

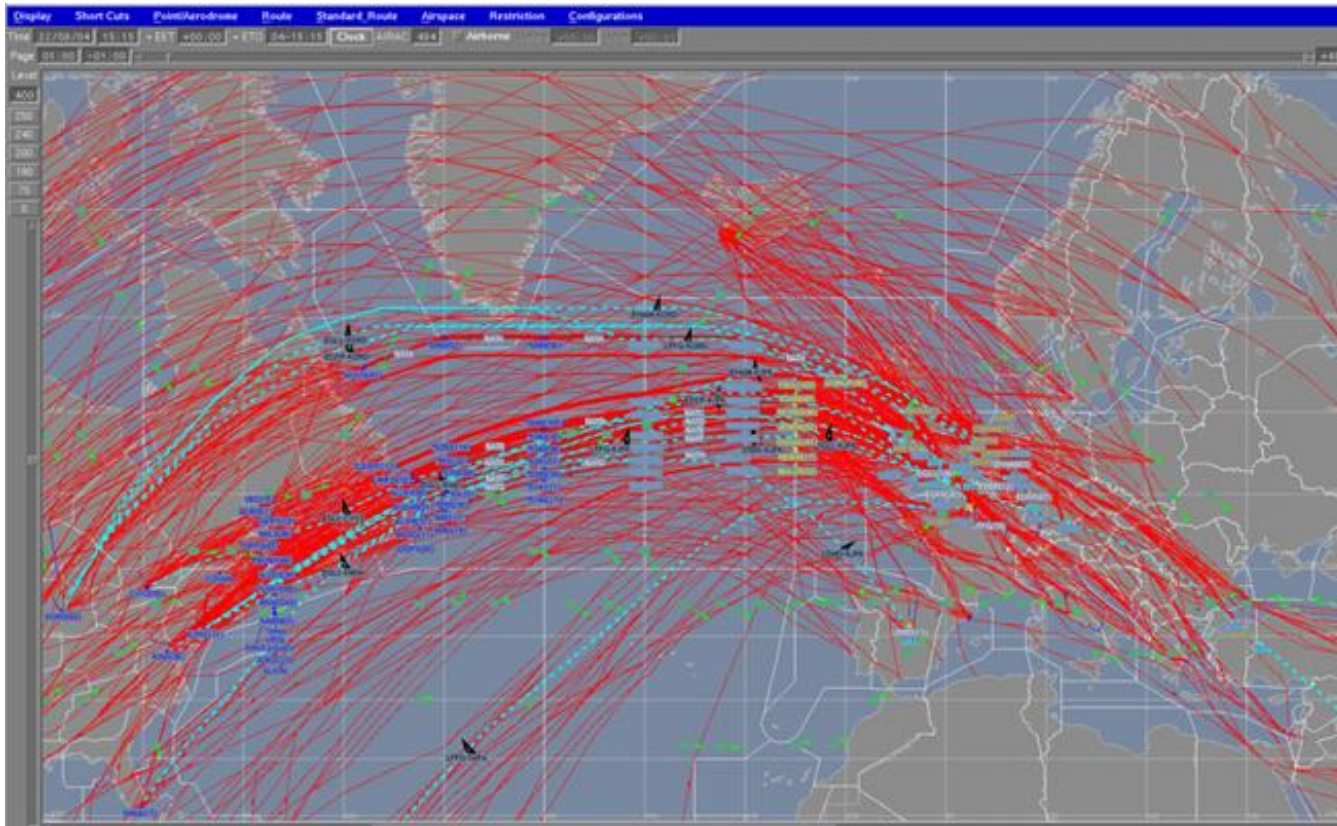
**Center for Air Transportation Systems Research  
Operationalizing Contrail Avoidance (Virtual)  
Workshop**

**Operational Perspective**

**Ryan Makings, Airline Dispatchers Federation**

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**September 7<sup>th</sup>, 2022**



AIRLINE DISPATCHERS FEDERATION

OPERATIONALIZING CONTRAIL AVOIDANCE

# DISPATCH AUTHORITY

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**No person may start a flight unless an aircraft dispatcher specifically authorizes that flight.**

*(14CFR 121.593, 595, 597)*

**No aircraft dispatcher may release a flight unless he is thoroughly familiar with reported and forecast weather conditions on the route to be flown.**

*(14CFR 121.599)*

**Each certificate holder ... shall prepare a dispatch release for each flight between specified points, based on information furnished by an authorized aircraft dispatcher. The pilot in command and an authorized aircraft dispatcher shall sign the release only if they both believe that the flight can be made with safety.**

*(14CFR 121.663)*

# DISPATCH AUTHORITY

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**The pilot in command and the aircraft dispatcher are jointly responsible for the preflight planning, delay, and dispatch release of a flight in compliance with this chapter and operations specifications.**

**The aircraft dispatcher is responsible for -**

- **Monitoring the progress of each flight;**
- **Issuing necessary information for the safety of the flight; and**
- **Cancelling or redispatching a flight if, in his opinion or the opinion of the pilot in command, the flight cannot operate or continue to operate safely as planned or released.**

*14 CFR 121.533*

# SAFETY OF FLIGHT INFORMATION

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**The aircraft dispatcher shall provide the pilot in command all available current reports or information on airport conditions and irregularities of navigation facilities that may affect the safety of the flight.**

**Before beginning a flight, the aircraft dispatcher shall provide the pilot in command with all available weather reports and forecasts of weather phenomena that may affect the safety of flight, including adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear, for each route to be flown and each airport to be used.**

**During a flight, the aircraft dispatcher shall provide the pilot in command any additional available information of meteorological conditions (including adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear), and irregularities of facilities and services that may affect the safety of the flight.**

# DOMESTIC FLIGHT CONTROL





# FLIGHT PLANNING

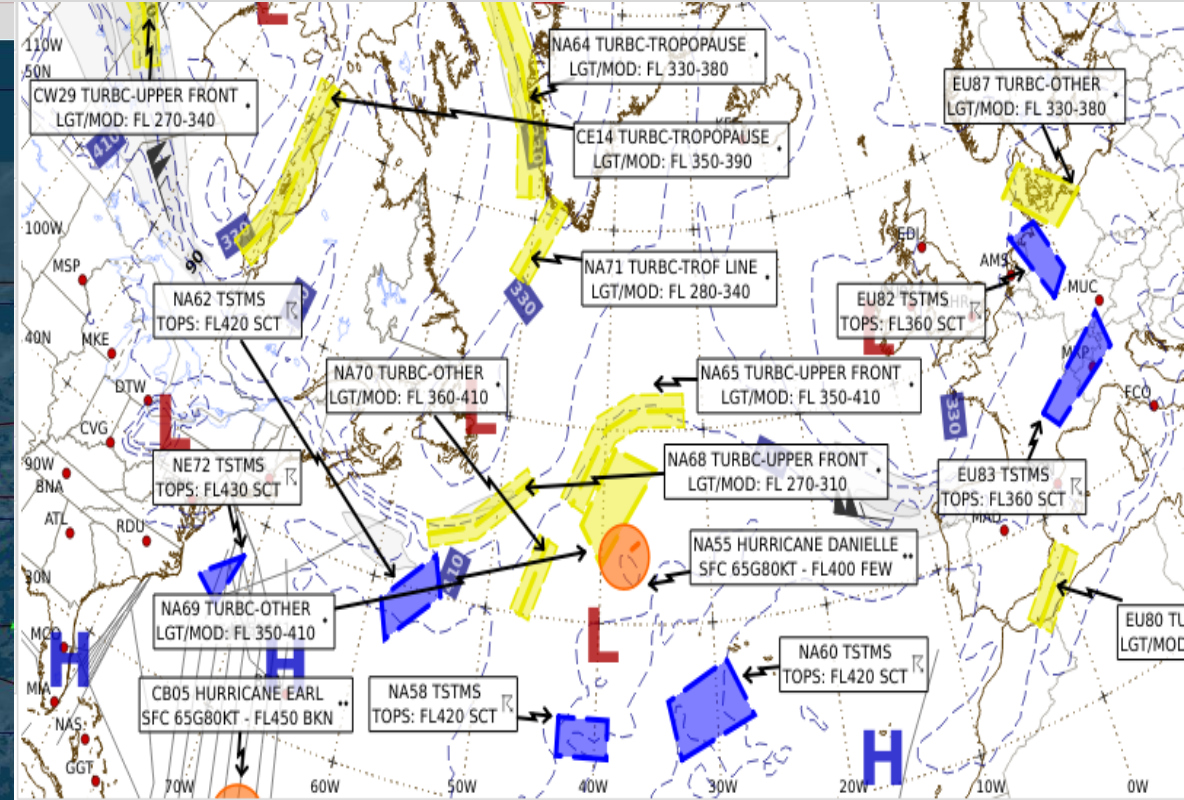
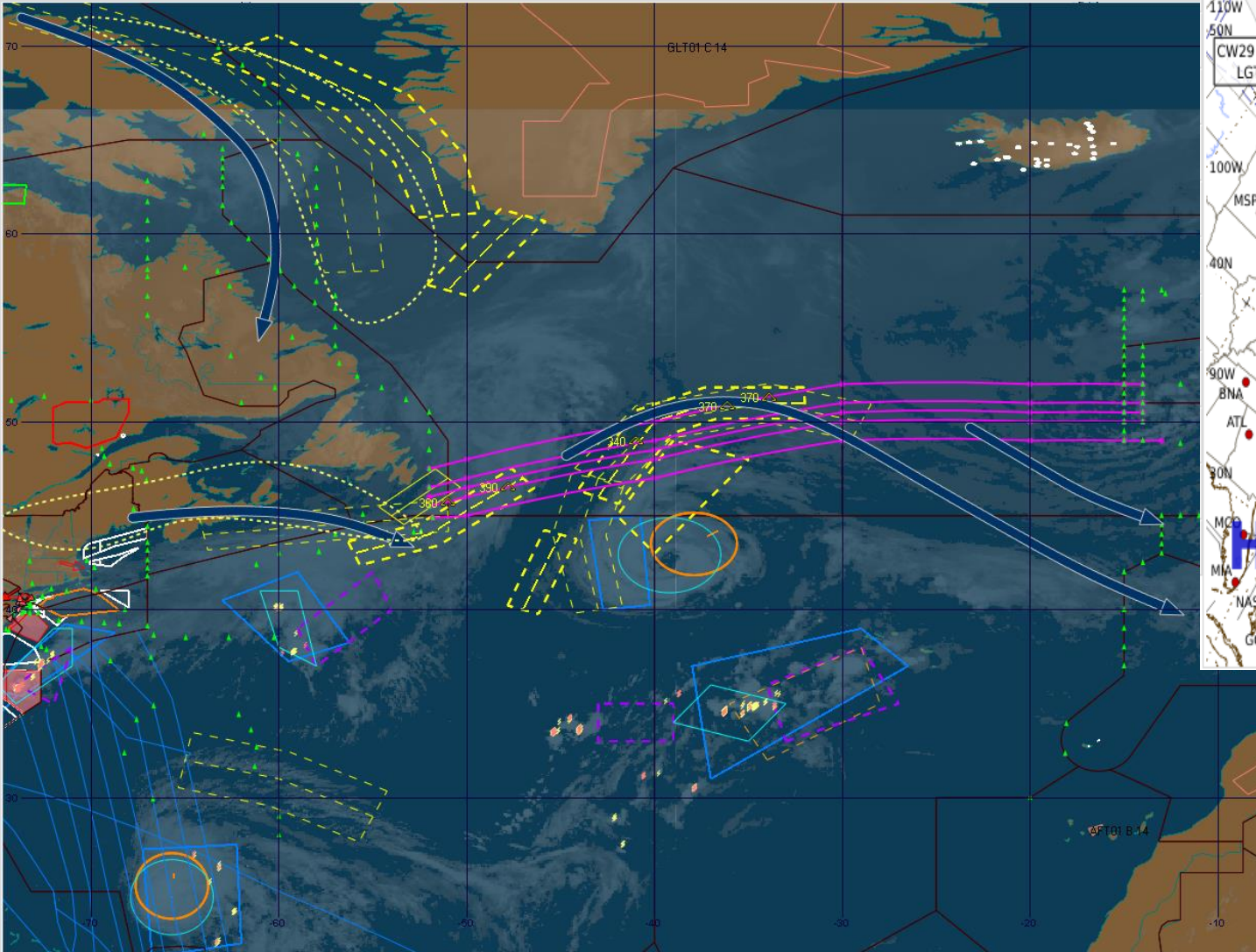
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**The Aircraft Dispatcher takes some of the following factors into account, while planning a flight:**

- ***Weather***
  - *Turbulence*
  - *Thunderstorms*
  - *Ozone*
- ***Payload***
- ***Routing***
  - *ATC Pref Routes*
  - *Overflight Permits/Costs*
  - *Letters of Agreement (US)*
  - *Traffic Volume (AFPs, etc)*
  - *Special Use Airspace*
- ***Altitude***
- ***Fuel***

