CLEARED TO LAND

Newsletter For The Pilots of MidContinent Airlines May 2019

View From the Top

A Message from Michael Collier / CEO

Welcome to the May issue!

Action Item Update

This month I'm pleased to report that we've made some significant strides towards improving our web experience. A big "THANK YOU" goes to John Binner (P383) for spending a couple of days getting some new operational tools and systems set up!

Our main website will still be http://www.midconair.net but the operational side will now be supported at http://www.midconair.net/vam

The use of the previous operation at midconair.net/mca that was driven from the phpVMS software is discontinued effective April 20th.

If you have not yet registered yourself in the new system, please do so as soon as possible.

In This Issue

Action Item Update

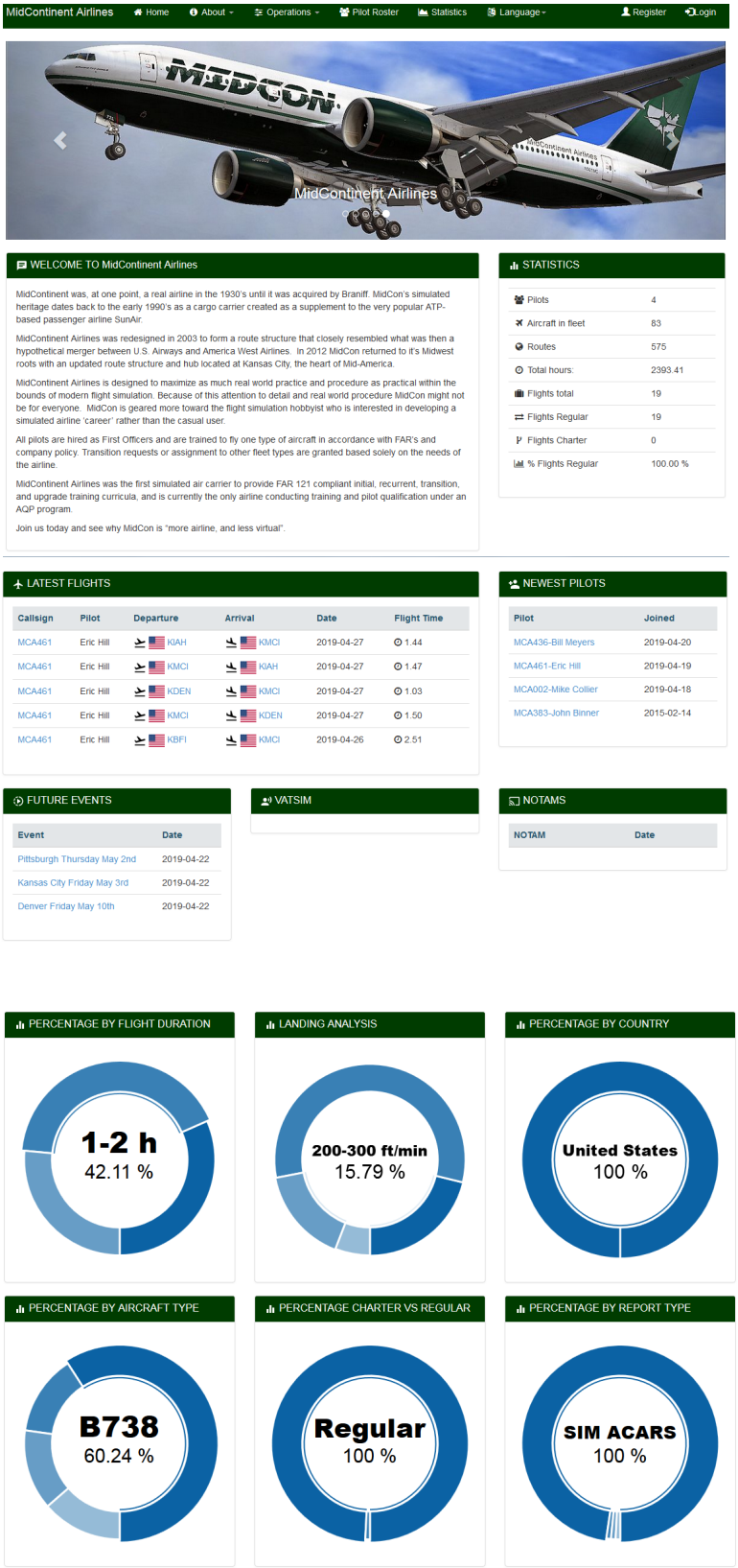
Here's snapshot of the front page on the new ops side of the house.

We still have high hopes for PMDG's Global Flight Ops, but in the meantime this isn't half bad!

This system also does quite a bit of statistic tracking as well.

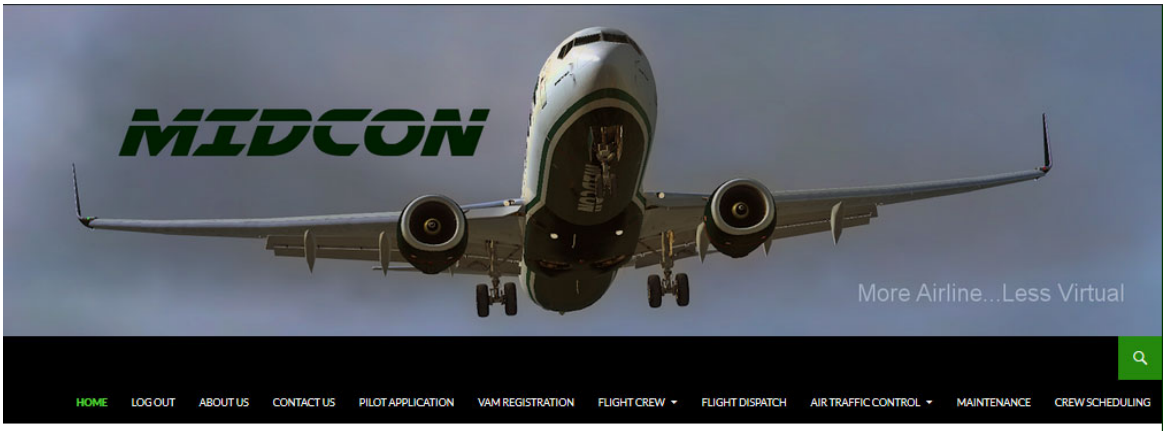
Our previous "branded" ACARS unit doesn't work with this so you will need to download and install the free SIMACARS unit.

www.simacars.net



Action Item Update

Also, the existing website has been spruced up with a fresh new look to more closely match the new VAM operational pages.



MIDCON TO EXHIBIT AT FLIGHTSIMEXPO

APRIL 28, 2019 LEAVE A COMMENT EDIT

April 28th, 2019

We are pleased to announce that MidCon will be an exhibitor at FlightSimExpo during the weekend of June 7-9 in Orlando Florida.

Join us for North America's largest flight simulation event!

Click the logo below to register and view the list of sponsors and exhibitors.

FSExpo

- Home
- Log Out
- About Us
- Contact Us
- Pilot Application
- VAM Registration
- Flight Crew
  - Live Flights
  - Pilot Seniority List
  - Hubs
  - Fleet
  - Downloads
  - Crew Scheduling

DC3

FlightSimExpo

We have received our confirmation for our FSExpo exhibition booth.

Thank you to everyone who registered with a MidCon affiliation to help make this possible.

For those that are attending, we look forward to seeing you there!

Mark Your Calendars!

Flightline News

Our first deliveries of the 787 have entered service with only a few remaining for delivery in May.

Work continues on the scheduling side in preparation of launching the regional operation.

See the fleet news for the reveal on our special CRJ livery!

