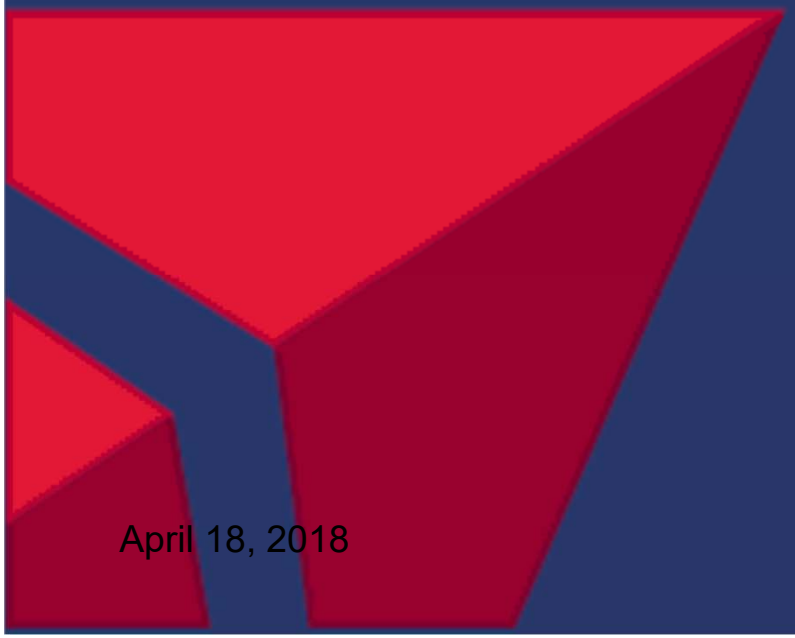
Delta Air Lines

ICAO FPL Planning and Filing



Bob Oberstar
Supervisor – Int'l Flight Control
robert.oberstar@delta.com