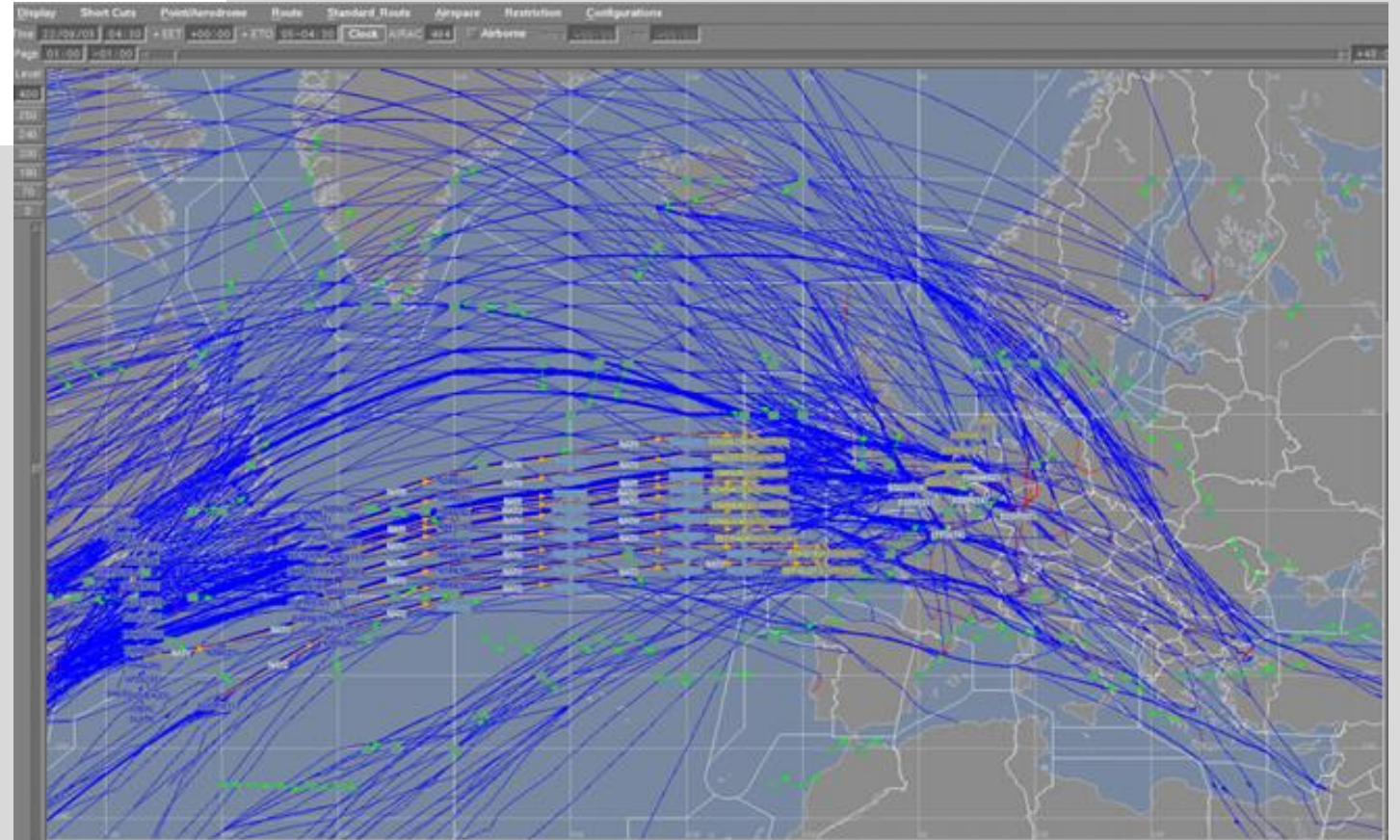


# FLIGHT PLANNING - WEATHER



# FLIGHT PLANNING – NORTH ATLANTIC OTS

```
061429 CZQXZQZX  
1(NAT-2/3 TRACKS FLS 320/400 INCLUSIVE  
SEP 07/0100Z TO SEP 07/0800Z  
PART TWO OF THREE PARTS-  
X RELIC 4630/50 4830/40 5030/30 5030/20 RODEL EPUNA  
EAST LVLS 350 360 370 380 390  
WEST LVLS NIL  
EUR RTS EAST NIL  
NAR N123A N109D-
```