Fuel-Smart

Highest

FPO - $3.84/gallon

Lowest

BRU - $1.97/gallon

Hubs

JFK - $2.03/gallon

LAX - $2.21/gallon

MCI - $2.08/gallon

MIA - $2.13/gallon

PHX - $2.06/gallon

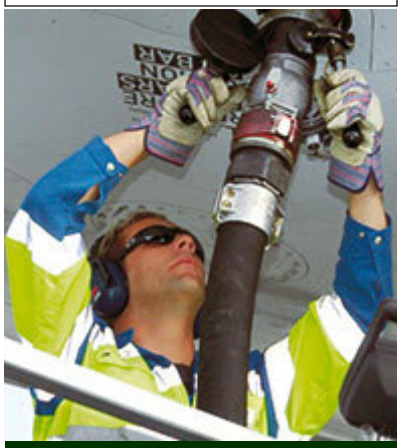
March Arrival Fuel

Average gate arrival fuel by fleet

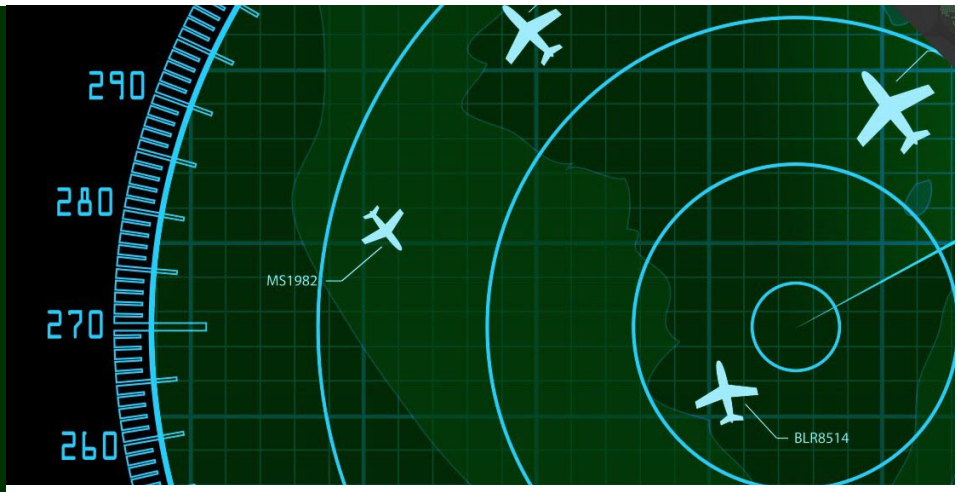
737 - 6,337 lbs.

777 - 20,345 lbs.

787 - 15,564 lbs.



On The Radar



May VATSIM ATC Events of interest

Thursday May 2nd:

- ZOB featuring PIT

Friday May 3rd:

- ZKC featuring MCI

Monday May 6th:

- ZFW featuring OKC

Friday May 10th:

- ZDV featuring DEN

Saturday May 11th:

- ZMA featuring MIA

Sunday May 12th:

- ZJX featuring JAX

Friday May 17th:

- ZME featuring MEM

Sunday May 19th:

- ZTL featuring ATL

Watch the EVENTS section of the VAM website for more VATSIM areas of interest for MCA!

Center NOTAMs

In the Spring, a young man's fancy turns lightly to thoughts of...figuring out how to get to the North Atlantic Tracks!

In the March issue, we looked at the FAA Advisory Database. We'll turn to that again this month in order to look at one advisory in particular.

https://www.fly.faa.gov/adv/advAdvisoryForm.jsp

You can uncheck everything except "Other Kinds of Advisories". This will narrow your search. When the results list comes back, you are looking for the one that says **NATOTS_RQD**.

OTHER ADVISORIES

NUMBER	CONTROL ELEMENT	DATE	BRIEF TITLE	SEND TIME
064	DCC	04/27/19	TCA/HOTLINE WEB PAGE TERMINATION	04/27/19 23:49
063	DCC	04/27/19	OPERATIONS PLAN	04/27/19 23:20
062	DCC	04/27/19	[illegible]	[illegible]
037	DCC	04/27/19	VOLCANIC ACTIVITY BULLETIN - REVISED	04/27/19 15:54
035	DCC	04/27/19	OPERATIONS PLAN	04/27/19 15:30
032	DCC/ZBW	04/27/19	NATOTS_RQD	04/27/19 14:56
031	DCC	04/27/19	US/MEXICO OUTLOOK_FYI	04/27/19 14:48
029	EWR/ZNY	04/27/19	EWR ARRIVAL DELAYS	04/27/19 14:15

This advisory is published on a daily bases by Boston Center/ZBW typically some-time between 1400-1500 Zulu. European Dispatchers simply call it the "Boston Advisory".

This will provide a detailed route description to join up with your track of choice.

Center NOTAMs

Click on the link for the advisory number to display the text.

In our example, it's advisory 32, so click that.

OTHER ADVISORIES

NUMBER	CONTROL ELEMENT	DATE	BRIEF TITLE	SEND TIME
064	DCC	04/27/19	TCA/HOTLINE WEB PAGE TERMINATION	04/27/19 23:49
063	DCC	04/27/19	OPERATIONS PLAN	04/27/19 23:20
062	DCC	04/27/19	45M CLOSURE EXTENDED ROD	04/27/19 23:16
037	DCC	04/27/19	VOLCANIC ACTIVITY BULLETIN - REVISED	04/27/19 15:54
035	DCC	04/27/19	OPERATIONS PLAN	04/27/19 15:30
032	DCC/ZBW	04/27/19	NATOTS_RQD	04/27/19 14:56
031	DCC	04/27/19	US/MEXICO OUTLOOK_FYI	04/27/19 14:48
029	EWR/ZNY	04/27/19	EWR ARRIVAL DELAYS	04/27/19 14:15

Although the advisory provides routing information departing several east coast airports, we'll focus on JFK.

PFPX has suggested NATX as our route for best time tonight, and based on weather, we'll accept that track.

This pretty much takes all the guesswork out of trying to figure out an appropriate route to join up with your track.

ATCSCC Advisory

ATCSCC ADVZY 032 DCC/ZBW 04/27/2019 NATOTS_RQD

RAW TEXT:

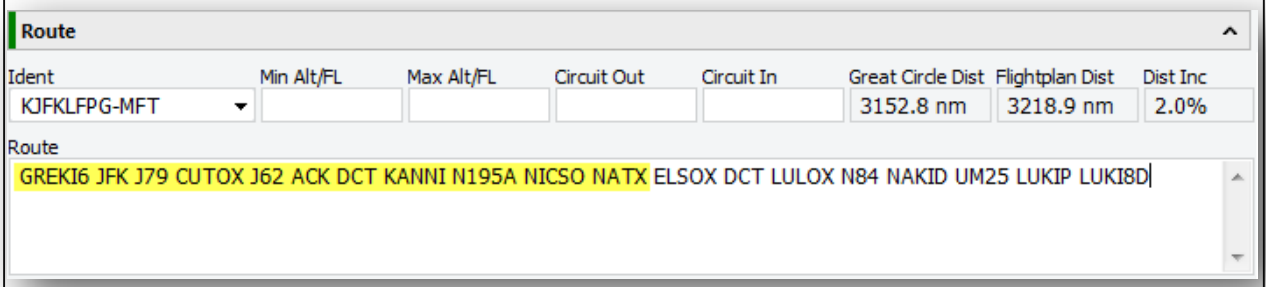
```
EVENT TIME: 27/2100 - 28/0500
ZBW NORTH ATLANTIC ADVISORY FOR 04/27/19 2100Z - 04/28/19 0500Z

NOTE: CERTAIN TRACKS HAVE MORE THAN ONE OPTION. USERS MAY FILE
EITHER OR BE TACTICALLY REROUTED.
------------------------------------------------------------------
JFK NORTH ATLANTIC DEPARTURES MUST FILE THE FOLLOWING ROUTES TO
MINIMIZE DEPARTURE DELAYS:

TRACK P/  JFK..GREKI..JUDDS..MARTN..QUBIS..CUDDY.NATP
TRACK Q/  JFK..GREKI..JUDDS..MARTN..TAFFY.N681A.JANJO.NATQ
TRACK R/  JFK..GREKI..JUDDS..MARTN..TOPPS.N441A.TUDEP.NATR
TRACK S/  JFK..MERIT..HFD..PUT..EBONY.N381B.ALLRY.NATS
TRACK S/  JFK..BETTE..ACK..EBONY.N381B.ALLRY.NATS
TRACK T/  JFK..BETTE..ACK..ALLEX.N353B.BUDAR.NATT
TRACK U/  JFK..BETTE..ACK..TUSKY.N321A.ELSIR.NATU
TRACK V/  JFK..BETTE..ACK..BRADD.N255A.JOOPY.NATV
TRACK W/  JFK..HAPIE..YAHOO..KANNI.N225A.MUSAK.NATW
TRACK X/  JFK..HAPIE..YAHOO..WHALE.N193A.NICSO.NATX
TRACK Y/  JFK..HAPIE..YAHOO..VITOL.N133A.PORTI.NATY
```