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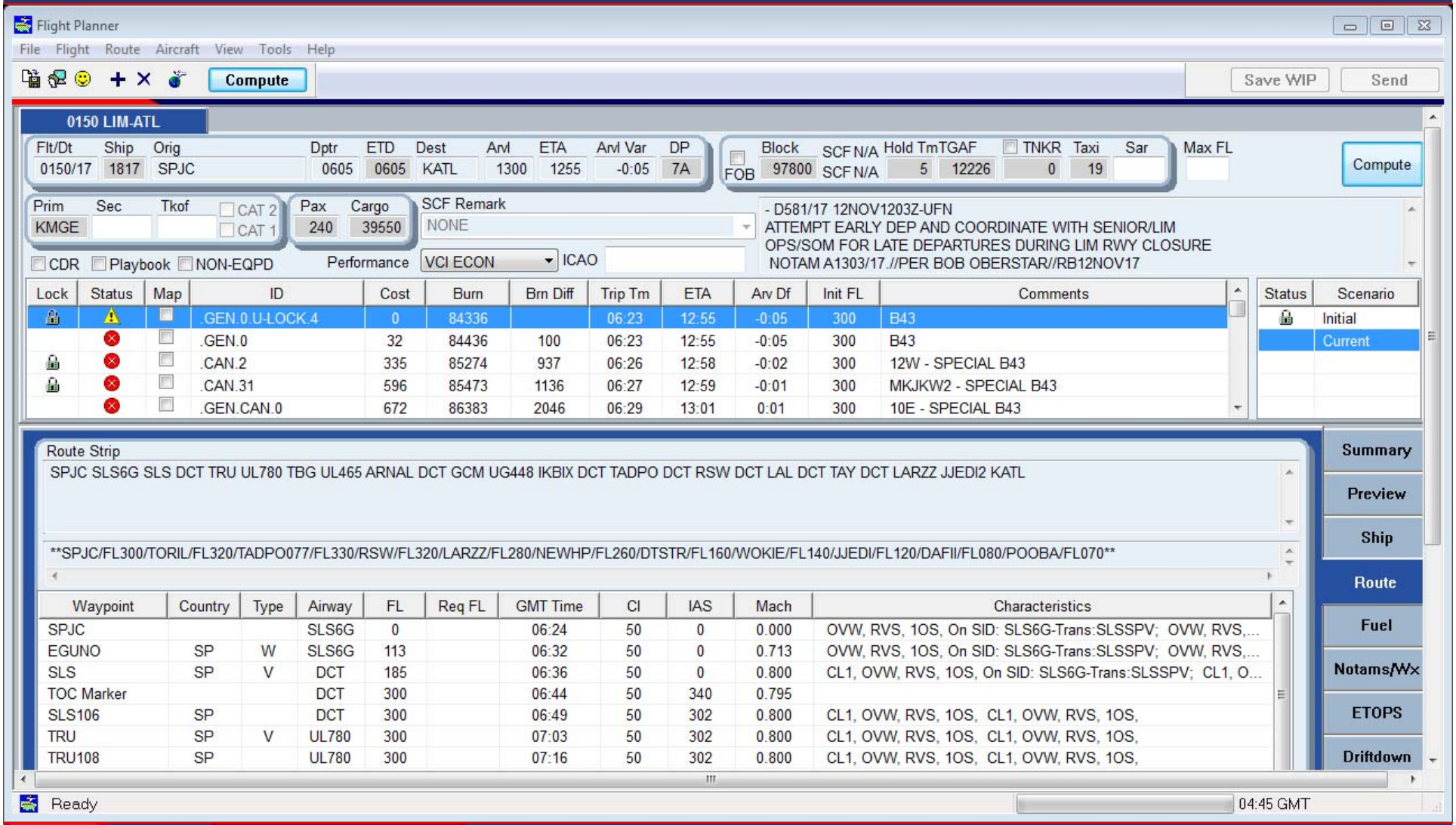
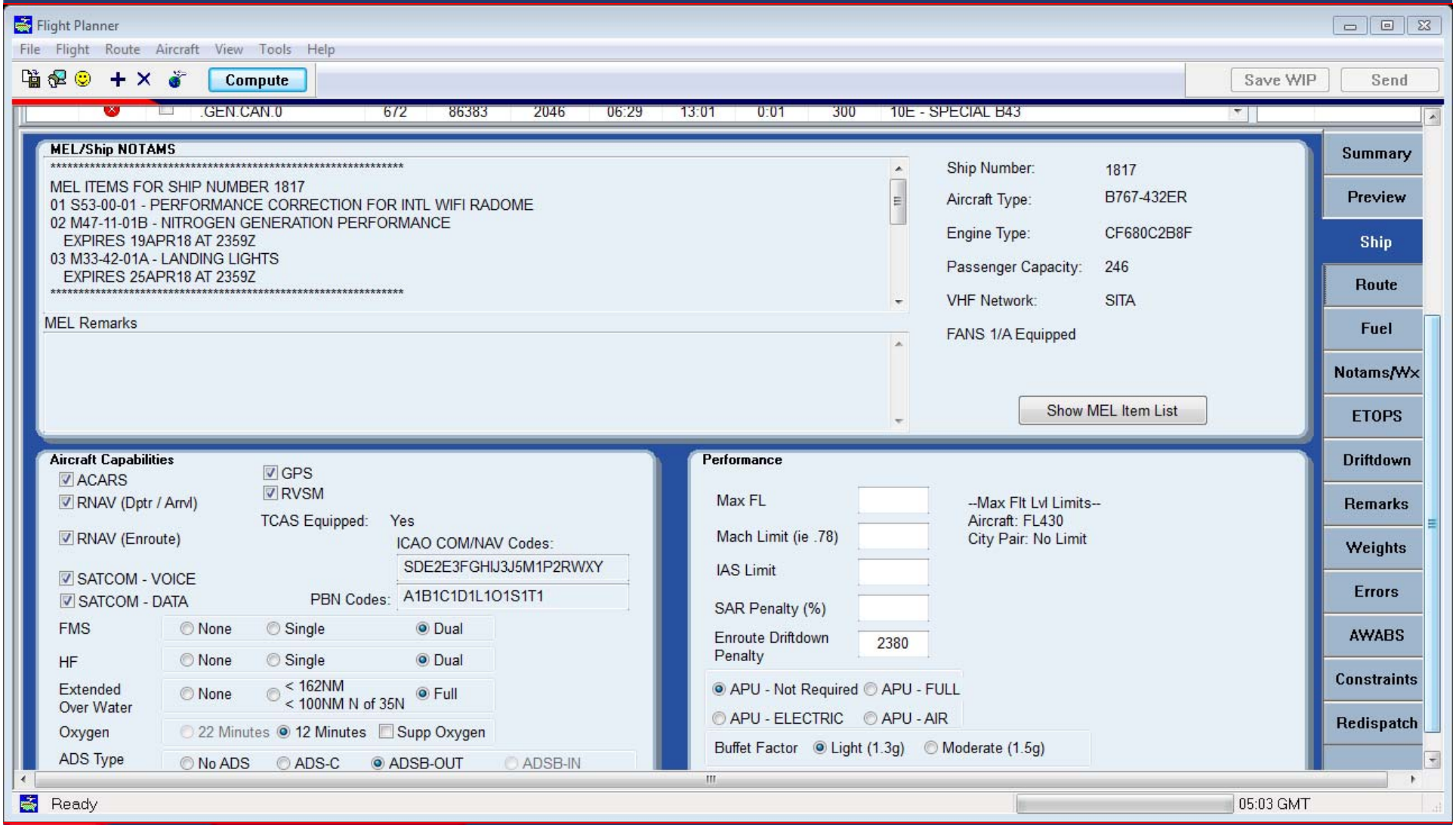
The planning of a flight always has safety as the number 1 priority.

