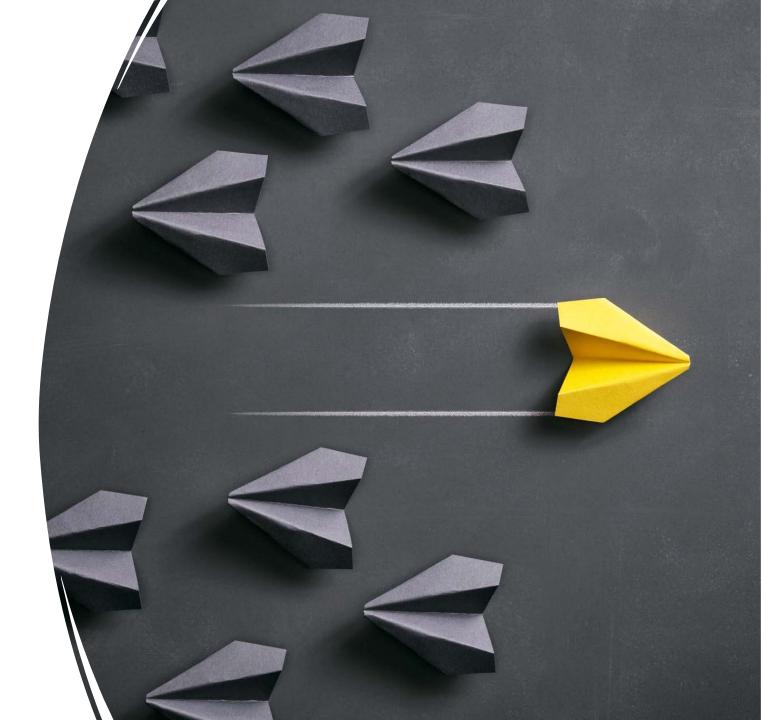


On-line Workshop on the Mitigation of Flight Plan Errors in the NAM/CAR Regions

Jenny Lee



On-line Workshop on the Mitigation of Flight Plan Errors





THE RELEVANCE OF KNOWING THE FLIGHT PLAN IN AIR NAVIGATION









Basic ATM/ATS course

Introductory course in the world of air navigation, explanation of the main reason for either AIM or ATS through training as an aeronautical information manager or air traffic controller.





RELEVANCE IN AIR TRAFFIC

Training whose purpose is that the student knows the importance of knowing the flight plan in air traffic, visits are made to the control center and situations are observed that help to know in greater detail what causes a flight plan with errors, duplicate flight plans or delay in their transmission.

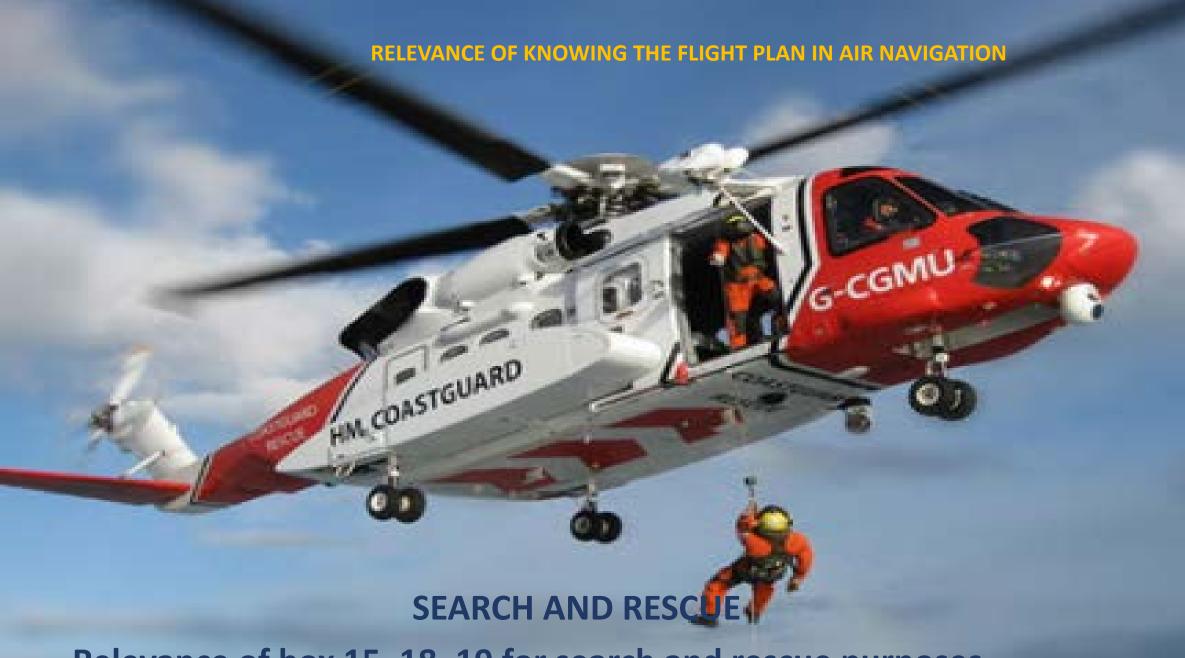


RELEVANCE OF KNOWING THE FLIGHT PLAN IN AIR NAVIGATION

IMPACT IN AIRLINES

Awareness is raised regarding the impact caused by a small error on the route, the transmission of a flight plan with a delay, the elimination of a simple letter in box 10, the lack of an arrival procedure, the economic impact it represents for an airline.





Relevance of box 15, 18, 19 for search and rescue purposes



ATFM

- EXPLANATION WHAT IS ATS CAPACITY
- WHAT IS DEMAND?
- WHAT HAPPENS WHEN DEMAND EXCEEDS CAPACITY?
- WHAT IS A DYNAMIC SECTORIZATION?
- WHEN ARE TACTICAL OPERATIONS APPLIED?
- THE IMPORTANCE OF THE TSE IN ATFM
- THE IMPORTANCE OF MESSAGE DEP, CNL DLA

SAFETY MANAGEMENT SYSTEM

- WHAT DOES SMS MEAN?
- HOW IS RISK MANAGED?
- WHEN IS IT NECESSARY TO DO A RISK ANALYSIS?
- WHEN IS IT CONSIDERED TO BE AN ACCEPTABLE RISK LEVEL?
- HOW MAY THE FLIGHT PLAN I DID AFFECT?





RELEVANCE OF KNOWING THE FLIGHT PLAN IN AIR NAVIGATION



BASIC COURSE AIM/ATS

FLIGHT PLAN COURSE

RELEVANCE IN AIR TRANSIT

IMPACT ON THE AIRLINES

SEARCH AND RESCUE

AIR TRAFFIC FLOW MANAGEMENT

SAFETY MANAGEMENT SYSTEM



On-line Workshop on the Mitigation of Flight Plan Errors

INDUSTRY AND ITS COMPLIANCE WITH ICAO STANDARDS



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INDUSTRY AND ITS COMPLIANCE WITH ICAO STANDARDS

- Have you ever wondered why a company flight plan ever comes up with errors?
- Why do we receive more than one flight plan?
- Does the industry comply only with ICAO regulations or also with State regulations?
- The flight plan is not always identical to the one sent by the State.
- Are there any changes to the flight plan data for Europe?
- Is the filling of alternate aerodromes always carried out in accordance with the regulations?
- Why is the sequence in the issuance of flight plans not always followed?



```
(FPL-SLI678-IS
-E190/M-SDE2E3FGIRWYZ/LB1V1
-MMMX1930
-N0444F370 ILETO1A ILETO UT109 VER UA552 AUR DCT
-MGGT0132 MMTP
-PBN/A1B1C1D101S1 DAT/1PDC SUR/260B DOF/210612 REG/XAGAH EET/
MHCC0107 CODE/0D083B OPR/SLI RMK/OCC SLI SHIFT MGR CONTACT 015255
9132)
```

OPR / ICAO Designator or operator name, if different from the aircraft identification in Box 7.



(FPL-CMP194-IS
-B738/M-SDE1E2E3GHRWIZ/H
-MPT00229
-N0453F380 SIMAN1A SIMAN DCT BITOR DCT BUFEO UA317 TAP J13 IZT
UT157 LARLO LARLO1A
-MMMX0316 MMGL
-PBN/A1B1C1D1L101S2T1 NAV/RNP2 DOF/210613 REG/HP1714 EET/MHCC0032
MMFR 0157 MMEX 0230 SEL/DSBQ CODE/0C2052 OPR/CMP PER/C RMK/TCAS)

Designators of significant points or limits of the FIR and total expected duration from take-off to those points or limits of the FIR when prescribed in regional air navigation agreements or by the competent ATS authority



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(FPL-TAI537-IS
-A319/M-SDE2E3FGHIRW/LB1
-MHLM2315
-N0392F180 DCT SAP H225 NAGEL
-MSLP0044 MNMG MHLM
-PBN/A1B1C1D101S2T1 SUR/260B DOF/210612 REG/N522TA SEL/BDGS
CODE/A69206 PER/C TALT/MNMG)
```

- Altitude in hundreds of feet, expressed by an A followed by 3 figures (eg, A045; A100)
- Report altitude in meters followed by "METERS", or in feet followed by "FEET", when using QNH.



1953 UTC

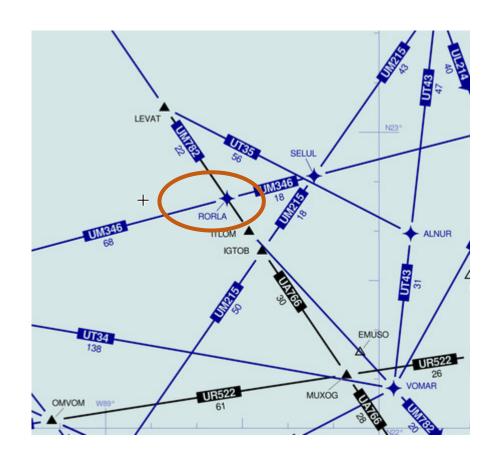
(FPL-DAL1831-IS

- -B752/M-SDE2E3FGHIJ3RWZ/LB1
- -MGGT2000
- -N0460F350 TATVO2 TATVO UA770 SISAL/N0457F360 UA770 KEHLI A770 LEV DCT GCV/N0454F370 DCT PAYTN DCT SHYRE HOBTT2
- -KATL0308 KBNA
- -PBN/A1B1C1D1O1S1T1 NAV/RNVD1E2A1 SUR/260B DOF/210612 REG/N696DL EET/MMID0030 KZHU0122 KZTL0224 SEL/DLCR CODE/A94156 PER/C RMK/AGCS TCAS EQUIPPED)

Flight plan submitted 7 minutes before EOBT



(FPL-UAL2749-IN -B738/M-SDE3GHIRWXYZ/LB1 -KIAH0230 -N0457F390 FLYZA5 KELPP A766 KEHLI UA766 RORLA/N0453F410 UA766 ITLOM UM782 DELVI DCT ARNAL UM782 AGUJA/N0427F230 G445 KOPGI -SKCG0341 MPTO -PBN/A1L1B1C1D1O1S2T1 NAV/RNP2 SUR/260B DOF/210614 REG/N12216 EET/MMFR0101 MHCC0143 MKJK0221 MPZL0237 SKEC0316 SEL/DMAG CODE/A05DBA OPR/UAL PER/D)



Routes with landlines that do not belong to the airway



(FPL-AFR430-IS

- -B772/H-SDE2E3FGHIJ3J5M1P2RWXYZ/LB1D1
- -LFPG1455
- -N0474F260 EVX UT300 SENLO UN502 JSY UN160 LIZAD/N0470F280 N160 LND/N0472F300 N160 BOGMI/N0476F320 N160 LEDGO DCT KOMAG DCT DOGAL/M083F320 DCT 55N020W 56N030W/M083F340 56N040W 55N050W DCT LOMSI/N0486F360 N518A TAFFY DCT KAYCC DCT KYLOH DCT NELIE Q75 GREKI J222 JFK DCT CYN DCT SBY DCT KEMPR DCT DIW AR19 JENKS/N0477F380 AR19 AYBID DCT VKZ DCT MNATE/N0475F390 Y442 FUNDI UM335 ALVEK UM328 SELEK/N0477F390 UZ403 PIRAS BARRA3P
- -MROC1106 MPTO
- -PBN/A1B1C1D1L1O1S2 DAT/CPDLCX 1FANSP2PDC SUR/260B RSP180 DOF/210128 REG/FGSPN EET/EGTT0044 EISN0106 EGGX0147 CZQX0251 56N040W0332 55N050W0414 LOMSI0446 CZUL0514 CZQM0544 KZBW0629 KZNY0656 KZDC0702 KZJX0755 KZMA0823 MUFH0914 MHCC0947 SEL/EHLR CODE/3949ED RVR/075 OPR/AFR ORGN/LFBOAFMI PER/C RALT/EINN CYYR RMK/ACAS TCAS)

RVR ELEMENT DOES NOT APPEAR IN DOC.4444, but is used in Europe

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INDUSTRY AND ITS COMPLIANCE WITH ICAO STANDARDS

Missing SID or DCT at the beginning of the route in addition to missing STAR or DCT at the end

ORGN/LEMDIBED RALT/TFFR LPLA RIF/LUTAK UNPOT LPPT RMK/TCAS IBERIA

FLIGHT WATCH +34 913055305 RVR/125)



(FPL-VOC4091-IS

- -A319/M-SDFGHIRWYZ/SB1
- -KLAX0839
- -N0453F370 PNDAH2 TCATE DCT PPE
- UL655 ASOKU UW3 DUNEL
- -MSLP0441 MGGT
- -PBN/A1B1C2D2O2S1 NAV/RNP10 RNAV5

RNAV2 RNAV1 RNP1 RNP APCH

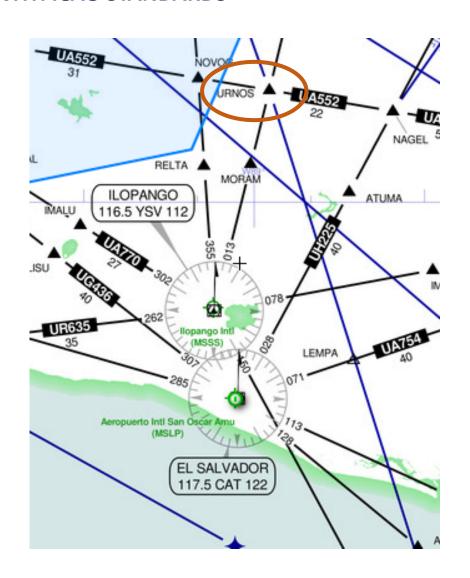