Departing JFK for Track X/ JFK..HAPIE..YAHOO..WHALE.N193A.NICSO.NATX

Center NOTAMs

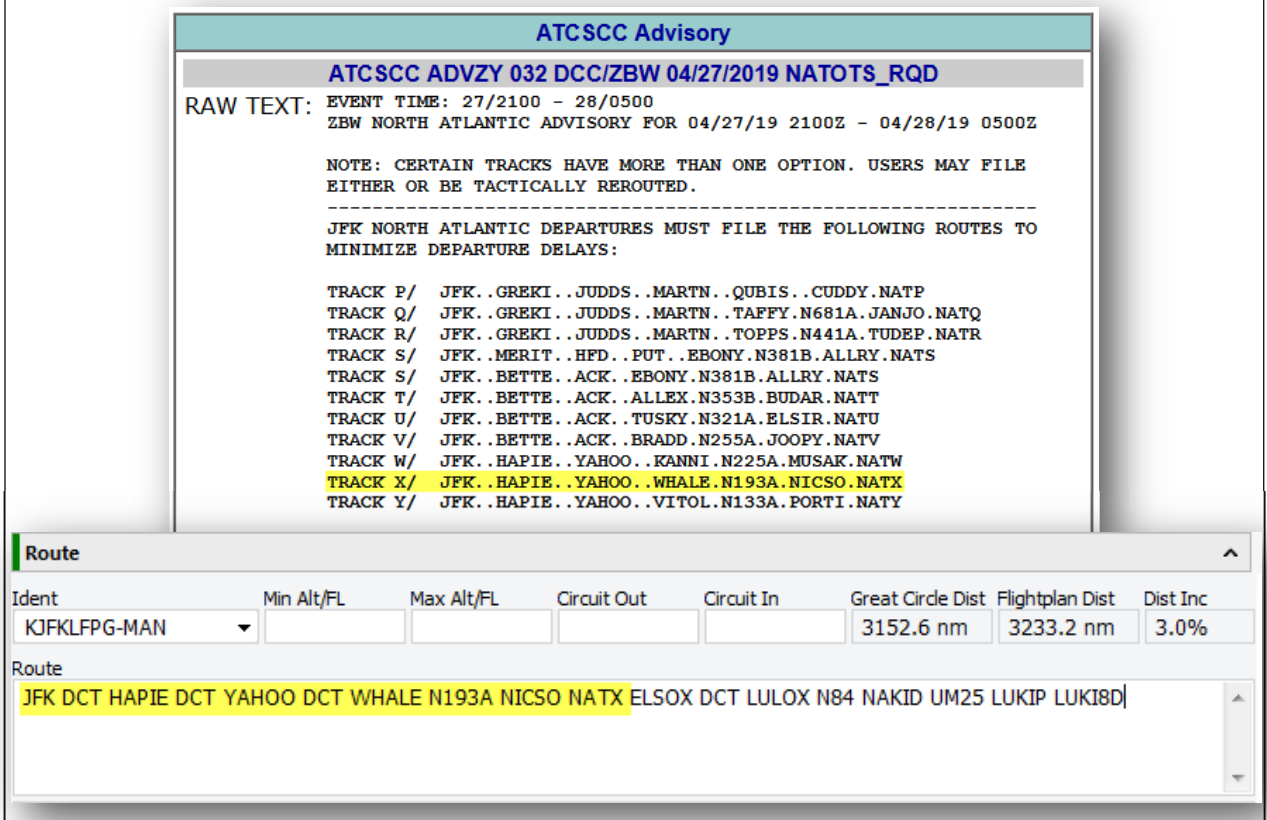
PFPX does a pretty good job of generating a route, but it does have limitations. It does not take advisories into consideration.

The auto-generated route from PFPX gave us this:



While we end up at NICSO for the track entry point, how we get there is completely non-compliant with the advisory.

Now that we know where to look to find this information, it's a simple matter to adjust the PFPX route to match.



Center NOTAMs

Also, make sure that you look at your track message closely.

All flight levels may not be available for your track.

In the example to the right, flight levels 320/330/340/400 are not available on NATW.

Don't ignore the remarks at the end of the track message either, lots of good info there!

```
V JOOPY 49/50 51/40 52/30 52/20 LIMRI XETBO
EAST LVLS 320 330 340 350 360 370 380 390 400
WEST LVLS NIL
EUR RTS EAST NIL
NAR N269A N255A-

W MUSAK 4830/50 5030/40 5130/30 5130/20 ADARA LEKVA
EAST LVLS 350 360 370 380 390
WEST LVLS NIL
EUR RTS EAST NIL
NAR N237A N225A-

X NICSO 48/50 50/40 51/30 51/20 DINIM ELSOX
EAST LVLS 320 330 340 350 360 370 380 390 400
WEST LVLS NIL
EUR RTS EAST NIL
NAR N211E N193A-
```

```
REMARKS:
1.AMMENDMENT DUE 50W CO-ORD ON TRACK R. THE TMI IS 118A  AND
 OPERATORS ARE
REMINDED TO INCLUDE THE NUMBER AS PART OF THE OCEANIC CLEARANCE READ
 BACK.
2.OPERATORS ARE REMINDED THAT ADS-C AND CPDLC ARE MANDATED FOR
LEVELS 350-390 IN NAT AIRSPACE.
3.PBCS OTS LEVELS 350-390. PBCS TRACKS AS FOLLOWS
TRACK S
TRACK T
TRACK U
TRACK V
TRACK W
TRACK X
END OF PBCS OTS.
4.CLEARANCE DELIVERY FREQUENCY ASSIGNMENTS FOR AIRCRAFT OPERATING
FROM AVPUT TO TALGO INCLUSIVE:AVPUT TO LIBOR 132.02,
MAXAR TO VESMI 134.2, AVUTI TO JANJO 128.7,KODIK TO TUDEP 135.45,
UMESI TO JOOPY 135.05, MUSAK TO SUPRY 128.45,RAFIN TO TALGO 119.42.
5.80% OF NAVIGATIONAL ERRORS RESULT FROM POOR COCKPIT PROCEDURES
ALWAYS CARRY OUT PROPER WAYPOINT PROCEDURES.
6.OPERATORS ARE ADVISED THAT VERSION 24 OF THE GANDER DATA LINK
OCEANIC CLEARANCE DELIVERY CREW PROCEDURES IS NOW VALID AND
AVAILABLE AS NAT OPS BULLETIN 2015-004 ON THE WWW.PARIS.ICAO.
INT WEBSITE.
7.OPERATORS ARE REMINDED THAT EASTBOUND AIRCRAFT INTENDING TO
OPERATE IN THE OTS ARE REQUIRED TO COMPLY WITH NAR FLIGHT
PLANNING RULES AS DEFINED IN THE CANADA FLIGHT SUPPLEMENT
OR WITH ROUTES AS CONTAINED IN THE DAILY BOSTON ADVISORY.
8.OPERATORS ARE ADVISED TO CONSULT NOTAM A0596/19 REGARDING
ADS-C.-
```

Hopefully this provides a little guidance when planning your next North Atlantic journey! See the Dispatch Sector article on the following page as we continue our JFK-CDG planning!