# FLIGHT PLANNING – NORTH ATLANTIC OTS

TDA North Atlantic Tracks

Current UTC Time: 2022-09-05 11:23:23
Français
Home
Help
janine.mardell@delta.com

TDA - FPL Search

ACID:

Departure date:

[View FPLs](#)

TDA - Pireps Listing

[View](#)

[Disclaimer](#)

9/5/2022 (last 4 hrs)

Type: FLLatLong Received

[View last 24 hours>>](#)

TDA - Westbound NAT Loading

2022-09-05 / 1100z - 1800z
2022-09-05 starting 1100z for 07 hr [View](#)

	A GOMUP	B SUNOT	C PIKIL	D ETARI 55	E RESNO	F VENER 54	G DOGAL	H NEBIN 53	J MALOT
FL410									
FL400									
FL390	3	1	0	0	2	1	1	0	1
FL380	3	6	2	0	4	3	5	2	1
FL370	3	0	0	1	2	6	5	1	2
FL360	7	5	1	0	2	10	4	3	5
FL350	3	1	3	1	1	10	6	6	2
FL340	2	6	4		5		11		12
FL330									
FL320									
FL310									
FL300									
FL290									
Totals	22 / 22	19 / 19	10 / 10	2 / 2	16 / 16	30 / 30	32 / 32	12 / 12	23 / 23
	A/C PER ALT	A/C PER ALT	A/C PER ALT	A/C PER ALT	A/C PER ALT	A/C PER ALT	A/C PER ALT	A/C PER ALT	A/C PER ALT

[Compare](#)

**Note:** In the Totals row, the first number indicates the total aircraft for the time period selected, the second number represents the total aircraft for the complete duration of the track.

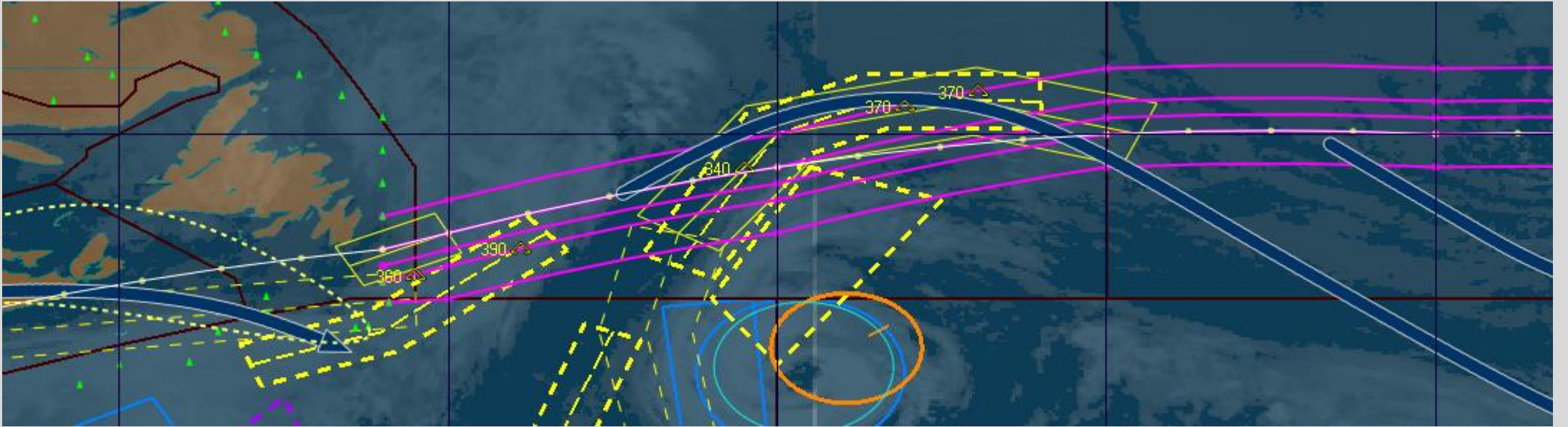
Pilot Observations: (clicking on icon in table above provides details)

- P LGT Turb or TR Ice
- P MDT Turb or LGT Ice
- P SVR, EXTR Turb or MTD, SVR Ice
- S Boundary shows effected area

SIGMET: (clicking on icon in table above provides details)

