

Tuesday, April 15, 2009

Take off time: 11AM local (19Z)

Landing, approximately 7:20 local

Times are calculated based on ground distance using a speed of 220 knots (113 m/sec).

15 minutes have been added for first leg of haze hunt (from 6 to 7), 20 minutes have been added for the spiral at 13-14, and 15 minutes have been added for the haze hunt from 17-18.

Waypoints A and B may change due to prior information relayed back from the King Air indicating where the haze layer actually is between Fairbanks and 160W. If timing becomes an issue due to extensive loitering during the comparison and haze hunting leg, then pull the northward point back to 71N, 165W.

pt	UT	lat	lon	palt(ft)	total dist nm	inc dist nm	total time hh:mm	inc time min	notes
PAFA	1900Z	64.82N	147.86W	sfc	0	0	00:00	0	takeoff
1	1916Z	64.80N	150.20W	12,000	59	59	00:16	16	reach altitude (12kft), level off for calibration leg
2	1936Z	64.80N	153.00W	12,000	131	72	00:36	20	end calibration leg, if you found a layer on the ascent to 12kft, then head down to it, otherwise start ascent to be a 16kft at waypoint A, noting pollution layers on the way, and leveling off if you find them
3-A	1957Z	64.80N	156.00W	16,000	208	77	00:57	21	Waypoint A, NASA P3 should be flying below
4-B	2025Z	64.80N	160.00W	16,000	310	102	01:25	28	Waypoint B, reverse course and meet up with NASA P3 at 16kt, loiter here for timing if needed, then start high level formation leg.

5-A 2053Z 64.80N 156.00W 10,000 412 102 01:53 28 Waypoint A, prior to this point, NASA plane should call for a new level for low leg, prepare to descend to new level and meet up with NASA plane again, estimate level is somewhere between 6000 and 13000 ft.

6-B 2121Z 64.80N 160.00W 10,000 515 103 02:21 28 Waypoint B, end low level formation leg, break off formation with NASA P3

7 2211Z 64.80N 165.00W 10,000 643 128 03:11 50 Haze hunt from 6 to 7, vertical changes and course reversals possible, turn north at 7

8 2241Z 66.64N 165.00W 10,000 753 110 03:41 30 End haze hunt and begin enroute descent

9 2251Z 67.26N 165.00W 1,000 791 38 03:51 10 low point of descent, should be over water and or ice

Change to

10/11 ~69.00N 165.00W 15,000 ascend to 15kft, note haze in ascent, stay up long enough to take samples, then start descent. Models predict the haze to be at higher altitude the further north you go.

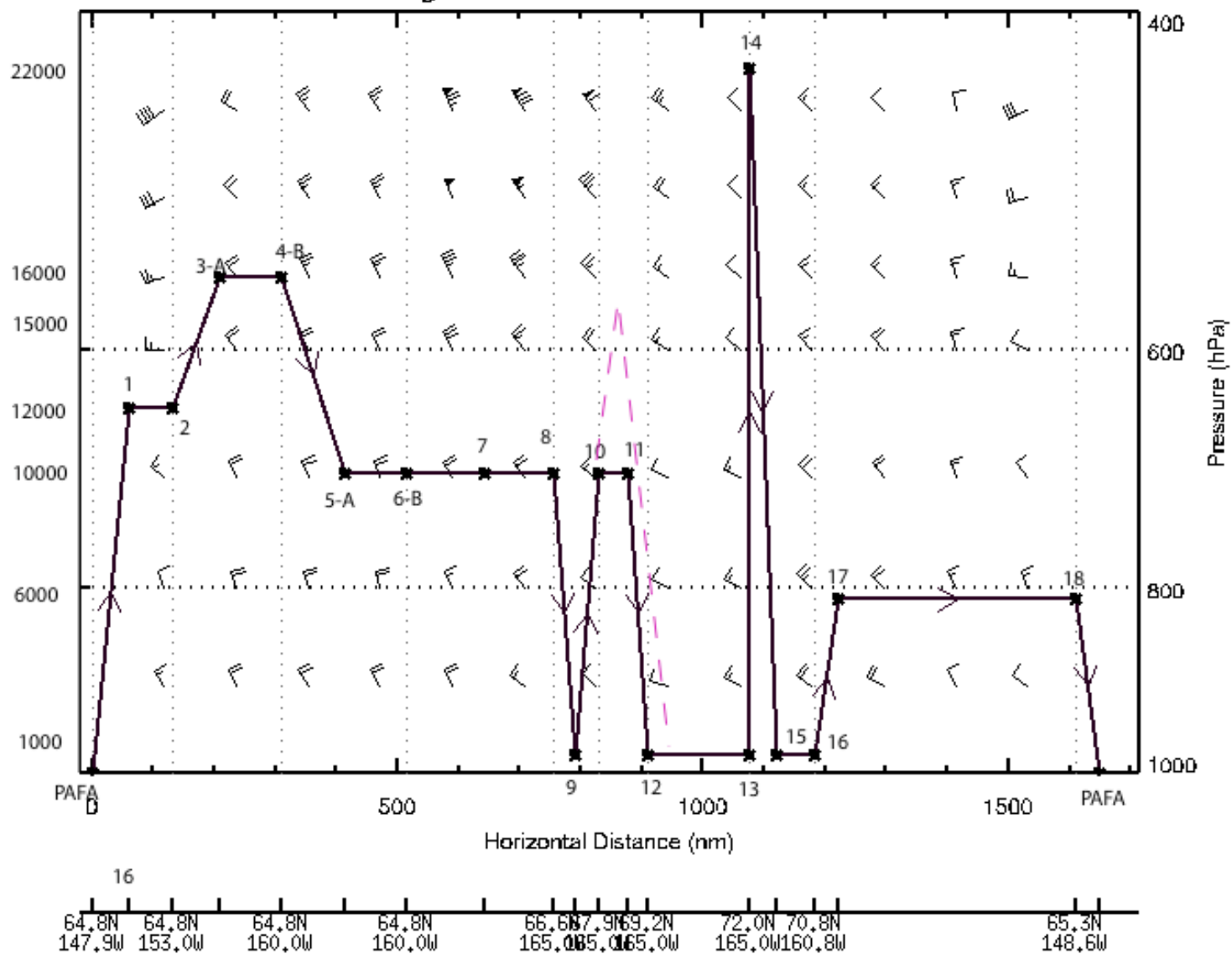
12 2323Z 69.25N 165.00W 1,000 910 33 04:23 9 reach low point, begin low level run over ice/leads possible. If see any lead/polynya clouds, go ahead and work them, cutting off northern point if necessary. Timing to reach this point, and exact latitude of point not critical

