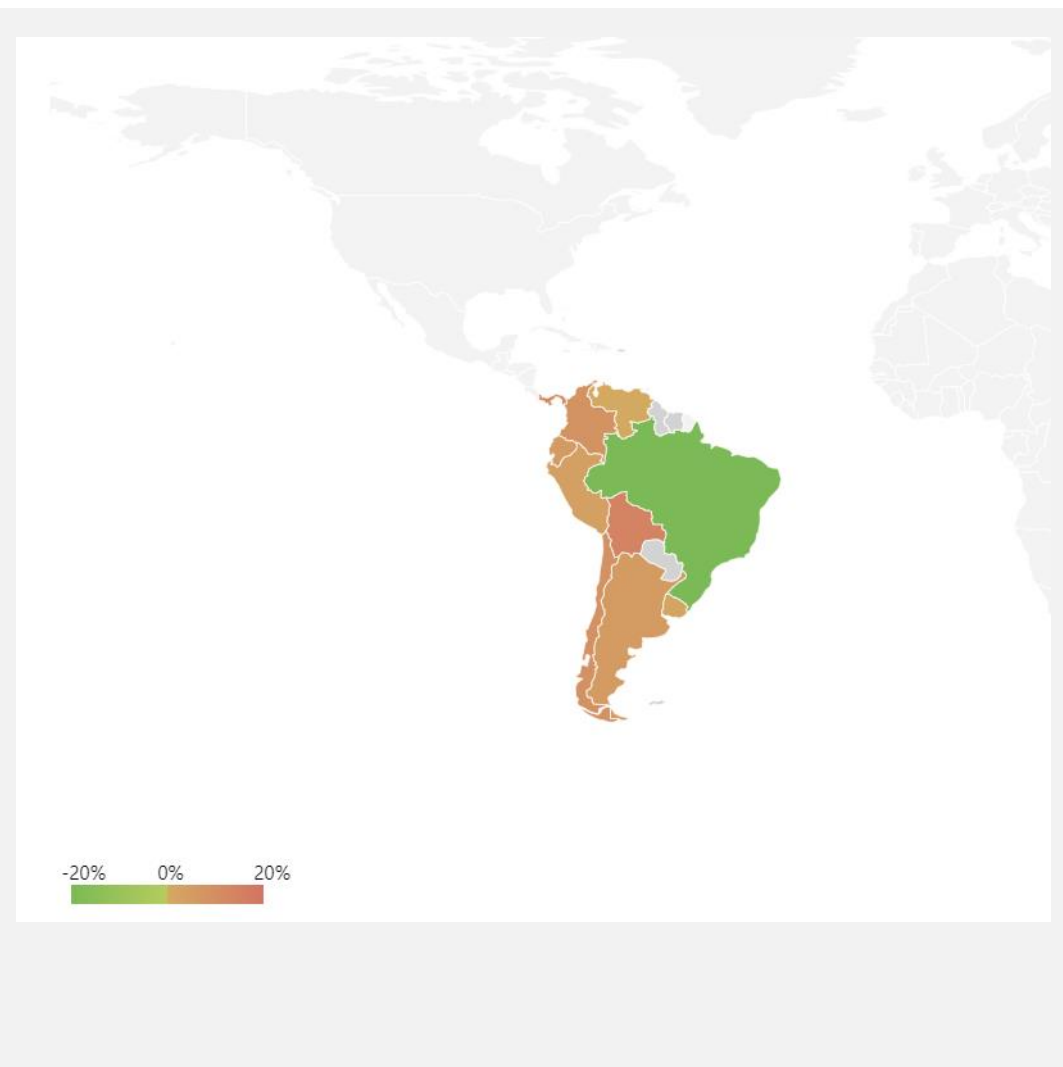
State	Region	Total	NOTAM			
			Old	Old (%)	Very old	Very old (%)
United States of America	NACC	10683	1895	17.7 ↑2.2	570	5.3 ↓-0.7
France	EUR/NAT	1691	307	18.2 ↑3.1	65	3.8 ↓-6
Russian Federation	EUR/NAT	1415	195	13.8 ↑9	92	6.5 ↑1.2
Turkey	EUR/NAT	641	123	19.2 ↑14.4	99	15.4 ↓-3.8
China	APAC	1296	98	7.6 ↓-5.4	40	3.1 ↑0.1
Chile	SAM	541	86	15.9 ↑9.3	7	1.3 ↓-1.8
Italy	EUR/NAT	1354	74	5.5 ↓-1.1	5	0.4 ↓-2.5
India	APAC	947	63	6.7 ↓-4.1	399	42.1 ↑6.5
Philippines	APAC	441	59	13.4 ↑4.7	58	13.2 ↑1.6
Argentina	SAM	890	53	6 ↑5.4	90	10.1 ↓-0.1