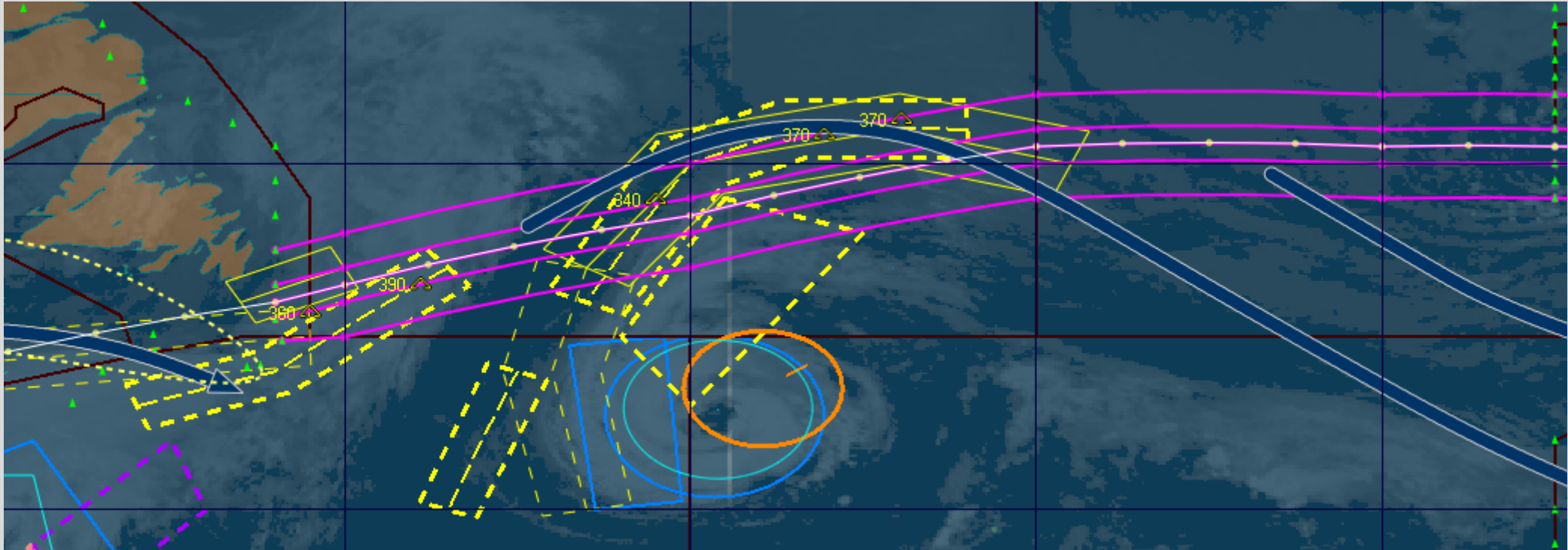
Random Routes (1100z - 1800z)	Totals
North of tracks	129
South of tracks	5