SUR/260B DOF/210613 REG/N503VL

EET/MMZT0026 MMTY0127 MMEX0236

MMID0329 MHCC0405 SEL/GPEH

CODE/A646FB PER/C)

Incomplete routes





THE AIRLINE SHOULD REVIEW THE FLIGHT PLANS THAT THE STATE SENT OR SHOULD ONLY BE INTERESTED IN THAT THE PILOT TAKES ON BOARD THE FLIGHT PLAN ISSUED BY THE AIRLINE BECAUSE IT CONSIDERS THAT IT IS "NO ERRORS"

TO MITIGATE INDUSTRY ERRORS

ERROR REVIEW BY AIS / ATS

PERIODIC MEETINGS WITH THE AIRLINES.

COORDINATION VIA EMAIL.

REVISION OF ENR 1.10



Workshop on the Mitigation of Flight Plan Errors



Doc 4444, Periodic Update Needed?



NOT ALWAYS FIND WHAT I AM LOOKING FOR

INCOMPLETE INFORMATION FOR MY NEEDS



THE STANDARD IS AMBIGUOUS

IT DOES NOT ADJUST TO CURRENT REALITY

PERIODIC UPDATE MUST BE MORE FREQUENT

I CONSIDER THAT SOME SUBJECTS MUST BE INCLUDED



DO YOU KNOW WHAT IS NEEDED?



NOT ALWAYS FIND WHAT I AM LOOKING FOR

EXAMPLE: HOW MAY DELAYS CAN BE ACCEPTED?

EXAMPLE: HOW MANY CHANGES CAN BE ACCEPTED?

EXAMPLE: WHERE CAN I FIND THE STANDARD RELATED WITH ON BOARD AUTONOMY?



INCOMPLETE INFORMATION FOR MY NEEDS

EXAMPLE: SEL / SELCAL Code, for aircraft equipped in this way, the associated regulations are not

found in this document.

EXAMPLE: There is PBN information but in some it is unknown if the capacity involves GNSS

EXAMPLE: It is not clear that PBN capabilities are excluded by other capabilities.



THE STANDARD IS AMBIGUOUS

EXAMPLE: If the letter G is used, the types of external GNSS augmentation, if any, are specified in box 18 after the NAV / indicator and separated by a space.

EXAMPLE: If the letter R is used, the achievable performance-based navigation levels are specified in Box 18 after the PBN / indicator.

EXAMPLE: If the letter Z is used, specify in Box 18 any other type of equipment or capabilities installed on board preceded by COM /, NAV / Y / 0 DAT, as appropriate.





IT DOES NOT ADJUST TO CURRENT REALITY

EXAMPLE: OPR: ICAO designator or name of the operator if different from the aircraft identification shown in box 7

EXAMPLE: List as many RSP specifications as applicable to the flight using designators without space. Multiple RSP specifications are separated by a space.

Example: RSP180 RSP400

EXAMPLE: SPL information is included in an FPL.





ARE THERE MORE SUBJECTS TO BE INCLUDED?

EXAMPLE: TABLE OF RELATION OF BOX 10A AND PBN OF BOX 18

EXAMPLE: The industry indicates that the letter W should not be limiting in a flight plan, they

consider it to be something operational in air traffic.

EXAMPLE: The system should reject a flight plan when an STS / MARSA has been written but only

one flight quantity was written.



Workshop on the Mitigation of Flight Plan Errors

YOU KNOW WHAT IS NEEDED?