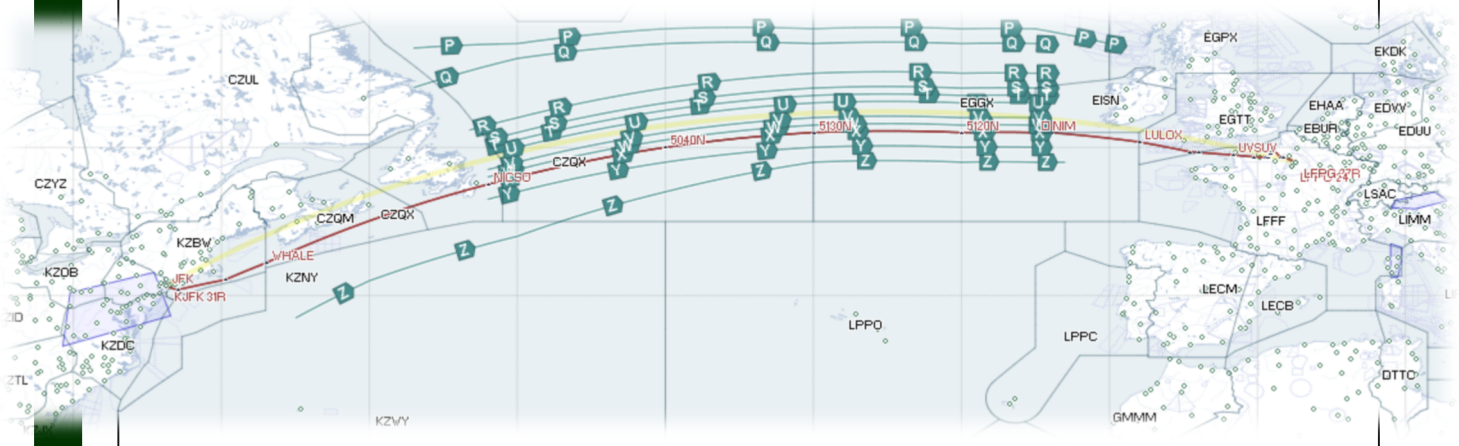
Dispatch Sector

News from the Operations Control Center

Continuing our discussion from the “Center NOTAMs” article, we learned about the Boston Advisory for route planning guidance out to the tracks.

Here’s our eastbound track structure today. Our route is built, so we need to look at what we’re going to use for EDTO (Extended Diversion Time Operations), i.e. ETOPS, enroute alternates.

We need to make sure the route falls within the maximum diversion time circles for the operating rule being used.



Advisory Circular 120-42B states that *“It should be a goal of all two-engine airplane flight planning to operate to the shortest diversion time that provides the widest range of options in the event of a diversion...”*

That means, given the choice between 120-minute or 180-minute ETOPS, we should consider 120-minute operations first. We always want to plan to minimize the time spent on a single engine to the extent possible.

Is it “easier” to plan a 180-minute operation? Some Dispatchers will say yes. One enroute alternate on the Canadian side, and one enroute alternate on the European side will cover the entire North Atlantic with only one equal time point for the crew, and there’s fewer airports to monitor for weather changes.

However, planning 180-minutes vs. 120-minutes simply because it’s “easier” does not meet the guidance set forth in 120-42B.

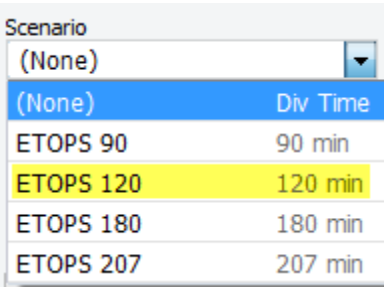
Dispatch Sector

News from the Operations Control Center

There are times, based on weather forecasts, where 120-minute operations are not legal, or not prudent, and that in turn forces us into 180-minute operations, and that's fine. The only thing AC 120-42B states is that it should be the ***goal*** to plan the shortest time possible.

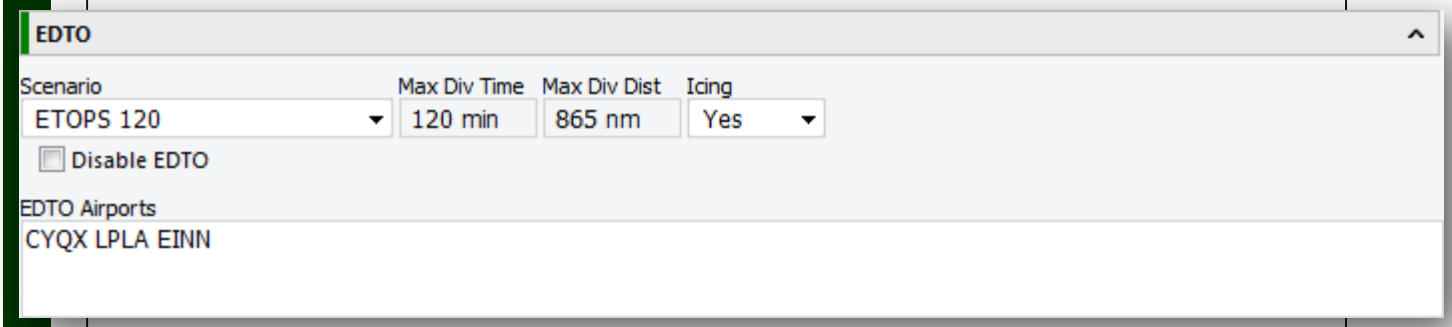
We at least have to evaluate it.

Alternate minimums are another topic of discussion, and for the sake of this article we'll assume the weather at our enroute alternates is acceptable for our operation.



For 120-minute operations we need something mid-ocean. The two most common choices are Keflavik Iceland (BIKF), and Lajes Air Base (LPLA), in the Azores. Typically if we're on a southerly track, or the entire track structure is south, then it favors LPLA. If on a northerly track, or the track structure is north, then it will favor BIKF. Since we're a little farther south today we'll use LPLA. We'll also use Gander Newfoundland (CYQX) on the Canadian side, and Shannon Ireland (EINN) on the European side.

PFPX will perform an area of operations check based on the airports entered and the operating rule selected, and will turn green if the requirements are met.



Dispatch Sector

News from the Operations Control Center

Looking at the map, we can view the 865 nm / 120-minute maximum diversion time circles.