13 0009Z 72.00N 165.00W 1,000 1075 165 05:09 46 end low level run, start spiral ascent to high altitude

14 0029Z 72.00N 165.00W 22,000 1076 1 05:29 20 end spiral ascent at high altitude (20-22 kft), begin enroute descent toward the southeast.

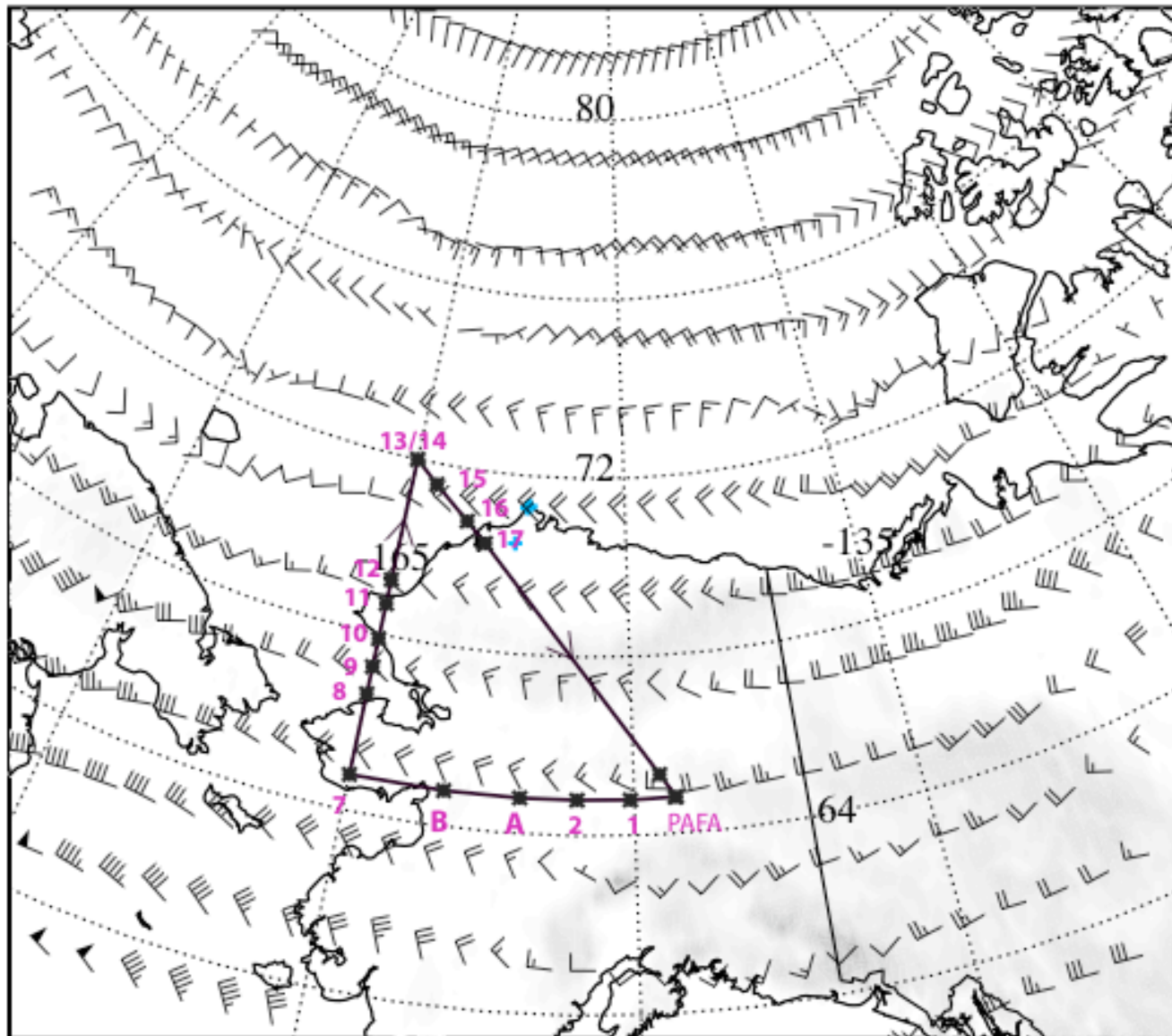
15	0040Z	71.54N	163.30W	1,000	1119	43	05:40	11	reach low level of enroute descent, start low level run.
16	0058Z	70.84N	160.80W	1,000	1183	64	05:58	18	end low level run near coast, start enroute ascent.
17	0108Z	70.40N	159.40W	6,000	1221	38	06:08	10	level off and start haze hunt at 6000 ft. Expect to find haze between 6000 and 13000 ft.
18	0210Z	65.34N	148.60W	6,000	1610	389	08:10	122	start descent to Fairbanks
PAFA	0220Z	64.82N	147.79W	sfc	1648	38	08:20	10	land