# FLIGHT PLANNING - ROUTING



A350  
Optimal Routing, No Rules  
FL390

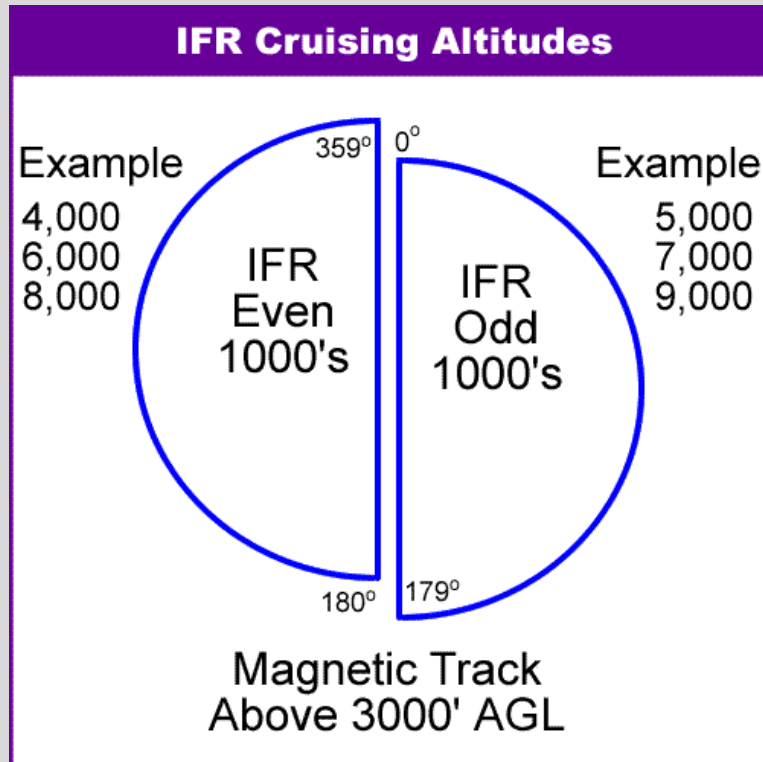
# FLIGHT PLANNING - ROUTING



A350  
NAT-X  
FL390  
+85 lbs

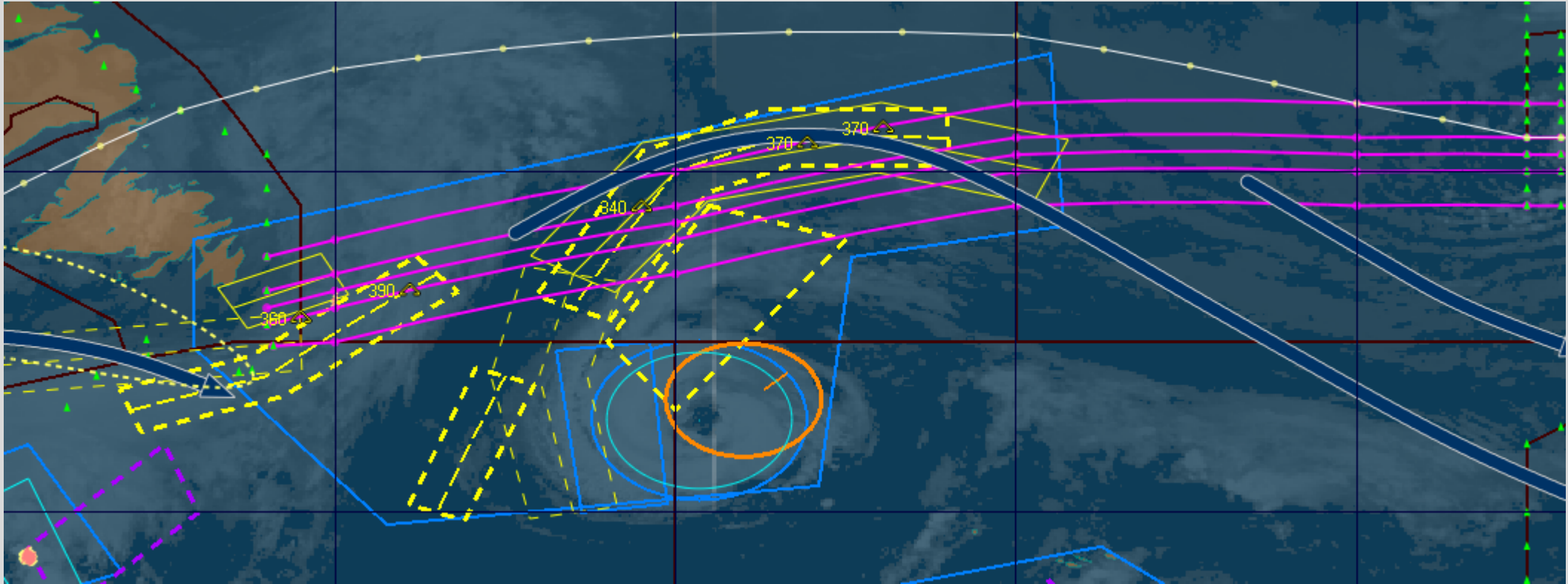
ID	Cost	Burn	Brn Diff	Trip Tm
.TRK.X	103	101240	85	07:43
.TRK.Z	266	101864	709	07:47
.TRK.Y	388	101593	438	07:45
.TRK.W	397	101616	461	07:44
.TRK.V	1612	103226	2071	07:49

# FLIGHT PLANNING - ALTITUDE



Flight Level	Burn Difference
FL390 (Opt)	0
FL330	+8520 lbs (~\$5000)
FL350	+5379 lbs (~\$2900)
FL360	+3596 lbs (~\$1900)
FL370	+2100 lbs (~\$1100)
FL380	+993 lbs (~\$400)