State	Region	Total	NOTAM			
			Old	Old (%)	Very old	Very old (%)
United States of America	NACC	10683	1895	17.7 ↑2.2	570	5.3 ↓-0.7
India	APAC	947	63	6.7 ↓-4.1	399	42.1 ↑6.5
Turkey	EUR/NAT	641	123	19.2 ↑14.4	99	15.4 ↓-3.8
Russian Federation	EUR/NAT	1415	195	13.8 ↑9	92	6.5 ↑1.2
Argentina	SAM	890	53	6 ↑5.4	90	10.1 ↓-0.1
Indonesia	APAC	178	0		74	41.6 ↓-2.8
France	EUR/NAT	1691	307	18.2 ↑3.1	65	3.8 ↓-6
Philippines	APAC	441	59	13.4 ↑4.7	58	13.2 ↑1.6
Germany	EUR/NAT	1455	31	2.1 ↓-5.7	54	3.7 ↓-10.6
Cameroon	WACAF	55	0		49	89.1 ↑52.9

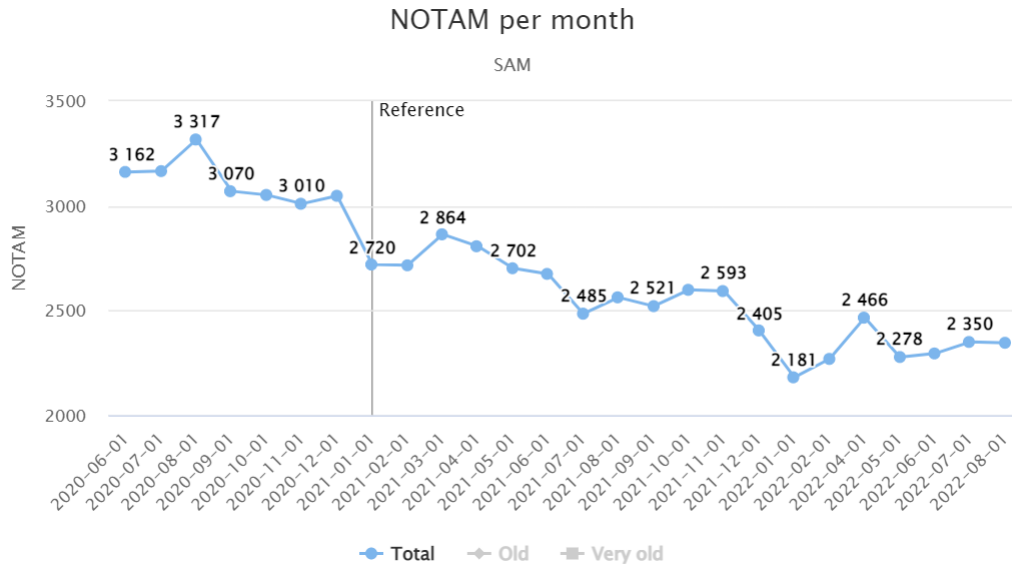
02

SAM Region NOTAM Analysis

Statistics and trends



Global NOTAM Campaign – SAM statistics (Aug 2022)



Total NOTAM

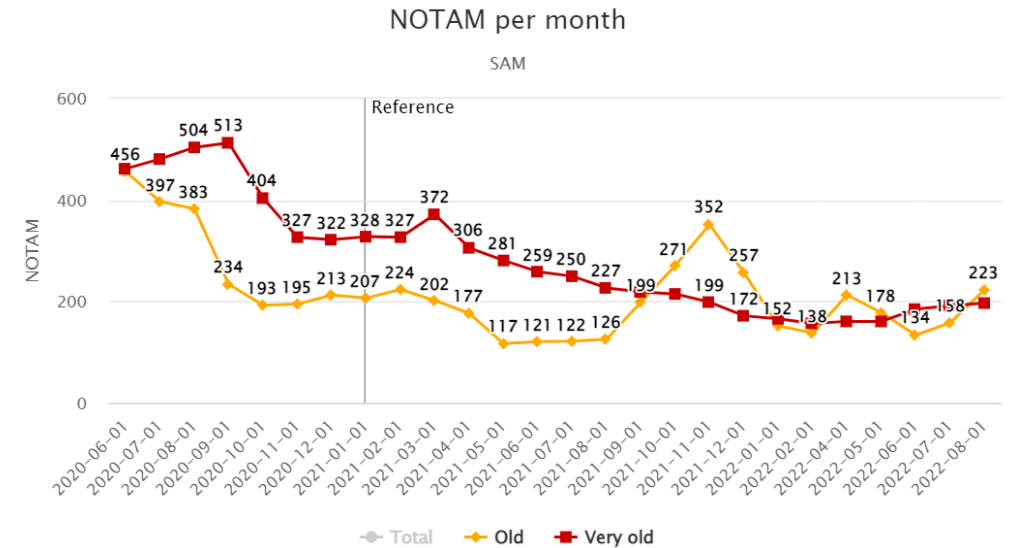
2346

Old NOTAM




223 (9.5%)




