

07/29/02

FC:

Log:

1600: Takeoff
1601: NPOL: 24 35N 81 31W
35000 ft
Right over Marathon
There are no cells at all over the Peninsula. Bill is suggesting that we investigate the cells over Marathon. Apparently there is a line of relatively shallow-topped storms (35000 ft). Will head out there now as there is absolutely nothing going over the peninsula

1641: Picking up on an EW line of convection
1642: Turning heading E
1646: NPOL: Some cells over Marco Island and small echoes near Naples
We are going to stay on this storm for a while as we have just got down here. Bill says that convection is weak over Marco Island and Naples and stronger down here

1650: Convection ~ 7km
Concentrated core

1653: Turning heading west (281°)
1701: Western cell is strongest
1708: Western cell is weakening
Convection is quite suppressed

1709: Have asked pilots to head north to Naples region and fly an EW leg along the northern side of the current storm that we are investigating on the way. They tell me that they cannot see around the eastern side of the line, so we are going to head west and then fly north. This meant that our eastern leg got far too long

1711: Turning around
1714: ELDORA down
1717: ELDORA up
Going to head north to Marco island and give the radar a rest.

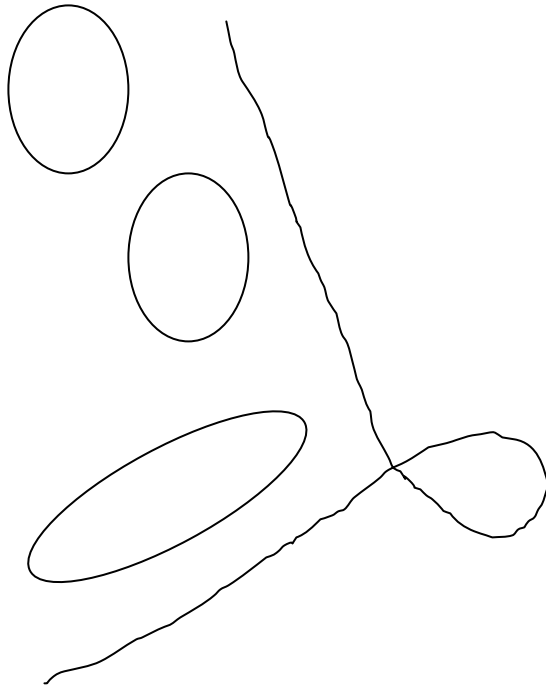
1718: ELDORA down
1723: NPOL: 26 22N 81 52W
45000 ft
We are heading up to this region and letting the radar rest. We have ended up getting stuck behind this EW line over the keys. The pilots finally decided that it was better to go around the eastern edge of the line – this was pretty frustrating as we got stuck behind the line for 2 extra legs thereby delaying our transit to the north by about 20 mins

1733: Found a hole in the line – now heading north.
1752: ELDORA up
Picking up storm on the nose radar and visually

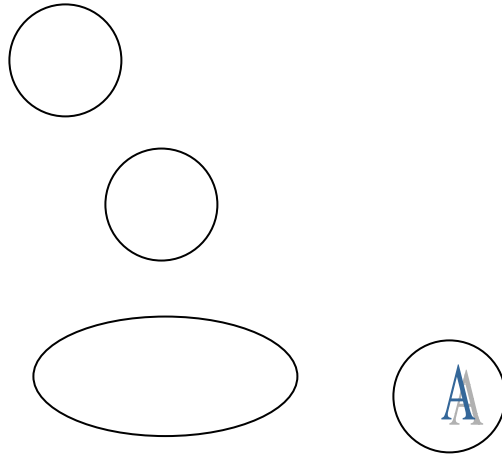
1756: Deep convection ~ 13km
Things are pretty turbulent

1805: Line of convection
1808: NPOL: Bill says that he can see a space at 26 37N 81 50W in the line and wants the pilots to break through it there and head west along the anvil. I doubt that pilots will agree to this. Bill suggested an L-pattern along E-side of storm and along the anvil. Several of the other planes are in the area too