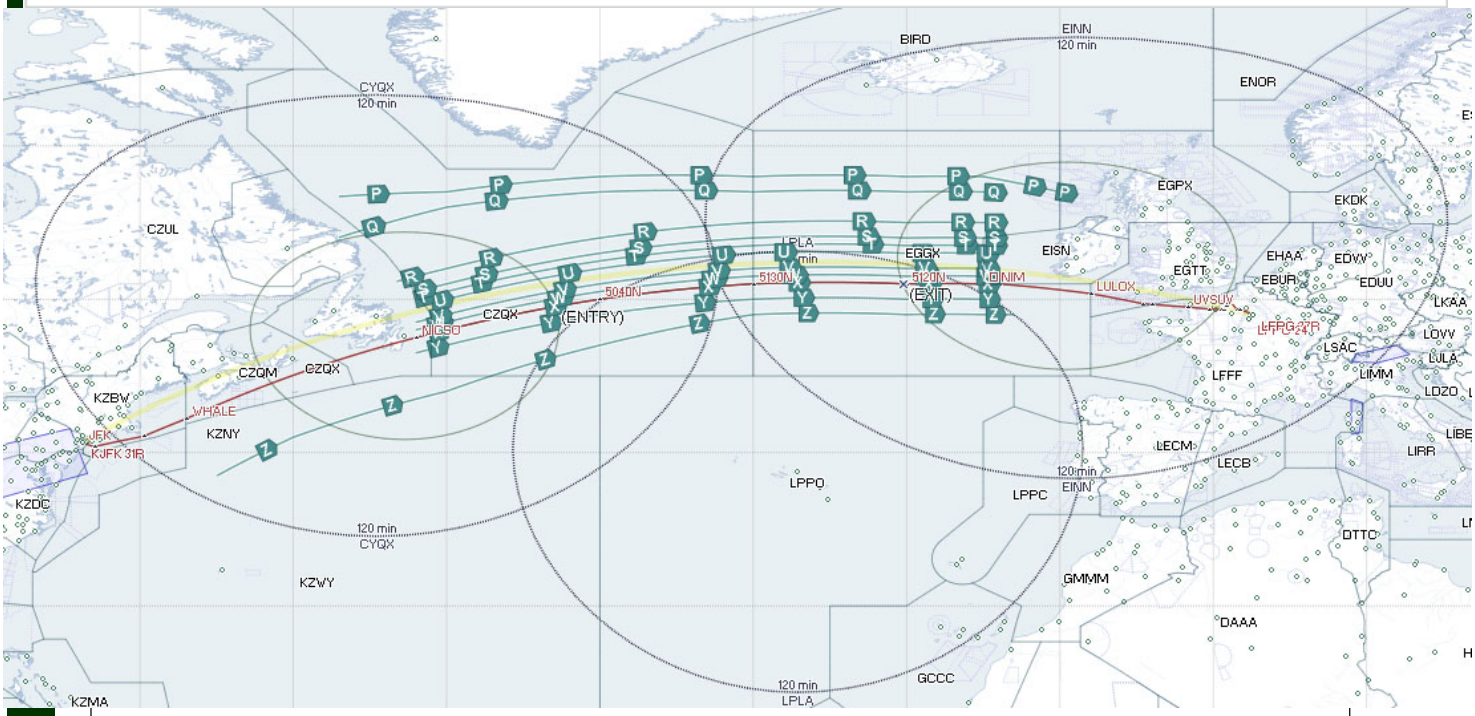
EDTO

Scenario	Max Div Time	Max Div Dist	Icing
ETOPS 120	120 min	865 nm	Yes

Disable EDTO

EDTO Airports

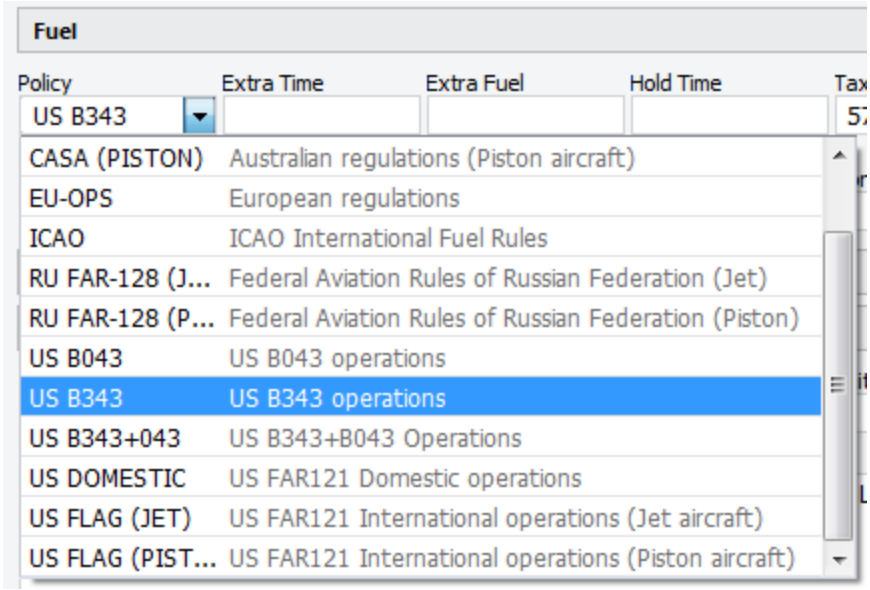
CYQX LPLA EINN



Dispatch Sector

News from the Operations Control Center

For fuel planning we'll want US B343. Differences in reserve fuel will be a topic for another article, but suffice to say B343 will yield a 5% enroute reserve (E/RSV) on the flight plan vs. 10%.



Let's run an info plan and look at the ETP data blocks. Note that it states it meets the 120 minute area of operations rule. We have an engine-out time of 01:38 at our ETP for Gander/Lajes, and 01:37 at our ETP for Lajes/Shannon.

```
ETP / ETOPS ENROUTE ALTERNATE DATA
MEETS 120 MINUTE AREA OF OPERATIONS RULE
***FULL ICE 120 MIN/320 KIAS***
ONE ENGINE OUT
ETP FOR CYQX/LPLA N50 28.9 W036 15.1  0324 FROM JFK
ETP / FOB  57575 CRITICAL FUBO  37445
ENG OUT TIME FROM ETP 0138 DESC 1EO84/320 CRUZ 1EO320 FLVL 292
TO CYQX N48 56.2 W054 34.1  DIST  716 NM  WC HD032 TT 270
TO LPLA N38 45.7 W027 05.5  DIST  805 NM  WC TL023 TT 148

ONE ENGINE OUT
ETP FOR LPLA/EINN N50 56.3 W031 02.4  0347 FROM JFK
ETP / FOB  52268 CRITICAL FUBO  37055
ENG OUT TIME FROM ETP 0137 DESC 1EO84/320 CRUZ 1EO320 FLVL 295
TO LPLA N38 45.7 W027 05.5  DIST  751 NM  WC HD006 TT 166
TO EINN N52 42.1 W008 55.5  DIST  825 NM  WC TL040 TT 074
```

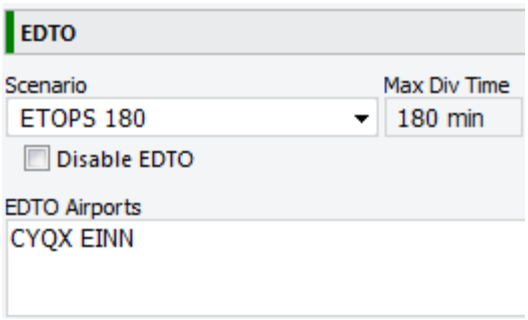
Dispatch Sector

News from the Operations Control Center

Now let's compare that to a 180-minute plan to see what the difference in engine-out times would be.

We'll simply remove LPLA, keep CYQX and EINN, change it to ETOPS 180 and run another info plan.

Our ETP meets the 180-minute area of operations rule with an engine-out time of 01:50. An increase of 12 and 13 minutes respectively vs. the 120-minute engine-out times.



12 additional minutes doesn't sound like much until you are at 30 West in the dark with one engine shut down.

That's it for this month.

Next month, we'll take a look at alternate minimums!

```
ETP / ETOPS ENROUTE ALTERNATE DATA
MEETS 180 MINUTE AREA OF OPERATIONS RULE
***FULL ICE 180 MIN/320 KIAS***
ONE ENGINE OUT
ETP FOR CYQX/EINN N50 42.6 W033 58.3  0334 FROM JFK
ETP / FOB  55225 CRITICAL FUBO  41473
ENG OUT TIME FROM ETP 0150 DESC 1EO84/320 CRUZ 1EO320 FLVL 293
TO CYQX N48 56.2 W054 34.1  DIST  803 NM  WC HD033 TT 270
TO EINN N52 42.1 W008 55.5  DIST  936 NM  WC TL039 TT 073
```

```
ETP / ETOPS ENROUTE ALTERNATE DATA
MEETS 120 MINUTE AREA OF OPERATIONS RULE
***FULL ICE 120 MIN/320 KIAS***
ONE ENGINE OUT
ETP FOR CYQX/LPLA N50 28.9 W036 15.1  0324 FROM JFK
ETP / FOB  57575 CRITICAL FUBO  37445
ENG OUT TIME FROM ETP 0138 DESC 1EO84/320 CRUZ 1EO320 FLVL 292
TO CYQX N48 56.2 W054 34.1  DIST  716 NM  WC HD032 TT 270
TO LPLA N38 45.7 W027 05.5  DIST  805 NM  WC TL023 TT 148

ONE ENGINE OUT
ETP FOR LPLA/EINN N50 56.3 W031 02.4  0347 FROM JFK
ETP / FOB  52268 CRITICAL FUBO  37055
ENG OUT TIME FROM ETP 0137 DESC 1EO84/320 CRUZ 1EO320 FLVL 295
TO LPLA N38 45.7 W027 05.5  DIST  751 NM  WC HD006 TT 166
TO EINN N52 42.1 W008 55.5  DIST  825 NM  WC TL040 TT 074
```

Weather Wise

Though clear air turbulence (CAT) diminishes this time of year as the jetstream weakens and shifts north, **convectively induced turbulence (CIT)** encounters increase.

While high resolution weather prediction models have improved detection of impactful CAT events, CIT encounters continue to be a major challenge due to rapid changes in growth and development. Studies estimate that at least 50% of significant turbulence encounters are related to convection and an early look at statistics involving flight attendant injuries show similar, if not even higher, percentages associated with CIT.

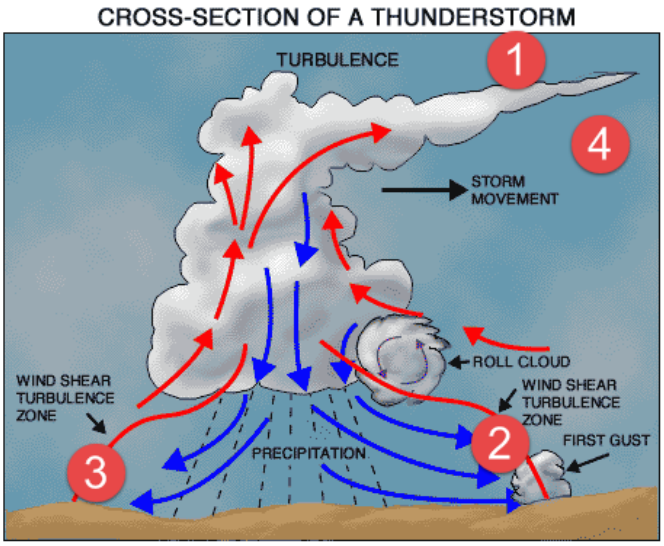
CIT encounters are not the result of flying directly through the thunderstorm! This oversimplified schematic details the multiple turbulence hazards in a typical storm:

The numbered areas are common turbulence hazard areas.

Area 1: While we don't fly through the core of the storm, we take the path of least resistance (less intense radar returns) which often leads to flying in and near storm tops that have pushed downstream with the winds at altitude. In or near the anvil of a storm is very turbulent.

Areas 2 and 3: This is low level turbulence associated with shifting winds near the surface, impacting the early ascent and late descent flight segments. In area 2 surface winds have shifted dramatically ahead of an approaching thunderstorm, but winds right above the surface may be 180 degrees the opposite, creating a narrow zone of windshear.

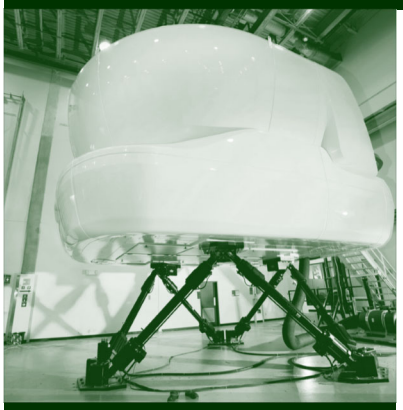
Area 4: This is the most complex. Large thunderstorm complexes often create and propagate turbulent atmospheric waves well away from a thunderstorm core. These are occasionally forecast as CAT, but initiate from large convective complexes.



Weather Wise

Minimizing the Impact of CIT

- When convective areas are forecast in TAFs or in SIGMETs, CIT is possible even if nothing is obvious yet.
- If able, use weather radar and scan vertically to look for either developing or dissipating convection (frequently dominated by light echoes).
- Some airports, like DEN, with significant terrain features nearby, require special vigilance. When in doubt, assume conditions are turbulent.
- Keep all parties aware of latest conditions via *communication* between dispatch & meteorology, dispatch & pilots and pilots & flight attendants.



Training Talk

Continuing with our emergency and safety theme I'd like to talk about what the industry now terms "Threat and Error Management." While some of this applies to the crew environment, much of it still is applicable to our operation as one of the biggest threats is **YOU** the pilot. So, lets get to know this TEMs (Threat and Error Management system) model, shall we?

A threat is an event, external to a pilot or flight crew, which increases operational complexity and occurs outside the influence of the flight crew. Threats usually require immediate crew attention to maintain safety margins. Threats are categorized into two primary classes: environmental and airline.

Environmental

Environmental threats stem from/originate from conditions outside the airline's control (weather, ATC, airports, terrain, etc.)

Airline

Airline threats are typically within the airline's control (aircraft, cabin, dispatch, ground/ramp, ops pressure, etc.)

Since we don't yet operate in a fully crew-oriented environment the human factors associated with crew threats isn't an issue for us. But errors are!

An **ERROR** is any practice that deviates from a written policy or procedure, or deviates from the crew's intention. Written policies and procedures are easily defined. A deviation from crew intention is whenever the crew's actions are contrary to their set expectations. For example, while setting up to fly an RNAV approach, the crew communicates their intention to be fully configured and on approach speed 5 miles prior to a specified fix. However, due to poor descent planning, the aircraft arrives at the fix 30 knots fast and not fully configured. This would be classified as an error due to the failure to meet the crew's defined expectations.

Such errors lead to the dreaded UAS or Undesired Aircraft Status. More or less, a place or configuration you don't want to be in. An undesired aircraft state is a crew-error-induced aircraft state that clearly reduces safety margins. Examples include an unstable approach to a continued landing, speed deviations beyond an acceptable buffer, long landing, etc. UAS are aircraft deviations that crews must detect and act upon quickly to maintain safety. Crews that experience a UAS typically do not detect the error(s) that contributed to the UAS until after they encounter the UAS.

Training Talk

So, all this begs the question: How do we mitigate such situations?

Well its as easy as your ABC's.

The acronym ABCs provides crews with a simple, easily remembered strategy to help manage threats and errors:

A – Actively monitor and assess potential for threats and errors.

B – Balance available barriers to detect and mitigate threats and errors.

C – Communicate threats, errors and intentions in a timely and effective manner.

S – Follow standard operating procedures (SOPs).

A – Actively Monitor for Threats and Errors

Effective TEM is fundamentally dependent on the crew's ability to actively monitor and assess for potential threats and errors. This is not an easy task. Consistent, effective monitoring during all phases of flight is surprisingly challenging to achieve. Therefore, crews need to employ a systematic process for monitoring, which is tailored to specific phases of aircraft operation. Detecting threats and errors is the first step in establishing a mitigation strategy.

Obstacles

There are several obstacles to effective monitoring.

Human Factors Limitations. The following are human factor limitations:

⇒ inattention blindness

Not noticing one aspect of a visual scene (e.g., mode annunciations on the primary flight display) while concentrating on another aspect.

⇒ change blindness

A person's perception of a visual scene is momentarily disrupted, such as when looking away, the person often subsequently fails to notice even large changes in the scene. (e.g., not noticing a flight mode change that occurred while referencing an approach plate).

⇒ expectation bias

Individuals are vulnerable to thinking they see what they expect to see and not what is actually displayed.

Note: Inattention blindness, change blindness and expectation bias are not manifestations of laziness, but simply part of the way the brain processes information.

*Recognizing these limitations are extremely important for effective monitoring of aircraft state/status.

Training Talk

Effective monitoring relies on the following four principles:

1. Recognize that all flights require active and methodical monitoring for threats and errors.
2. Actively assess if what is being done or is about to occur is sensible.
3. Reassess whenever a threat or error is discovered.
4. Intervene when necessary.

The biggest human factor threat I see regularly (and in the not-so-studied sim pilot) is the ***Pilots' Inadequate Mental Models of Autoflight System Modes.*** Pilots may not have a complete or accurate understanding of all of the functions and behaviors of the autoflight system on their aircraft.