Very Old NOTAM




197 (8.4%)



- Jan 2021: 2,720 total of which 207 old; 328 very old = 535, i.e. 19.7% non-compliant NOTAM
- Aug 2022: 2,346 total of which 223 old; 197 very old = 420, i.e. 17.9% non-compliant NOTAM
- Aug 2020: 3,317 total of which 383 old; 504 very old = 887, i.e. 26.7% non-compliant NOTAM
- Aug 2021: 2,550 total of which 126 old; 227 very old = 353, i.e. 13.8% non-compliant NOTAM
- Aug 2022: 2,346 total of which 223 old; 197 very old = 420, i.e. 17.9% non-compliant NOTAM

State	Region	NOTAM				
		Total	Old	Old (%)	Very old	Very old (%)
Argentina	SAM	890	53	6 ↑ 5.4	90	10.1 ↓ -0.1
Chile	SAM	541	86	15.9 ↑ 9.3	7	1.3 ↓ -1.8
Brazil	SAM	303	8	2.6 ↓ -19.9	0	
Colombia	SAM	183	27	14.8 ↑ 8.4	42	23 ↓ -0.9
Peru	SAM	107	8	7.5 ↑ 3.7	28	26.2 ↑ 1.9
Bolivia (Plurinational State of)	SAM	80	20	25 ↑ 14.2	17	21.3 ↓ -8
Venezuela (Bolivarian Republic of)	SAM	80	12	15 ↑ 0.1	5	6.3 ↓ -0.1
Uruguay	SAM	67	1	1.5 ↑ 1.5	3	4.5 ↓ -0.2
Ecuador	SAM	38	2	5.3 ↑ 5.3	1	2.6 ↓ -20.1
Panama	SAM	29	6	20.7 ↑ 13	4	13.8 ↑ 6.1
Paraguay 	SAM	20	0		0	
Suriname 	SAM	7	0		0	
Guyana 	SAM	1	0		0	

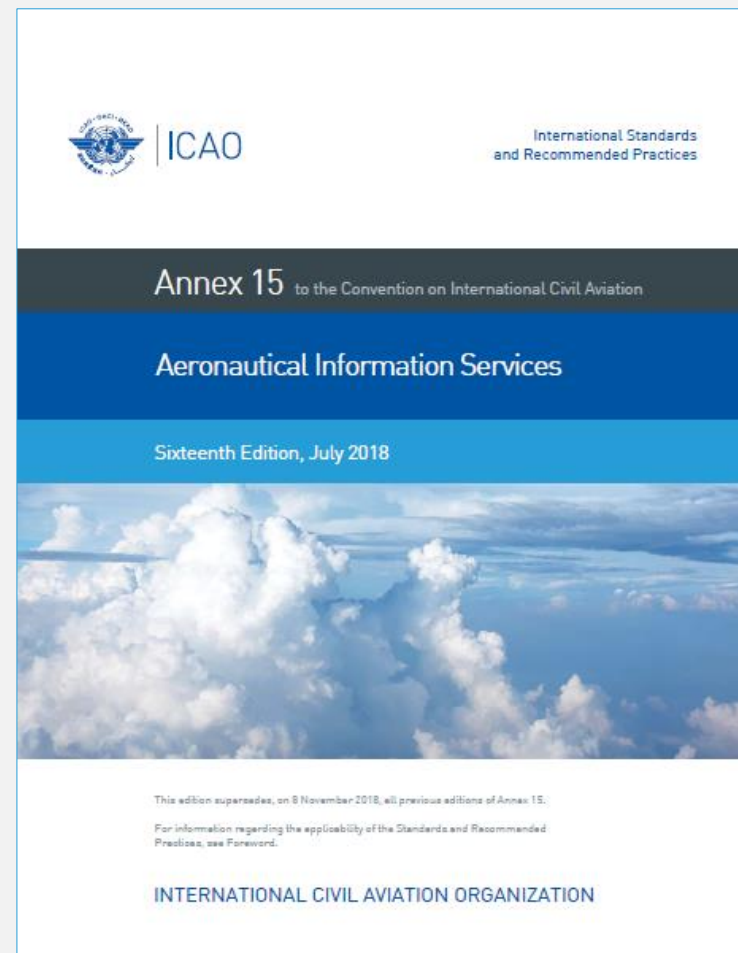
State	Region	Total	NOTAM			
			Old	Old (%)	Very old	Very old (%)
Chile	SAM	541	86	15.9 ↑ 9.3	7	1.3 ↓ -1.8
Argentina	SAM	890	53	6 ↑ 5.4	90	10.1 ↓ -0.1
Colombia	SAM	183	27	14.8 ↑ 8.4	42	23 ↓ -0.9
Bolivia (Plurinational State of)	SAM	80	20	25 ↑ 14.2	17	21.3 ↓ -8
Venezuela (Bolivarian Republic of)	SAM	80	12	15 ↑ 0.1	5	6.3 ↓ -0.1
Brazil	SAM	303	8	2.6 ↓ -19.9	0	
Peru	SAM	107	8	7.5 ↑ 3.7	28	26.2 ↑ 1.9
Panama	SAM	29	6	20.7 ↑ 13	4	13.8 ↑ 6.1
Ecuador	SAM	38	2	5.3 ↑ 5.3	1	2.6 ↓ -20.1
Uruguay	SAM	67	1	1.5 ↑ 1.5	3	4.5 ↓ -0.2
Guyana 	SAM	1	0		0	
Paraguay 	SAM	20	0		0	
Suriname 	SAM	7	0		0	

