



MAD DOG NEWSLETTER

Delta Virtual Airlines

September 2005

Volume 1, Issue #2

MD-88/90 Program News

From time to time, it becomes necessary to refresh everyone on DVA's flight PIREP policy. Specifically, what is a valid flight and what makes a flight invalid. Nothing is more frustrating than filing a PIREP after a long flight and having it rejected.

Flights must meet the following criteria to be deemed valid and be approved:

1. Flight must appear on either the actual Delta Airlines schedule or in the DVA schedule database. Codeshare flights are also allowed, as long as they have a Delta Airlines number.
2. The Pilot must have the proper rating in the aircraft used for the flight.
3. The aircraft must have the range to complete the flight.

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Recent Promotions

We would like to congratulate the following Mad Dog pilots on their recent promotions.



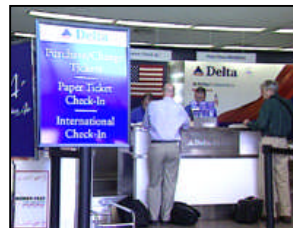
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MD-88/90 Events

Maddog Prowl #1 on August 19th was a great success. We were fortunate to have great ATC coverage during our flight from KATL to DFW. Great job to the controllers who helped us out (some were fellow DVA pilots) and to the pilots who participated and did an outstanding job of represented DVA

Based on feedback we received from those who flew last time, our next flight will take us from Miami (MIA) to our Atlanta home (ATL). This event again will be just shy of 2 hours.

If any of these items are not true, the flight is invalid and the PIREP will be rejected.



update the data periodically.

A great way to select your flights is by using the desktop schedule application available for download on the Delta Airlines site. It includes all Delta Airlines and Delta codeshare flights and allows you to

For more information on DVA's PIREP policy, as well as other information, check the Document Library within your "Pilot Center" for downloadable manuals. Any questions can also be sent to Matt Sisson or Larry Foltran.

- Matt Dyehouse (DVA2464) – Captain
- Kevin McIntyre (DVA1955) – Captain
- Steve Pickle (DVA1763) – Captain
- Kyle King (DVA1875) – Captain
- Josh Drummond (DVA1899) – Captain

We will again work to get ATC coverage, this time taking us from Miami through JAX CTR and finally our arrival into Atlanta. The event will be posted on the DVA events page, so go ahead and sign up. We hope to see you there!

Also, please feel free to submit suggestions for future events.

When: Friday, September 23, 2005
Time: 8:00 pm
Where: VATSIM

Mad Dogs in the News

(Matt Sisson & Larry Foltran)

Winglet supplier studies MD-80 application

Fischer Advanced Composite Components, which as a supplier to Aviation Partners Boeing has a 95% market share of 737



winglet production, is studying the possibility of developing winglets for

the MD-80. "We know that airlines like SAS are looking for solutions to save more fuel for their MD-80 fleets," FACC CEO Walter Stephan told this website. However, he added that winglets for the MD-80 are unlikely to provide the 3%-5% improvement in fuel burn enjoyed by 737NG operators. "MD-80 winglets could save 2%-3% of fuel," but only in combination with changes to the engines such as hushkitting, he said. Scandinavian Airlines and subsidiary Spanair operate a fleet of about 80 MD-80s. SAS CEO Jorgen Lindegaard told ATWOnline recently that no discussions are underway about an MD-80 replacement before 2008, given the financial challenges currently facing the carrier. Owing to noise concerns with the aircraft, particularly on takeoff, SAS is studying possible quieting solutions including winglets and engine modifications, an airline spokesperson confirmed.

Other big MD-80 fleet operators include American Airlines with 362, **Delta Air Lines with 120** and Alitalia with 79.

<http://www.atwonline.com/channels/maintenance/story.html?storyID=1697>

Emergency Landing for Greek Aircraft at Malpensa

(AGI) - Milan, Italy, Aug.11 - An MD80 of Greek charter airline Alexander Air with 159 passengers and 7 crew members on board, which took off from Zurich and was heading for Manchester and was transiting over Italy, was forced to an emergency landing at 12:30 pm at Malpensa airport because of an engine failure.

The piece of news was reported by ENAC, which added that "nobody on board was injured". The Malpensa hub was closed to air traffic for a few minutes, while all the required security measures were taken. All flights were delayed by 20-30 minutes. Malpensa ENAC inspectors will carry out an inspection on the aircraft, currently at the hub.



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Quick Mad Dog Facts

→ The last MD-80 was delivered on December 28, 1999 to Trans World Airlines (TWA). It was an MD-83.

→ As of information published on July 2004, a total of 59 airlines in 33 countries operate the MD-80 series aircraft.

→ The flat tailcones (screwdriver tail) were introduced in 1986, leading to all MD-87, -88, -90 and B-717 leaving the factory equipped as such. Other MD-80 types were later retrofitted with the redesigned tailcones.

→ The redesigned tail cone shape increases fuel efficiency by some 1.5% by reducing drag compared to the original rounded tail cone.

→ Most MD-80's are certified and registered as DC-9's. The only aircraft not certified as "late DC-9's" are the MD-88, MD-90 and B-717 (originally MD-95).

Wake Turbulence & Wing Tip Vortices

(Larry Foltran)

Our topic this month will be wake turbulence. With FS add-ons such as ActiveSky, wake turbulence has become another factor of real world aviation that has found its way into our virtual aviation world.

All Aircraft produce wake turbulence. Wake vortices are formed any time an airfoil is producing lift. Lift is generated by the creation of a pressure differential over the wing surfaces. The lowest pressure occurs over the upper surface and the highest pressure under the wing. This pressure differential triggers the rollup of the airflow aft of the wing resulting in swirling air masses trailing downstream of the wingtips. Viewed from behind the generating aircraft, the left vortex rotates clockwise and the right vortex rotates counterclockwise.



You can normally expect this in calm wind conditions, but constant awareness should be the rule of thumb. Remember, the best defense against wake turbulence is to know and avoid areas where it occurs. Aircraft which are heavy and in clean configuration give off the most intense vortices. Pilots, when flying a lighter aircraft with a shorter wingspan, trailing a large aircraft should be aware of wake turbulence. Our MD-88's and 90's certainly fall into this category.

The vortices begin as the aircraft becomes airborne. When taking off or landing behind a "heavy", the pilot should make note of the liftoff or touchdown point. The object is to avoid the area where the vortices can affect your aircraft. This is accomplished by either taking off prior to reaching the "heavy's" take off point or landing beyond the "heavy's" touch down point.



If you are following a large aircraft on an ILS approach, you may experience some wake turbulence along the

glideslope. To remedy this, you should hand fly the approach one "dot" below the glideslope. In other words, you will be above the glideslope. This is done because the vortices descend towards the ground after reaching their highest point.

In the case of a visual approach, it is the pilot's responsibility to stay clear of any potential wake turbulence.

In the rare situation that you will be performing a missed approach behind a Heavy who has also missed, you should climb at your best rate to the initial missed approach altitude.

Although encountering situations such as this in the virtual world is rare, being knowledgeable and prepared serves to make us all better virtual pilots. I have also included a short series of questions, at the end of the newsletter, to test what you've learned.



Wake Turbulance & Wing Tip Vortices Knowledge Test

(Larry Foltran)

1. You are on approach in an MD-88. ATC contacts you, "Delta442. You are #2 to land behind a company 777. Winds are calm. Clear to land." Is there a potential for wake turbulence?

Yes
No
2. In what situation should you most expect to face wake turbulence?
 - a. Heavy wind situation
 - b. Cross wind situation
 - c. Calm wind situation
 - d. Tail wind situation
3. In what situation are wing tip vortices strongest?
 - a. Behind a heavy aircraft with flaps and gear down.
 - b. Behind a small jet aircraft.
 - c. Behind a small prop aircraft.
 - d. Behind a heavy aircraft in clean configuration.
4. You are landing behind a 747. The winds are calm. What should you do?
 - a. Land at his touch down point on the runway.
 - b. Land before his touch down point.
 - c. Declare a missed approach.
 - d. Land past his touch down point.
5. You are cleared for takeoff behind a 777 that has just departed. You should...
 - a. Take off at the lift off point of the departing aircraft.
 - b. Take off before the lift off point of the departing aircraft.
 - c. Take off past the lift off point of the departing aircraft.
 - d. Take off at full flaps.
6. You are on the glideslope behind a 747. You should...
 - a. Follow the glideslope.
 - b. Follow slightly above the glideslope.
 - c. Follow slightly below the glideslope.
 - d. Declare a missed approach.
7. Wake turbulence can occur when...
 - a. You are taking off following a heavy aircraft.
 - b. You are on a visual approach behind a heavy aircraft.
 - c. You are on an ILS approach behind a heavy aircraft.
 - d. All of the above.
8. What direction to the wing tip vortices travel in when looking from behind the aircraft?
 - a. Both clockwise.
 - b. Both counterclockwise.
 - c. Right / clockwise, left / counterclockwise
 - d. Right / counterclockwise, left / clockwise.
9. If you suspect a condition of wake turbulence and are on a "missed approach", you should...
 - a. Fly your missed approach at Vfs
 - b. ...at V2 plus 10 knots.
 - c. ...at Vref minus 10 knots.
 - d. ...at your Best Angle of Climb airspeed.



Answers:

1-Y, 2-C, 3-A, 4-D, 5-B, 6-B, 7-D, 8-D, 9-D