How Well Are You Monitoring?

Red Flags. Signs of ineffective flight path monitoring:

⇒ a missed flight path callout

⇒ an unexpected pitch, power, or roll change occurs

⇒ an unexpected mode change occurs

⇒ unanticipated terrain, traffic, or weather

⇒ performing non-flight path related tasks during flight path transitions

A Flight Safety Foundation's Approach and Landing Accident Reduction study showed **63%** of the reviewed accidents involved inadequate monitoring and cross-checking.

Now, on to "B"

Training Talk

B – Balancing Available Barriers

Barriers represent tools to trap or mitigate the effects of threats and errors. When an error is stopped by a barrier, the error is considered managed or *trapped*. Sometimes an error passes through one barrier, but is stopped by another. Therefore, multiple barriers increase the likelihood that errors will be mitigated. Threat mismanagement is decreased through the effective implementation of barriers, which subsequently increases the margin of safety.

Task Loading

Task loading is the ratio of the number of tasks that need to be performed to the amount of time available for doing them (more tasks with less time = high task loading).

$$\frac{\text{\# Tasks}}{\text{Available Time}} = \text{Task Loading}$$

Phases/Levels. Crews should be aware that different phases of flight naturally have different levels of task loading (e.g., the task loading during a non-ILS approach is much higher than during cruise). Also, every flight encounters threats which may increase the pilots' task loading. During periods of high task loading the crew should ensure they are balancing available resources to eliminate or capture errors. Conversely, if a crew notices that errors are being made, they may want to evaluate the task loading status to determine if they need to make adjustments in workload management.

Use of Time and Resources

Using barriers often requires an investment in terms of time. Pilots must balance the use of resources with the available time to maintain an adequate margin of safety. Human nature is to underestimate the time needed to accomplish a series of task.

Impact. Task loading can increase without negative impact when the crew has the ability to accept the increased task loading and still perform all required monitoring and assessing duties. When task loading reaches a saturation level, however, something has to drop out. Often times it is one or both pilot's ability to actively monitor and assess at the same level. The effect of this situation is depicted by decreasing the size of the PM and PF barriers in front of one or more of the barriers. The outcome is the crew is no longer able to utilize that barrier to the maximum extent possible.

Training Talk

The takeaway from this is reduce task load and prioritize!

To reduce task loading and improve the margin of safety:

⇒ increase available time (slow down or plan ahead)

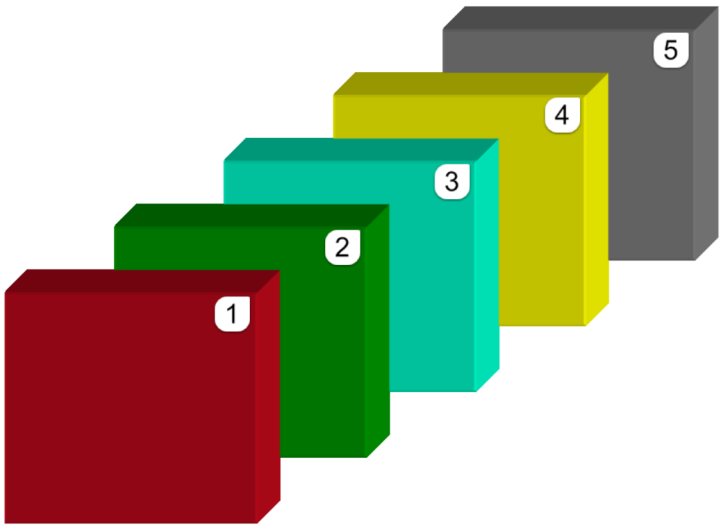
⇒ delegate some of the tasks to the other pilot or other available resources

⇒ accomplish tasks during low workload periods that don't have to be performed during high workload periods

Barrier Priority:

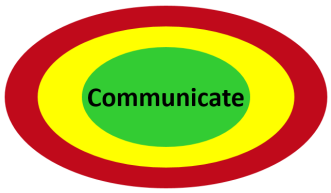
The following barriers are listed in a specific order to identify which barrier should normally trap the error or threat first:

1. Policies, Procedures, and Flows
2. Checklists
3. Automation
4. External Resources
5. Knowledge, Skill and Aircraft Handling



Training Talk

C – Communicate Threats and Intentions



Research shows that the way a crew communicates can be a predictor of the way the crew performs. In short, crews that communicate better have fewer errors. Improved performance (e.g., fewer mismanaged errors) was associated with crews who showed an increased number of:

⇒ commands

⇒ inquiries

⇒ acknowledgments

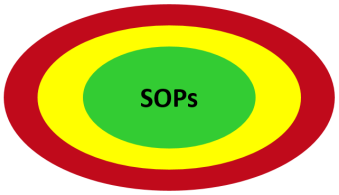
⇒ verbal observations about flight status

Communication is defined as sharing and listening to timely and relevant information in a way that is easily understood and keeps everyone at the same level of situational awareness.

I'm aware this is as applicable to our hobby but, I highly recommend briefing YOURSELF on procedures to come. This exercise will give structure to your plan, barriers, and procedures.

Finally we come to S:

S – Follow SOPs



The key to high performance is to put as much predictability as possible into a situation. This reduces the mental workload and provides a better foundation for effective crew coordination. In addition, the predictability of normal situations will help pilots handle non-normal situations, such as recognizing when another pilot is *out of the loop*. SOPs establish a consistent baseline for performance.

We say SOPs are "written in blood" for a reason. SOPs are carefully designed by the Company to create redundant barriers when necessary and to equalize workload as much as possible. When both pilots follow the SOPs consistently, it makes it easier to identify deviations. Adherence to SOPs decreases the amount of time crewmembers spend trying to figure out what to do, or what to expect from other crewmembers in a given situation. This allows crewmembers to concentrate on issues not covered by SOPs.

Training Talk

Intentional Procedural Non-Compliance??

Intentionally not complying with SOPs has a direct correlation to the crew's ability to effectively manage threats and errors. Company LOSA data indicates crews who intentionally non-comply have twice the rate of mismanaged errors and three times the rate of undesired aircraft states during a typical flight!

An incredible instructor explained to our class as simply “If you want to fly the airplane your way, get your own airplane! If you’re being payed to fly it, follow the SOPs!”

I hope this motivates all of you to organize your flight and resources better and delve deeper into the aircrafts operation and company SOPs.

Questions? Doors always open.

“Clear left, I’ll have the chicken…”

Captain Eric Hill

Director of Training/ 737 Fleet Captain

ehill@midconair.net

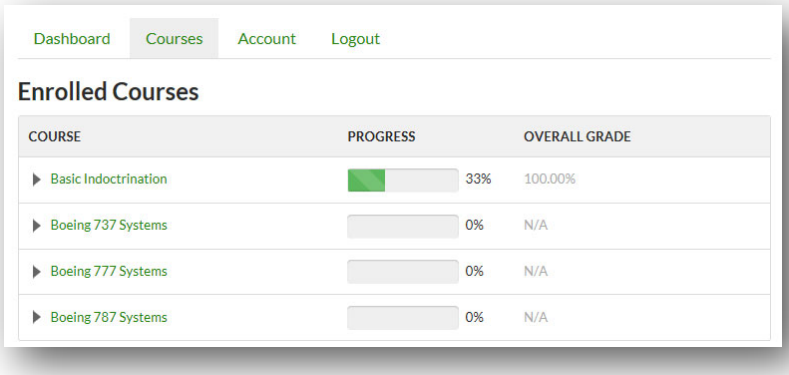
Training Talk

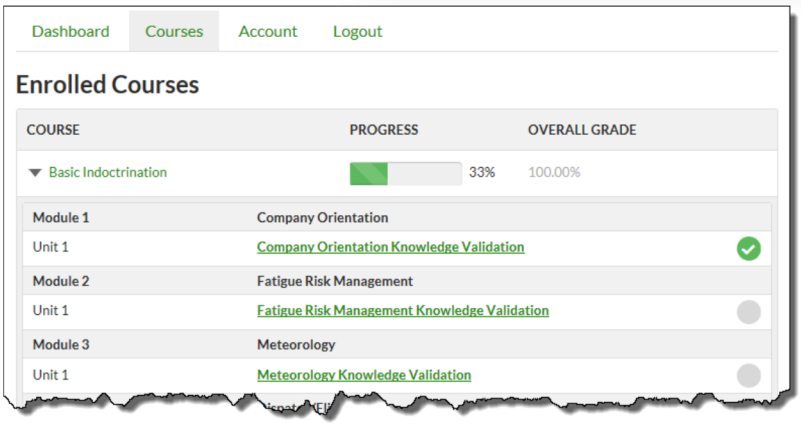
In other training news, the updated web site is now hosting an integrated learning management system.

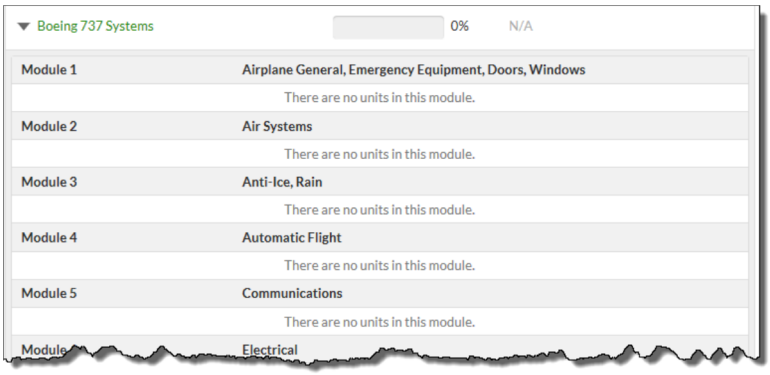
We will initially deploy the LMS for Basic Indoctrination and Initial ground training, as well as aircraft systems training for new-hire pilots.

Once the new-hire program is loaded into the system, work will commence on our first continuing qualification *(recurrent)* training.

More news on that as it develops!







Fleet News

April was quite an active month for our fleet.

We have six special liveries that are fresh from the paint hangar that we're excited to introduce.

The first is 777-200 **N511MC**, also known as the "Gray in May" theme livery. This was inspired and co-designed by retired Captain Tim Herman, P385.

Tim is a brain cancer survivor, and while not currently able to resume his PIC duties, he still supports MidCon in other ways, including serving as an editor of the monthly newsletter, and assisting with de-signing some of the special liveries we are previewing in this issue. MidCon is proud to present this namesake aircraft, the "Timothy D. Herman", and support brain cancer awareness during the month of May.

Fleet News

Next up are two new special liveries for the 737 fleet.

N182MC pays tribute to the men and women of VATSIM USA who spend countless unpaid hours to bring life to our virtual skies.

N183MC is the Flight Sim Expo promotional livery.

Fleet News

The widebody drivers have plenty to smile about this month as well.

Along with N511MC, “Gray in May”, theme, we’re also sprucing up our shiny new 787 fleet.

First up is 787-8 N611MC, another tribute to the worldwide VATSIM Air Traffic Control Network.

And, 787-9, N631MC, dressed up in our new Star Alliance colors.

Fleet News

Last month we presented this teaser shot of a CRJ paint in progress to see if you could guess what it could be.

Even though we haven't officially launched our regional operation yet, we're happy to unveil N931AM, the Air Midwest heritage livery!

You might be asking yourself, why on earth did we select those colors?!

Here's the reason:

These were the Air Midwest colors from the 1980's

Ugly? Absolutely, but authentic!

Pilot Profile

Tim Herman

P385

My name is Tim Herman. I'm 36 years old and live in south-central Pennsylvania. I am currently retired from MidCon due to chronic health issues. With MidCon, I was on the 757/767 fleet and also was the training department head for a period of time.

I'm a brain cancer and stroke survivor, and the stroke affected my ability to focus or take in a lot of sensory input, plus I need a good amount of sleep more than average due to that, as well as some of the medications I take. That has completely halted my ability to enjoy video games as well as railroad and flight simulation. I also have other health conditions, some since birth, which is why I am not employed and still live with my parents for support and assistance in my daily life.

My first experience with flight simulation was probably different to most of you, as I started out on the Mac instead of Windows. My first flight simulator was Graphic Simulations' F/A-18 Hornet series, including the Korea and Iraq areas.

Following that, I also used Flight Unlimited and the Apache combat helicopter sim, where I got my first rotary-wing experience. After that, I moved on to Windows 95 eventually, but I didn't do any flight simulation again until I got Microsoft Flight Simulator 2004 (FS9).

It was there that I really got into detailed procedural simulation with PMDG's 737NG and later their 747-400 and MD-11, Level-D's 767, the Ready for Pushback 747-200, Leonardo's MD-80, among other products.

I made my sim environment as real as possible, with the best scenery and quality products I could find. I'm the kind of flight simulator user who searches for the actual flight manuals for the aircraft I fly and not only read but use them in my sim activities.

This desire for realism also led me to find and then apply to MidCon, which sounded like exactly what I was looking for in a virtual or simulated airline. With MidCon I met Mike Collier, who has become a very close friend with our shared interests of planes and trains and simulation software and other things as well.

Pilot Profile

Tim Herman

P385

While I can no longer enjoy many of the things I used to with regards to computer games and simulation, I continue to enjoy other things, especially reading (I love dystopian fiction and modern military fiction). I am also a big fan of all types of music, with a preference for 90's alternative rock and grunge, as well as traditional Native American music. I am of mixed Native American and white ancestry, and am very involved with traditional Native cultural and spiritual practices, even if most of that is by myself as there are not many Native people near me. I'm working at learning the language of the Lakota (Sioux) and practicing the Lakota traditional spirituality.

I was very honored and humbled when Mike asked if we could have a brain cancer awareness livery for one of our MidCon aircraft. I gave him some ideas and then he used his incredible artistic talents to create the aircraft N511MC, a Boeing 777-200ER with the special gray ribbon for brain tumor awareness.

Gray is the color for brain cancer, in the same way the pink ribbon and color pink is associated with breast cancer. The tail has the slogan "Go Gray in May" which is also associated with brain cancer and tumor research. I have had two brain surgeries, one in 2006 and one in 2014.

While the first surgery was great and had a very easy recovery, the surgery was unable to remove all of the tumor and it eventually began to grow and change again. This necessitated another surgery in 2014, where there was also another area of tumor behind the previous surgical area that had begun to grow and form as well.

The original tumor was a grade II astrocytoma, and the new, pea-sized tumor that started becoming visible on MRI in 2013, was a grade III astrocytoma. For comparison, the tumors that eventually took the lives of Senators Edward Kennedy and John McCain were the worst, most aggressive grade IV glioblastoma.

Pilot Profile

Tim Herman

P385

My doctor at Johns Hopkins is an incredible, humble, compassionate human being named Alfredo Quiñones-Hinojosa. He went from being an illegal immigrant from Mexico and a migrant worker to Harvard Medical School and American citizenship, to one of the best neurosurgeons in the world.

While he is now head of neurosurgery at the Mayo Clinic in Jacksonville, Florida, Dr. Q. remains one of the most admirable people I've ever had the pleasure of knowing. For more on his story, you can look at https://en.m.wikipedia.org/wiki/Alfredo_Quinones-Hinojosa or visit his site at http://doctorqmd.com/ . He is also a dedicated researcher whose mission is to find the cure for brain cancer. Dr. Q has written a memoir of his journey entitled "Becoming Dr. Q", which is also being developed into a movie.

Dr. Q. also does humanitarian missions throughout Central and South America where he performs complex brain surgeries for both adult and pediatric patients at no cost.

To honor Dr. Q., I chose the SELCAL code JH-AQ for Johns Hopkins and Alfredo Quiñones for the N511MC airframe.

So, I think that's more than enough for my story and the story of N511MC. If you have any questions or anything, you can always contact me at tdherman312@gmail.com .