State	Region	NOTAM				
		Total	Old	Old (%)	Very old	Very old (%)
Argentina	SAM	890	53	6 ↑ 5.4	90	10.1 ↓ -0.1
Colombia	SAM	183	27	14.8 ↑ 8.4	42	23 ↓ -0.9
Peru	SAM	107	8	7.5 ↑ 3.7	28	26.2 ↑ 1.9
Bolivia (Plurinational State of)	SAM	80	20	25 ↑ 14.2	17	21.3 ↓ -8
Chile	SAM	541	86	15.9 ↑ 9.3	7	1.3 ↓ -1.8
Venezuela (Bolivarian Republic of)	SAM	80	12	15 ↑ 0.1	5	6.3 ↓ -0.1
Panama	SAM	29	6	20.7 ↑ 13	4	13.8 ↑ 6.1
Uruguay	SAM	67	1	1.5 ↑ 1.5	3	4.5 ↓ -0.2
Ecuador	SAM	38	2	5.3 ↑ 5.3	1	2.6 ↓ -20.1
Brazil	SAM	303	8	2.6 ↓ -19.9	0	
Guyana 	SAM	1	0		0	
Paraguay 	SAM	20	0		0	
Suriname 	SAM	7	0		0	

03

Creating Quality NOTAM

What the regulations say





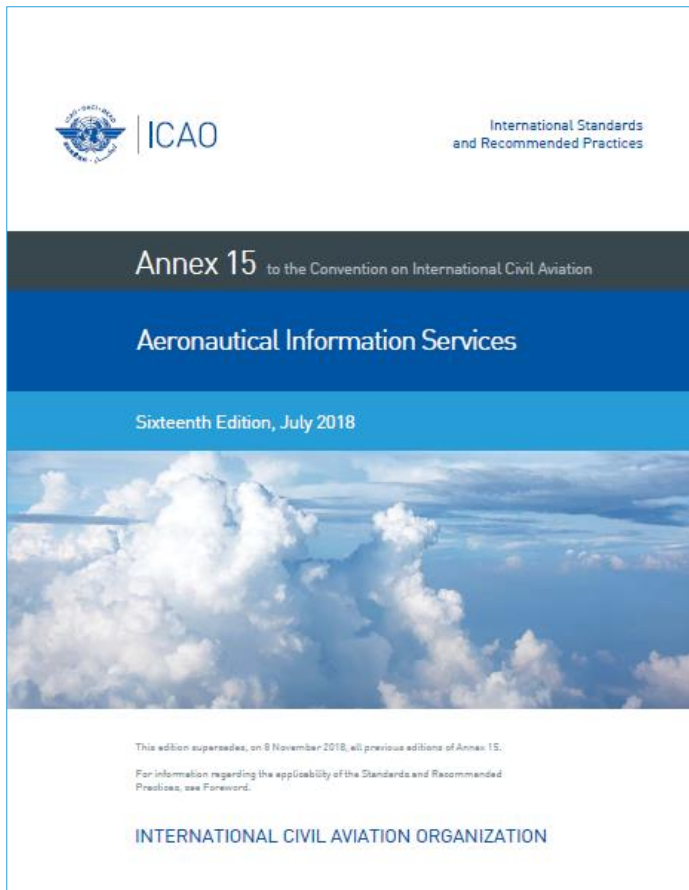
ICAO SARPs and Guidance on old NOTAM

- Annex 15 – Aeronautical Information Services (16th edition, 2018)
- PANS-Aeronautical Information Management (Doc 10066, 1st edition, 2018)
- Aeronautical Information Services Manual (Doc 8126, 7th edition, 2022)