A dispatcher is required to check NOTAMS, weather, MEL's (inoperative aircraft components) and among other items, in the preparation of a flight plan, which includes the ICAO FPL filed with ATC, as well as the release and flight plan information provided to the flight crew.

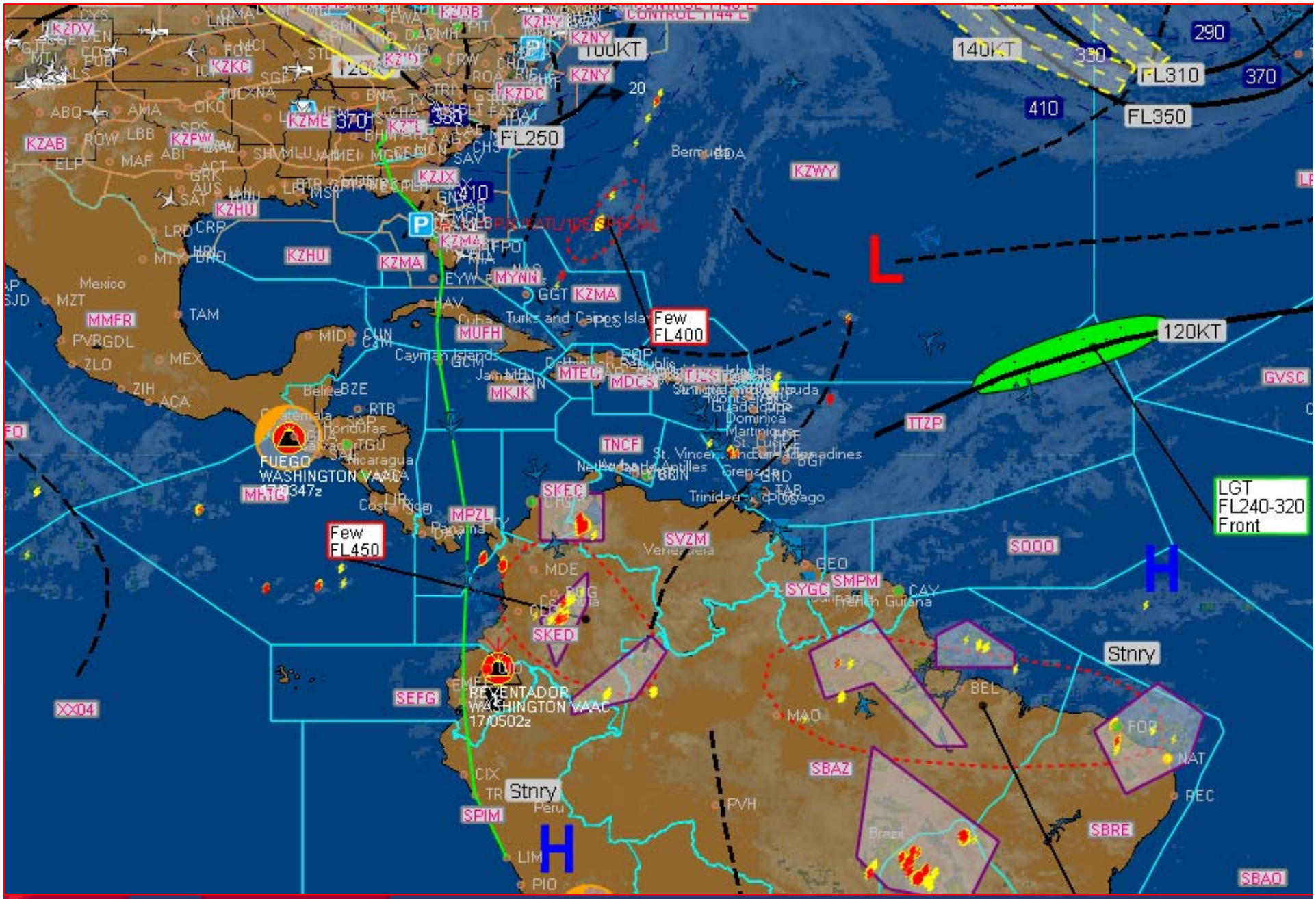
A number of tools are available and used by the FAA licensed Aircraft Dispatchers in the planning of the flight plan, including the Flight Planning System, Flight Following/Tracking tools, and numerous support items for NOTAMS, weather, etc..



