

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

Operational Perspective

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September 7th, 2022







AIRLINE DISPATCHERS FEDERATION

OPERATIONALIZING CONTRAIL AVOIDANCE

DISPATCH AUTHORITY

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)

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

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.

14 CFR 121.601







FLIGHT PLANNING

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

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FLIGHT PLANNING – NORTH ATLANTIC OTS

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FLIGHT PLANNING - ROUTING



A350 Optimal Routing, No Rules FL390

FLIGHT PLANNING - ROUTING

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250	ID	Cost	Burn	Brn Diff	Trip Tm
	.TRK.X	103	101240	85	07:43
AT-X	.TRK.Z	266	101864	709	07:47
390	.TRK.Y	388	101593	438	07:45
	.TRK.W	397	101616	461	07:44
35 IDS	.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?

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