Annex 15 – Aeronautical Information Services



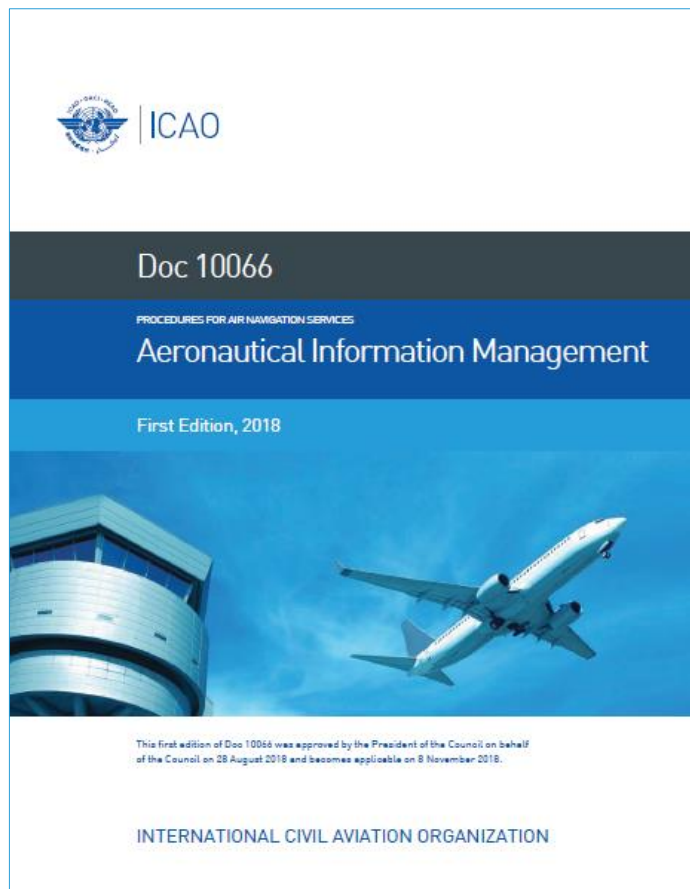
The Annex states that ...

6.3.2.2 A NOTAM shall be originated and issued promptly whenever the information to be distributed is of a **temporary nature and of short duration**...

6.3.1.3 Temporary changes of long duration (**three months or longer**) ... shall be published as AIP Supplements.



PANS – Aeronautical Information Management



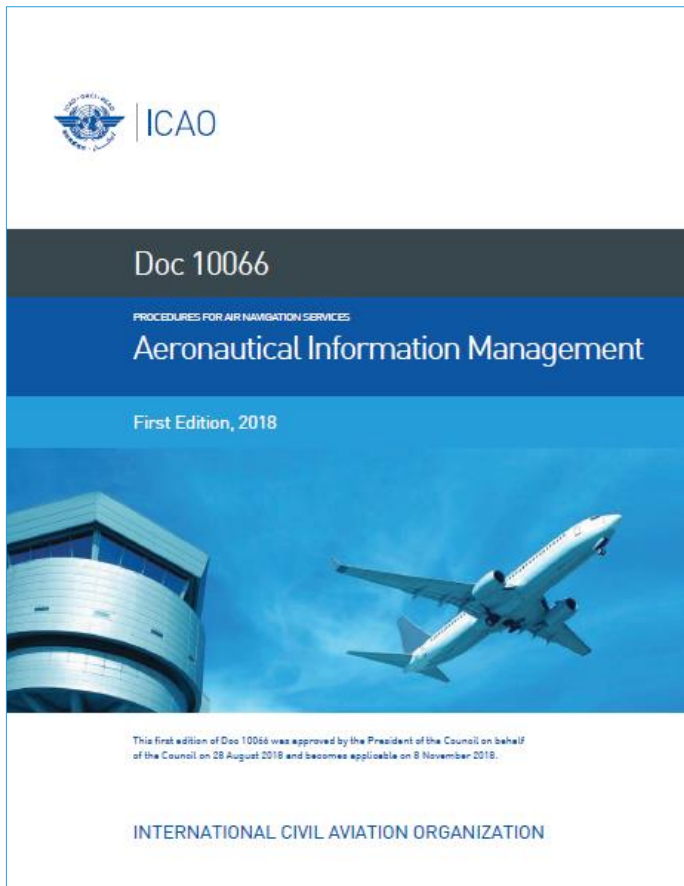
PANS-AIM states that ...

6.1.4.4 Within three months from the issuing of a permanent NOTAM, the information contained in the NOTAM shall be included in the aeronautical information products affected.

6.1.4.5 Within three months from the issuing of a temporary NOTAM of long duration, the information contained in the NOTAM shall be included in the AIP Supplement.



PANS – Aeronautical Information Management



PANS-AIM further states that ...

6.1.4.6 When a NOTAM with estimated end of validity **unexpectedly exceeds the three-month period**, a **replacement NOTAM shall be issued**, unless the condition is expected to last for a further period of more than three months; in this case, an **AIP Supplement shall be issued**.

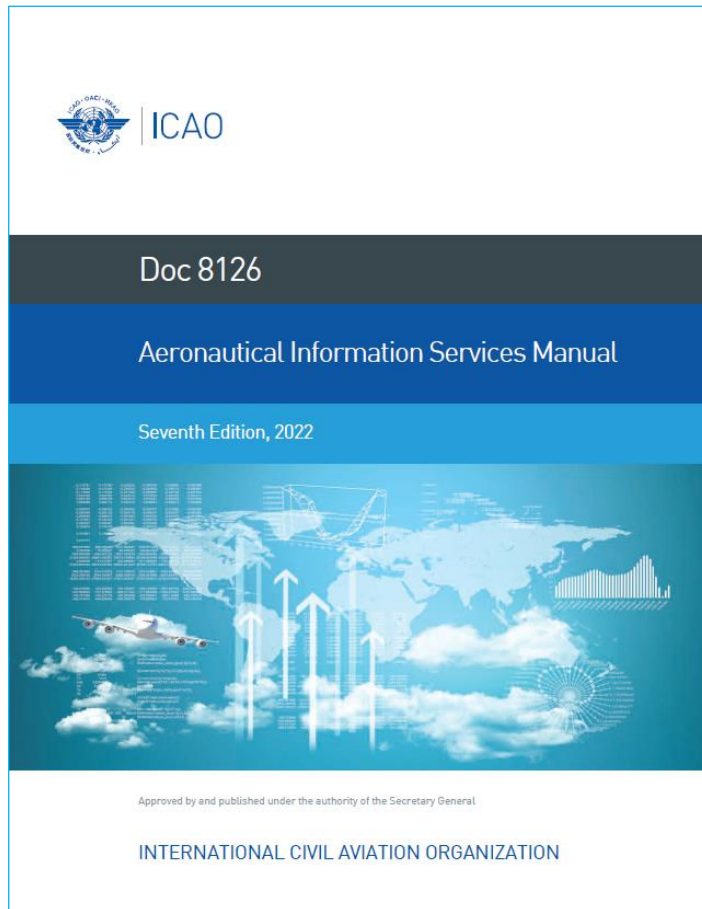


Aeronautical Information Services Manual

Doc 8126, 7th edition, states that ...

6.3.7.2 If the information is of a permanent nature, then the abbreviation PERM is inserted... **PERM** is solely for **NOTAM** information that will be incorporated in the AIP, and **must be entered in the AIP as soon as possible, but not later than within three months.**

6.3.7.3 ... Any NOTAM using EST must be cancelled or replaced before the date-time specified in Item C). **Failure to cancel or replace a NOTAM using EST implies that the NOTAM will continue to be promulgated for an indefinite period of time.**