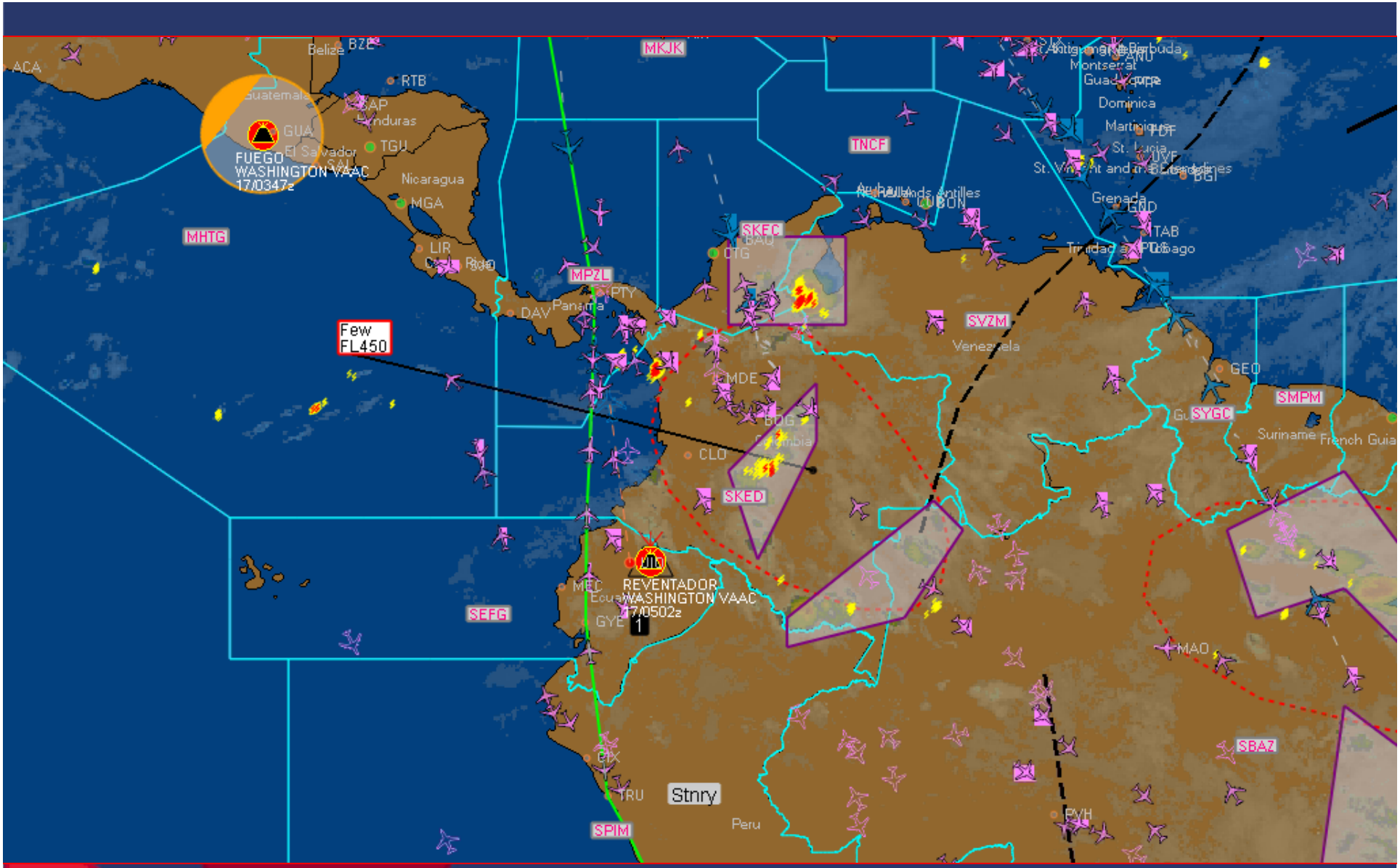
Although airlines use different Flight Planning Systems, the end results are similar in that routes are prepared, and weight and balance data is checked, to ensure a safe and economical flight plan. Information used in the Flight Planning Systems are typically maintained in a DataBase per state AIP information.