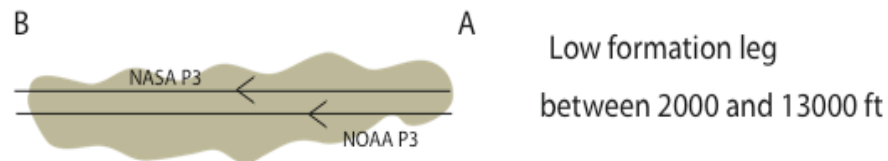
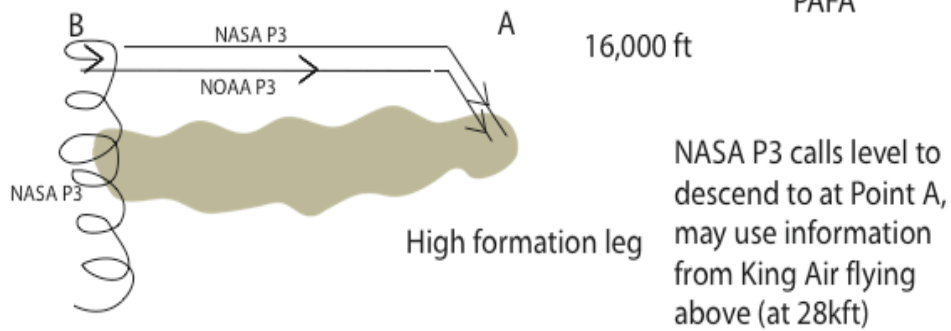
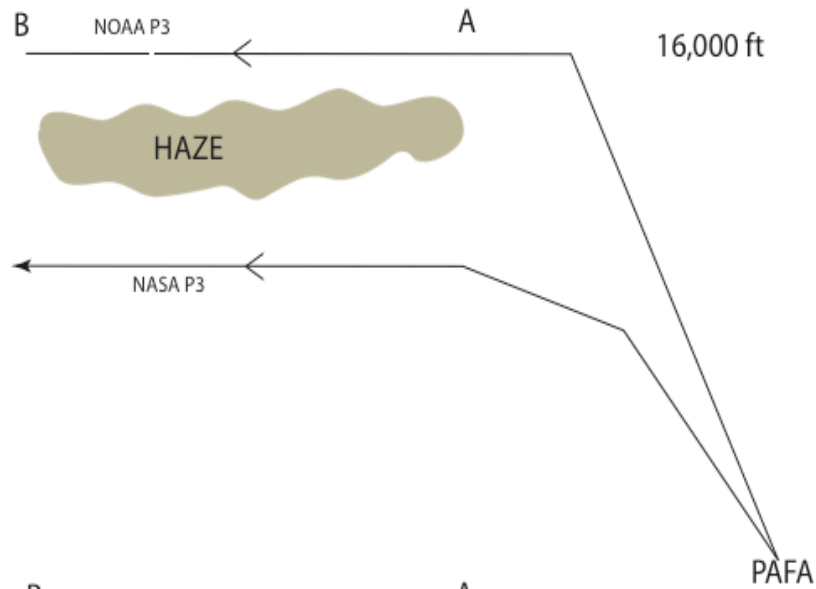
Wind Flags Init:2008041506 Valid:2008041600



NCEP GFS Wind Flags (knots) on Press = 700. hPa

Init:2008041506 Valid:2008041600





Planes split apart at low leg, point B.