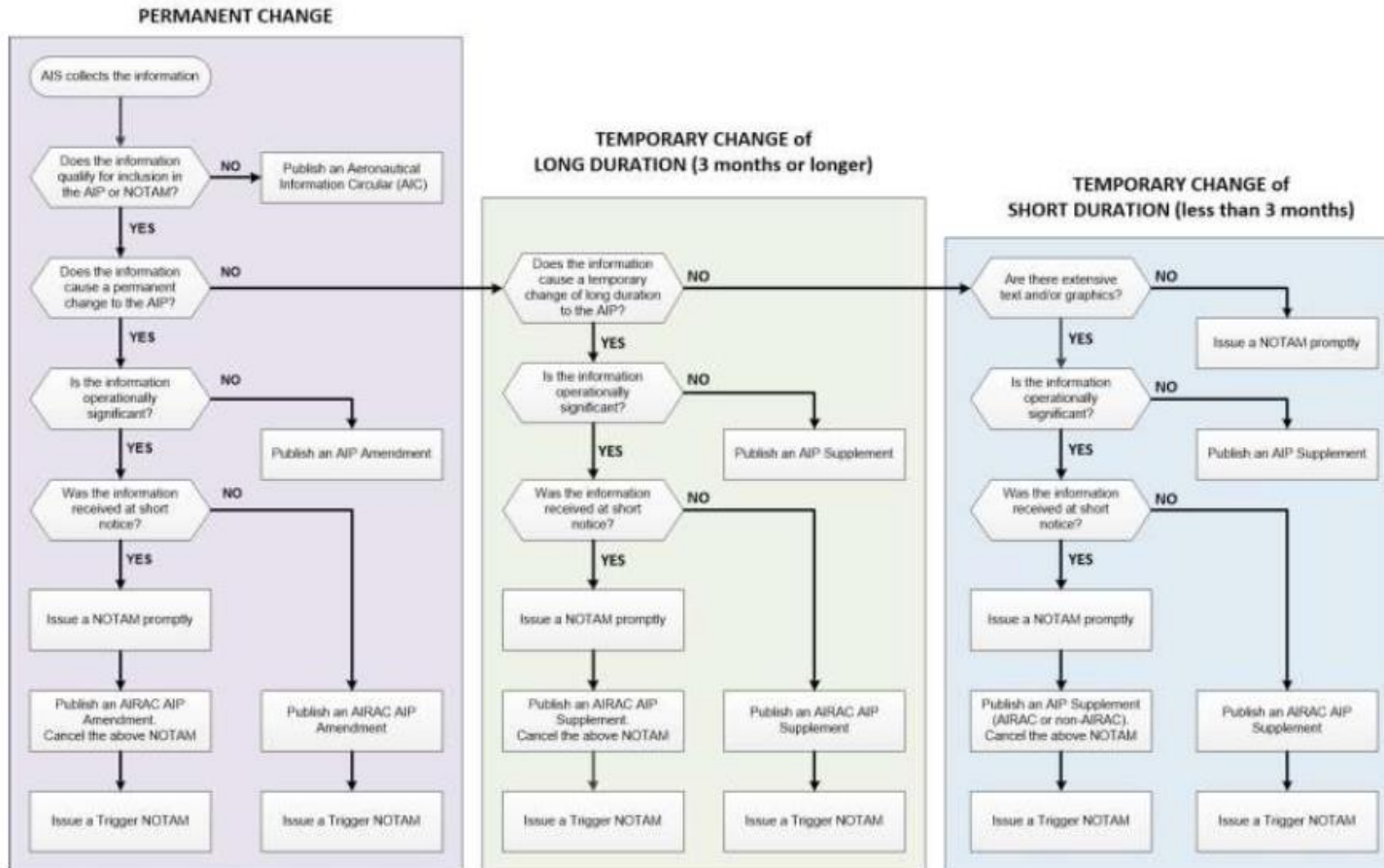


Also keep in mind...



**Repetitive NOTAM replacements
are clearly in violation of the
original intent of a NOTAM.**

Aeronautical Information Services Manual



Doc 8126, 7th ed., provides ...

Updated guidance on publication of Aeronautical Information Circulars and AIRAC and non-AIRAC AIP Amendments, AIP Supplements, and NOTAM.

Let's define old NOTAM ...



The rule: A NOTAM should not be active for more than three (3) months, and never be replaced more than once. If this happens, it becomes an **old NOTAM**.

Why do old NOTAMs exist?

- 1** An **EST** NOTAM (with an estimated end date) has not been cancelled or replaced before the date-time specified in Item C and therefore remains in the system.
- 2** A **PERM** NOTAM has not been transferred to the AIP or other appropriate publication. PERM NOTAM should never remain in the system for more than 3 months.
- 3** A routine NOTAM is incorrectly promulgated for a period longer than 3 months.



A simple way to find old NOTAM...

```

A1225/20 NOTAMR A1034/20
Q) /QK/ /K/ /K/ /K/ /000/ /999/ 1354N10036E999
A) B) 2006010032 C) 2007010300 EST

A2022/20 NOTAMR A1696/20
Q) /QK/ /K/ /K/ /K/ /000/ /999/ 1354N10036E999
A) B) 2009010032 C) 2010010300 EST
E) CHECKLIST
YEAR=2010 0721
YEAR=2012 1000
YEAR=2013 4629
YEAR=2014 2069 4114 4115
YEAR=2015 2291
YEAR=2016 0177 0332 0416 2266
YEAR=2017 1433 1616
YEAR=2018 0200
YEAR=2020 0049 0453 1292 1294 1296 1308 1321 1327
1362 1383 1400 1401 1408 1409 1410 1411 1412 1413
1414 1415 1416 1423 1424 1434 1441 1455 1457 1461
1465 1466 1497 1500 1501 1516 1517 1525 1539 1550
1551 1559 1560 1591 1615 1634 1657 1659 1660 1662
1691 1694 1760 1761 1776 1783 1795 1801 1802 1810
1812 1815 1822 1836 1861 1871 1897 1904 1905 1934
1939 1949 1961 1966 1967 1968 1975 1976 1977 1989
1998 2001 2004 2008 2010 2013 2014 2015 2017 2018
2021
LATEST PUBLICATIONS

```

Old Aged

Use of NOTAM checklist:

- Find NOTAM checklist number issued three months ago.
- NOTAM issued before that NOTAM checklist (issued three months ago) are considered old NOTAM.

What can we do...



**to clean up the Pre-flight Information Bulletin
and make it more useful and useable by pilots?**

What can we do...



- **Remove**

Identify old and very old NOTAM and their causes.

Remove existing old NOTAM, e.g. by transferring the information to the correct publication.



- **Resist**

If you get a request to issue a NOTAM that you know should be an AIP AMDT, AIC, AIP SUP, or in another document instead, educate the originator and do not publish the NOTAM.



- **Request**

If you are not sure how to deal with an old NOTAM situation, reach out. You can get help from your ICAO regional office or HQ, AIS/AIM groups, or the AIS community in other States.



Remember...



A **NOTAM** should never be active for more than **three months**, and never be replaced **more than once!**

Yes we can do it!

04

Improving the Quality of NOTAM for Safe Flight Operations

Implementation Package (iPack)



Improving the Quality of NOTAM for Safe Flight Operations

Implementation Package (iPack)

Goal

- To assist and guide CAAs and data originators in efficiently managing aeronautical information through education and raising awareness.

Objectives

- To understand applicable provisions, namely Annex 15, PANS-AIM (Doc 10066) and Doc 8126;
- To use the NOTAMeter to analyse NOTAM, run comparative analyses, and identify trends;
- To identify old and very old NOTAM and take action to cancel, replace and/or transfer the NOTAM to the appropriate aeronautical information products (AIP, AIP SUP, etc.);
- To cancel or replace all non-compliant NOTAM in a timely manner;
- To implement effective quality control procedures to avoid the issue of non-compliant NOTAM from reoccurring;
- To develop formal arrangements between AIS and data originators concerning NOTAM; and
- To ensure adequate competency through training for all NOTAM personnel.

Improving the Quality of NOTAM for Safe Flight Operations

Implementation Package (iPack) - continued

Target audience

- Civil Aviation Authorities and data originators

Contents

- Expertise: remote access to dedicated NOTAM SME (15 days over 3 months period)
- Tools: NOTAMeter
- Documents: ICAO Annexes and PANS, guidance material

Cost

- \$16,000 (plus additional SME days, if needed)

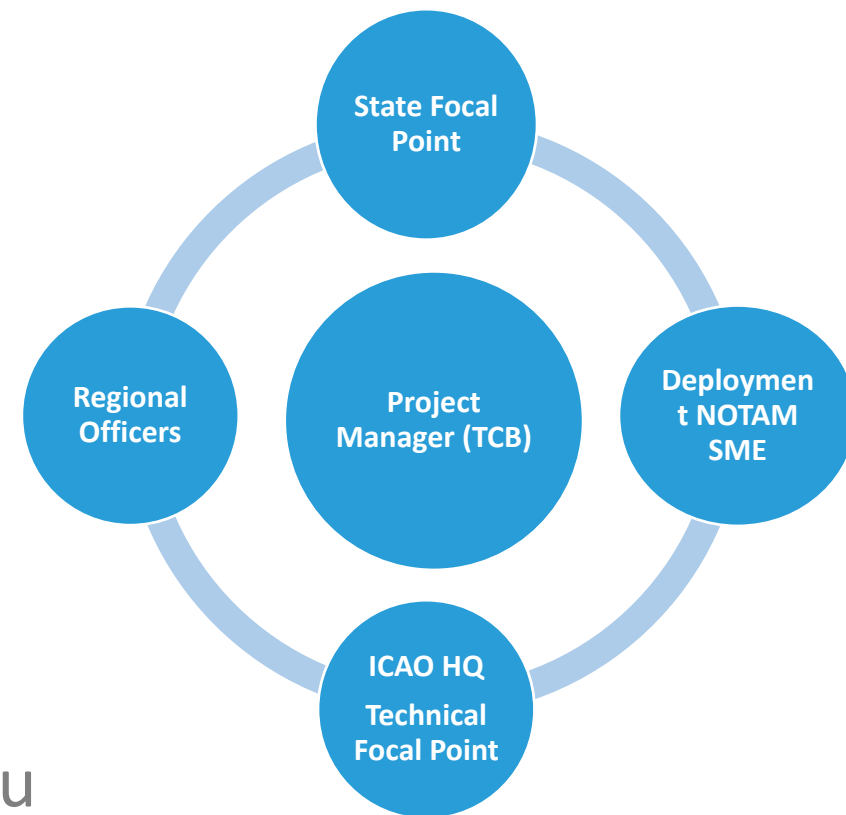


Improving the Quality of NOTAM for Safe Flight Operations

Implementation Package (iPack) - continued

Key Stakeholders for iPack Deployment

- Recipient State
- ICAO TCB Project Manager
- NOTAM Subject Matter Expert
- ICAO HQ Technical Focal Point
- Regional Officer



Contact ICAO Technical Cooperation Bureau

- <https://www.icao.int/secretariat/TechnicalCooperation/Pages/improving-the-quality-of-NOTAM-for-safe-flight-operations.aspx>



Thank You!