Aircraft data fed into the Flight Planning Systems is also maintained within the Airline's aircraft database to reflect the capabilities of those aircraft. When a flight plan is created, the capabilities and equipment codes will be reflected on the ICAO FPL.



Most, if not all, major airlines have a Flight Following tool to track flight progress, as well as weather & turbulence, forecast weather, Warning/Restricted areas, Volcanoes, etc.. Routes overlay the map for a visual idea of FIRs



In addition to Company aircraft, a dispatcher can overlay the flight following map with other airlines for situation awareness. By mousing over the aircraft icon - the airline, city pair, aircraft type, FL, etc. can be determined.

```
16APR0435   2D1127 FPL
015016LIMATL

DFF

IFF SPIMZQZX SEFGZQZX SKEDZQZX MPZLZQZX MKJKZQZX MUFHZQZX
MUFHZRZQ KZMAZQZX KDENXLDX

160435 KATLDALQ
(FPL-DAL150-IS
-B764/H-SDE2E3FGHIJ3J5M1P2RWXYZ/LB1D1
-SPJC0605
-N0490F300 ISRE1F ISREN UL780 BUXOS DCT TBG/N0489F310 UL465
 ARNAL/N0488F320 UL465 GCM UG448 IKBIX Y183 PEAKY/N0482F330
 DCT RSW/N0482F340 DCT LAL DCT FAGAN DCT TAY/N0488F330 DCT
 LAIRI DCT LARZZ JJEDI2
-KATL0610
-PBN/A1B1C1D1L1O1S1T1 NAV/RNVD1E2A1 SUR/RSP180 DOF/180416
 REG/N829MH
 EET/SEFG0106 SKED0150 MPZL0217 MKJK0330 MUFH0408 KZMA0438
 KZJX0509 KZTL0538
 SEL/QSHM CODE/AB5365
 RMK/AGCS TCAS II EQUIPPED)
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Once all considerations (weather, NOTAMS, aircraft capability) have been analyzed, the ICAO FPL will be displayed and reviewed prior to sending via the AFTN messaging system. The Flight Planning System will take into account inop items (such as Auto Pilots inop) to automatically adjust the ICAO FPL with the removal of the appropriate equipment codes, as well as flight levels if required.

Once an ICAO FPL has been sent by the Airline Dispatcher, we would like to know as soon as possible whether this flight plan is valid or not (ACK or REJ).

We often find out near the proposed departure time when the crew sends an ACARS datalink message to the dispatcher advising that ATC has no FPL on file. A dispatcher may then just re-file the original ICAO FPL. This may result in multiple ICAO FPLs without correcting the problem.

17APR0006 000000 FPL
214416ATLMCO

DFF KZTLZQZX

IFF KDENXLDX

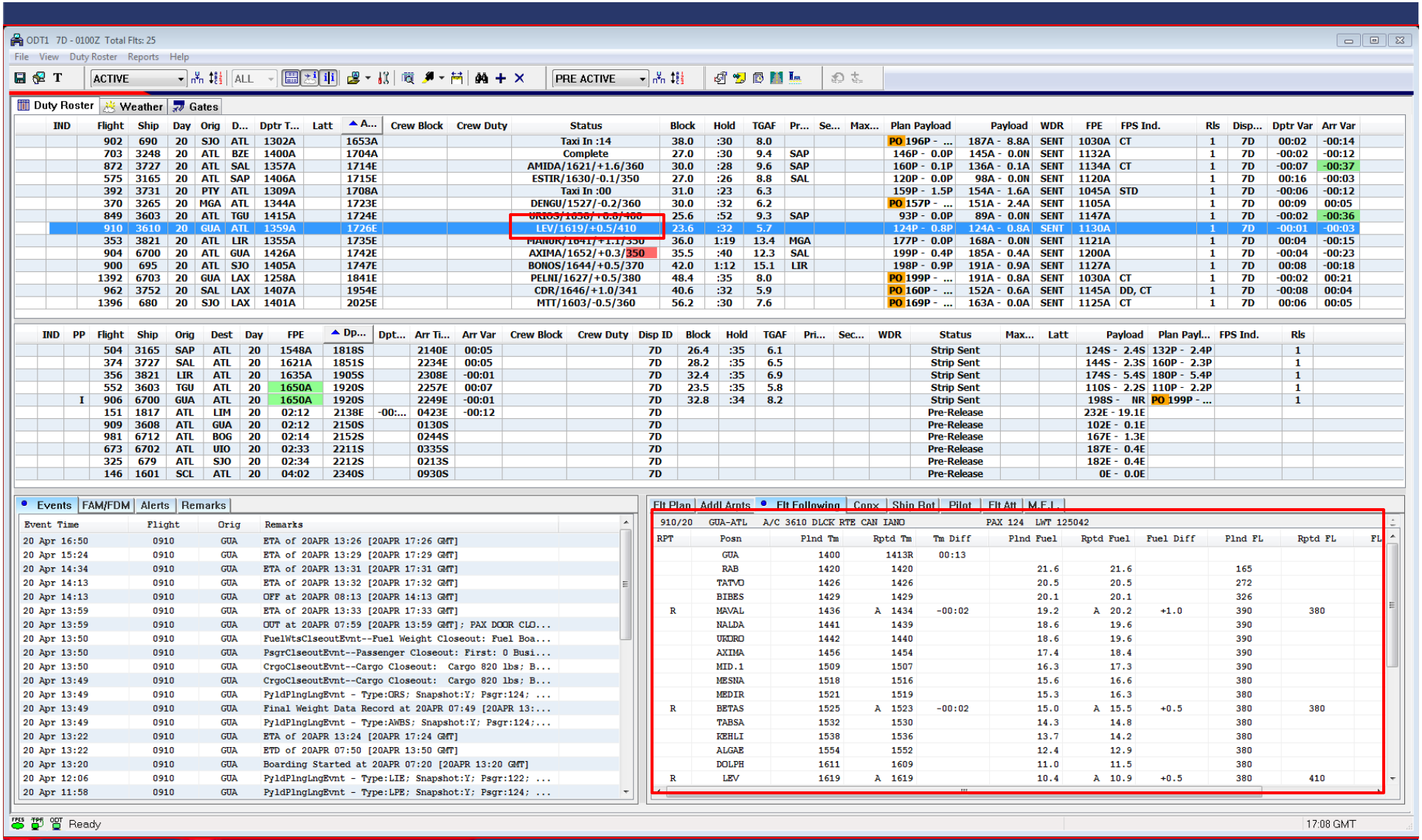
170006 KATLDALQ
(FPL-DAL2144-IS
-A321/M-SDE2E3FGIJ4RWYZ/LB1
-KATL0055
-N0461F330 SMLTZ2 WALET DCT OTK PIGLT4
-KMCO0057
-PBN/A1B1C1D1O1S1T1 NAV/RNVD1E2A1 REG/N303DN
EET/KZJX0019 KZMA0057
SEL/MQBS CODE/A32ACF)
>

17APR0006 000000 RTA
QU ATLFPDL
.CHIXCXA 170006
FF KATLDALQ
170006 KZCTZQZX
ACK FPL KZTL DAL2144 KATL 0055 KMCO

An example of the acknowledge message (ACK) as received by the FAA within the U.S. The date/time stamp with the ACK is very closely associated with the date/time stamp as sent by the Airline's Operations Center.

```
QU OCCESDL
.CHIXCXA 162122
FF KOCCDALS
162122 EUCHZMFP
-TITLE REJ -MSGTYP IDEP -FILTIM 162122 -ORIGINDT
1804162122
-BEGIN ADDR
      -FAC KOCCDALS
      -FAC KZTLZRZX
-END ADDR
-COMMENT THIS MESSAGE HAS BEEN REJECTED
AUTOMATICALLY
-ERROR EFPM220: NO EXISTING FILED FLIGHT PLAN
MATCHES THIS MESSAGE
-M
SGTXT (DEP-DAL130-KATL2120-EDDM-0)
162122
RES 1794
```

QU OCCESDL
.CHIXCXA 170035
FF KOCCDALS KATLDALQ
170035 EUCHZMFP
-TITLE ACK -MSGTYP IFPL -FILTIM 170035 -ORIGINDT 1804170035
-BEGIN ADDR
-FAC KOCCDALS
-FAC KATLDALQ
-END ADDR
-IFPLID AA00448104
-MSGTXT (FPL-DAL84-IS
-A333/H-SDE2E3FGHIJ3J5M1P2RWXYZ/LB1D1
-KATL0325
-N0485F350 PLMMR2 SPA Q6
0 JAXSN DCT CREWE DCT ENO J191 RBV DCT
RIFLE DCT YAHOO/N0483F370 DCT VITOL N45D RAFIN/M082F380 NATV
OMOKO/M082F380 NATV GUNSO/M082F380 DCT RATKA/N0464F390 N502 PIKOD
UN502 JSY UY111 INGOR/N0465F380 UM25 LUKIP
-LFPG0741 LFPO
-PBN/A1B1C1D1L1O1S1 NAV/RNVD1E2A1 SUR/RSP180 DOF/180417 REG/N814NW
EET/KZDC0037 KZNY0114
KZBW0120 KZWY0155 CZQM0215 CZQX0252 KZWY0255
CZQX0321 EGGX0501 EGTT0643 SEL/FMCL CODE/AB1979 IFP/MODESASP
ORGN/KATLDALQ RALT/CYYT LPLA EGCC RMK/ADSB AGCS TCAS II EQUIPPED NRP
USA)
170035
REG 1841



An important flight watch tool used by Delta Air Lines is the above, which includes all flights worked by a specific dispatch desk. It can be sorted by active flights vs. non-active flights. This tool will allow a dispatcher to see if his/her flights are going according to plan (fuel burn, routes, flight levels, arrival times, etc.). For example, the above highlighted flight DAL910 GUA-ATL is over LEV at 1619Z, +0.5 (indicating 500 lbs. above flight plan fuel), & at FL410. A more comprehensive comparison of flight plan vs. actual is in the lower right screen for that flight.

Over the last few months, ZHU has had numerous DAL flights from Honduras and South America with routing discrepancies. Sometimes the pilot (most often) will have direct routings starting at HRV and continue direct to various points all the way to ATL. The computer flight plan, however, will have either HRV.J37.ATL or HRV.J37.SJI..SHYRE.HOBTT2.ATL. In either case, it is not reflective of what the pilot is flying.

Other times, it will be the reverse. We will show direct fixes and the pilot will respond he was cleared via the arrival or via j37 to ATL.

What is consistent is that numerous times a week, the pilots are reporting flying different routes than the computer system for the NAS shows. We have been catching them I believe for the most part, but this is a significant issue for our facility, as we have to verify each flight to ensure accuracy and prevent a deviation.

When queried, the pilots typically respond that they were "**cleared as filed**" from the departure airport. This makes me think that maybe their FMS has incorrect or old data. Another possibility is somewhere along the way, the wrong flight plan is activated by a foreign facility. What makes this hard to catch is the incorrect routes are only in ZHU/ZTL airspace. They are correct south of our facility.

I currently only have one example in front of me, but I can get more. The latest was:

DAL552 MHTG to ATL. APRIL 4, 2018

We showed entering our airspace A770.LEV.J31.HRV.J37.KATL.
Pilot was cleared as filed and had A770.LEV.J31.HRV.J37.SJI..SHYRE.HOBTT2.KATL

An example of feedback (email) from KZHU concerning inconsistent flight plans passed on which differed from what Delta Air Lines had filed.

Thank you