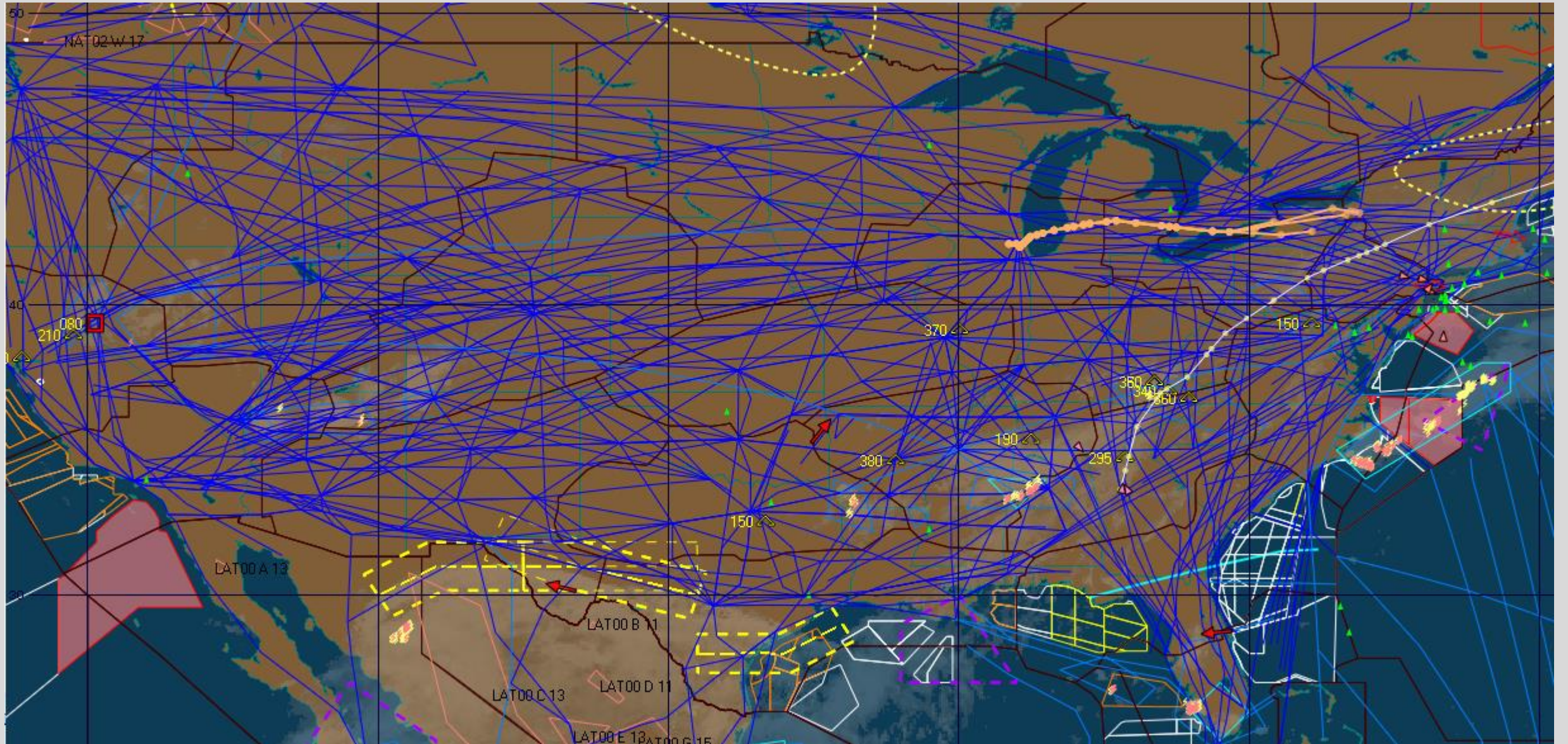
# FLIGHT PLANNING - AVOIDANCE



A350  
AVOIDANCE  
FL390  
~\$2800, 3000 lbs

ID	Cost	Burn	Brn Diff	Trip Tm
.TRK.X	103	101240	85	07:43
.TRK.Z	266	101864	709	07:47
.TRK.Y	388	101593	438	07:45
.TRK.W	397	101616	461	07:44
.TRK.V	1612	103226	2071	07:49

# ATC CONSTRAINTS





# QUESTIONS?

info@dispatcher.org

<https://www.dispatcher.org>