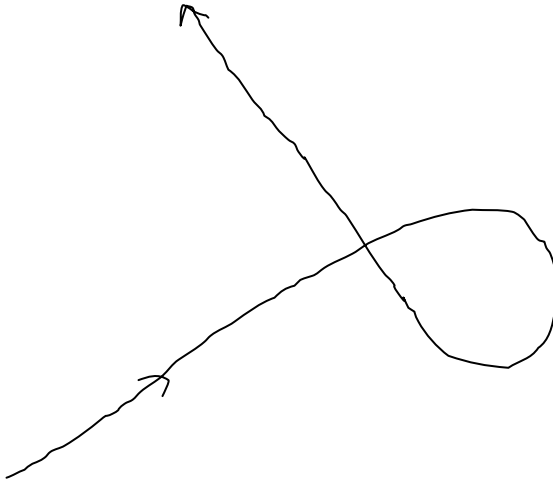
1810: Check with pilots – Rich said “No Way”. Got the pilots to head SE and then track along the southern side of the line to sample the anvil



- 1817: Turning (27°)
1819: Heading west (260°)
1820: Reflectivity - 55+dBZ
Tops ~ 14-15 km
1823: Picking up on the anvil
1827: Need to turn around due to ATC pressure
We are almost at the anvil edge
1829: Anvil ~ 11-12km
1832: Double anvil
1833: Cell on SE corner (A) of the line is preventing us flying straight lines and close into the line of convection (see below)



1837: Turning NW to travel along the E side of the convection again



1837: NPOL: 26 58N 82 0W
 Tops of northern cell ~ 52000ft
 Planes in the area: Proteus, WB57, ER-2, Twin Otter and Citation are all in the area and working the storm
 This is going to make for a well-coordinated case

1843: Convection ~ 15km
 This is extremely turbulent flying – I think that this is the roughest we have had (bumps: 7.7 m/s)

We got very close to the convective line

1846: Pilots refuse to reverse track

We are now heading north and when we reach the northernmost cell, we are going to fly an E-W track along the northern side of the cell – cannot do a right 270 due to weather

1848: Pilots managed to get in a right 270

1850: Heading west (28 °) along northern side of the cluster
1853: Reflectivity - 55+dBZ
Tops ~18km
Strong core
Well-developed convection
1855: Reflectivity - +60dBZ at ~7km
Mike and I saw specks of what looked like 65 dBz (disappeared from the scan quickly so cannot be sure)
1859: Turning
1901: Flying right along the northern side of the convective line. Convection here is linear without cells “sticking out of it” – makes it easier to fly
1903: Consistent line of convection
1904: Seeing some anvil
1905: Pilots picking storms off nose – want to turn around
1908: Turn – heading west
1912: Classic core-anvil picture
We are a little too far away but the pilots are very cautious at the moment – will tighten up the line on the next leg
1918: Turning south to head down west side. The east side has become turbulent and messy
1920: Under the anvil
1931: Turning E – going to do some anvil transects
1933: NPOL: suggests more anvil runs – other planes doing similar things
South side looking messy, stay north
1934: Going to head west and then NE
1936: Nice anvil development
1946: Heading NE – lightening off the nose – turning around
We are having a hard picking a constant track due to weather
Currently heading SW, and then going to head SE and attempt to stay on that track
1946: NPOL: wanted to see if we had seen any bright bands – neither Mike nor I have seen any decent bright bands recently. Citation wanting to do bright band spirals
1949: Mammatus
1951: NPOL: 26 50N 83 00W
1953: Turning heading SE
Having a hard time doing SW-NE tracks due to ATC, lightening etc
1955: Bright band
Saw some bright band development just after having spoken with Bill – called back and let them know
1959: Apparently there was some confusion between pilots and Sharon over previous
1 egs, hence the fact that we have landed out so far west
2000: Heading NW again
Several other planes here – NPOL wants us to keep sampling the anvil
2010: Turning to head NE – sampling anvil in L-shape
2013: Bright band
2018: Turn around – heading SW
2019: ELDORA down
2023: ELDORA up
2023: Heading ESE for last leg along anvil
All the planes were up today
All have been sent back – NPOL suggests RTB
2024: Heading along the anvil on our RTB

Mission Reports:

Flight Path & Focus: