

**Fifth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group
(CPWG/5)**

(Ft. Worth, TX, 1-3 April 2008)

Agenda Item 4: Communications, Navigation and Surveillance and Air Traffic Management Issues

Route Proposals

(Presented by Continental Airlines)

SUMMARY

This paper presents proposal for new route development for discussion and consideration by the Russian Federation.

1 Introduction

1.1 Aircraft entry into Russian controlled airspace is permitted only via specific entry points and published Air Traffic Services (ATS) routes. Since 1990, when entry of commercial flights into what was then the USSR's far east airspace was first permitted, until today, 12 entry points have been established along the U.S. / Russian FIR boundary. All 12 fall within Anchorage ARTCC's Arctic or Domestic Flight Information Region (FIR).

1.2 Development of these routes and entry points have been coordinated either bilaterally, that is by the United States and the Soviet Union in the early years, or multilaterally through the Russian/American Coordinating Group for Air Traffic Control (RACGAT) and now with the new multi-lateral Cross Polar Trans East Air Traffic Management Providers' Working Group (CPWG)

2 Discussion

2.1 With the great progress made by the Russian Federation to accommodate new long haul routes via the Cross Polar and Russia Trans-East routes, Continental Airlines, as a member of the International Air Transport Association (IATA) is proposing the implementation of user preferred routes within Russian airspace for discussion and consideration by the Russian Federation.

4. Conclusion

4.1 The Meeting is invited to:

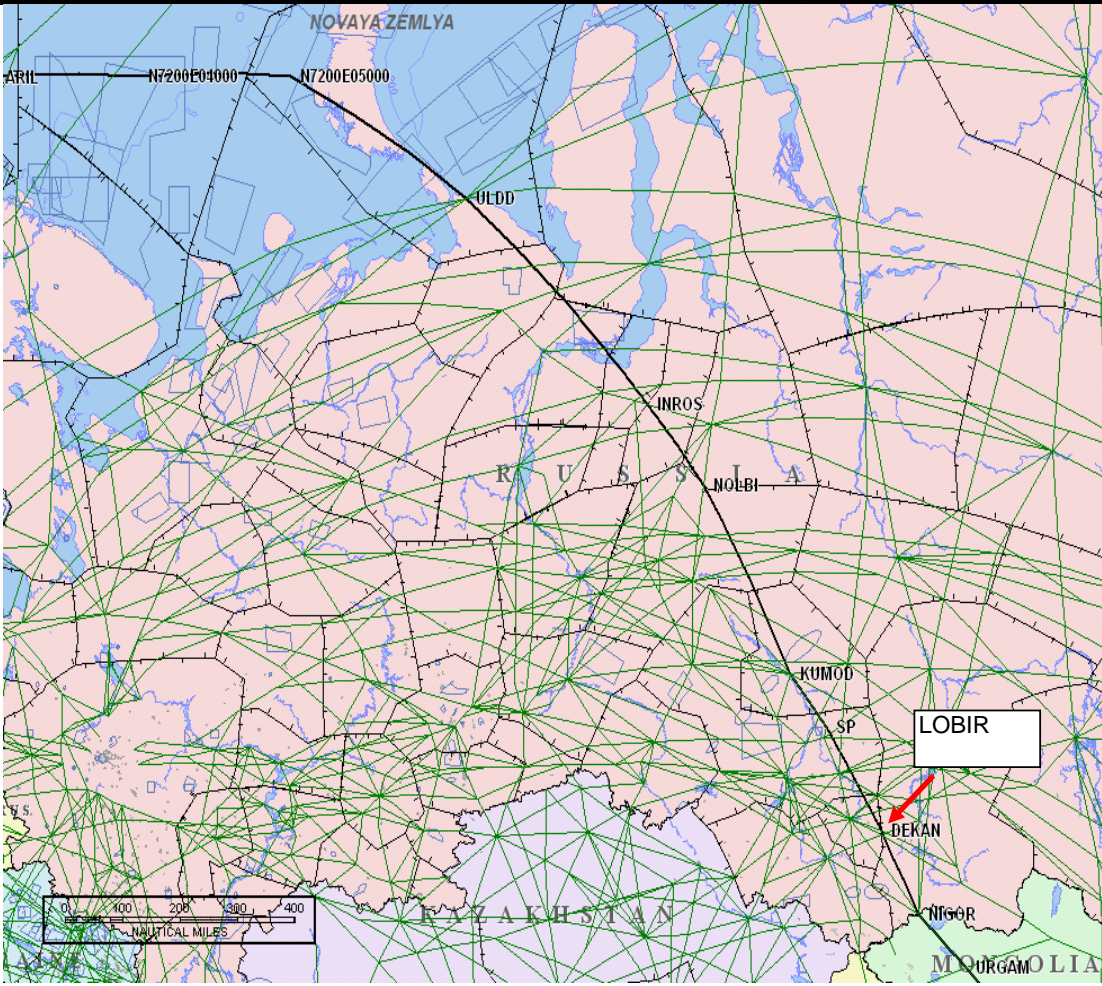
- a. consider the proposals by Continental on the attached new route proposals.

Proposed Route S72

(Almost entirely the same as KEWR-VHHH S72 thru Russia)

KEWR - VHHH 72N020E..LARIL..72N040E..72N050E..ULDD..INROS..NOLBI..KUMOD..SP..DEKAN..NIGOR..

KEWR - ZBAA 72N020E..LARIL..72N040E..72N050E..ULDD..INROS..NOLBI..KUMOD..SP..LOBIR.A575.





KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
S72	1-Jan-08	-38	-9600	-35	
S72	2-Jan-08	-50	-12000	-85	
S72	3-Jan-08	-58	-12200	-123	
S72	4-Jan-08	-54	-13200	-94	
S72	5-Jan-08	-56	-13400	-110	
S72	6-Jan-08	-53	-14500	-145	
S72	7-Jan-08	-72	-17100	-144	
S72	8-Jan-08	-59	-14500	-124	
S72	12-Jan-08	-49	-14200	-97	
S72	18-Jan-08	-46	-11500	-90	
S72	19-Jan-08	-39	-11800	-64	
S72	20-Jan-08	-36	-9200	-95	
S72	23-Jan-08	-45	-13000	-85	
S72	26-Jan-08	-29	-9400	-112	
S72	27-Jan-08	-23	-6500	-93	

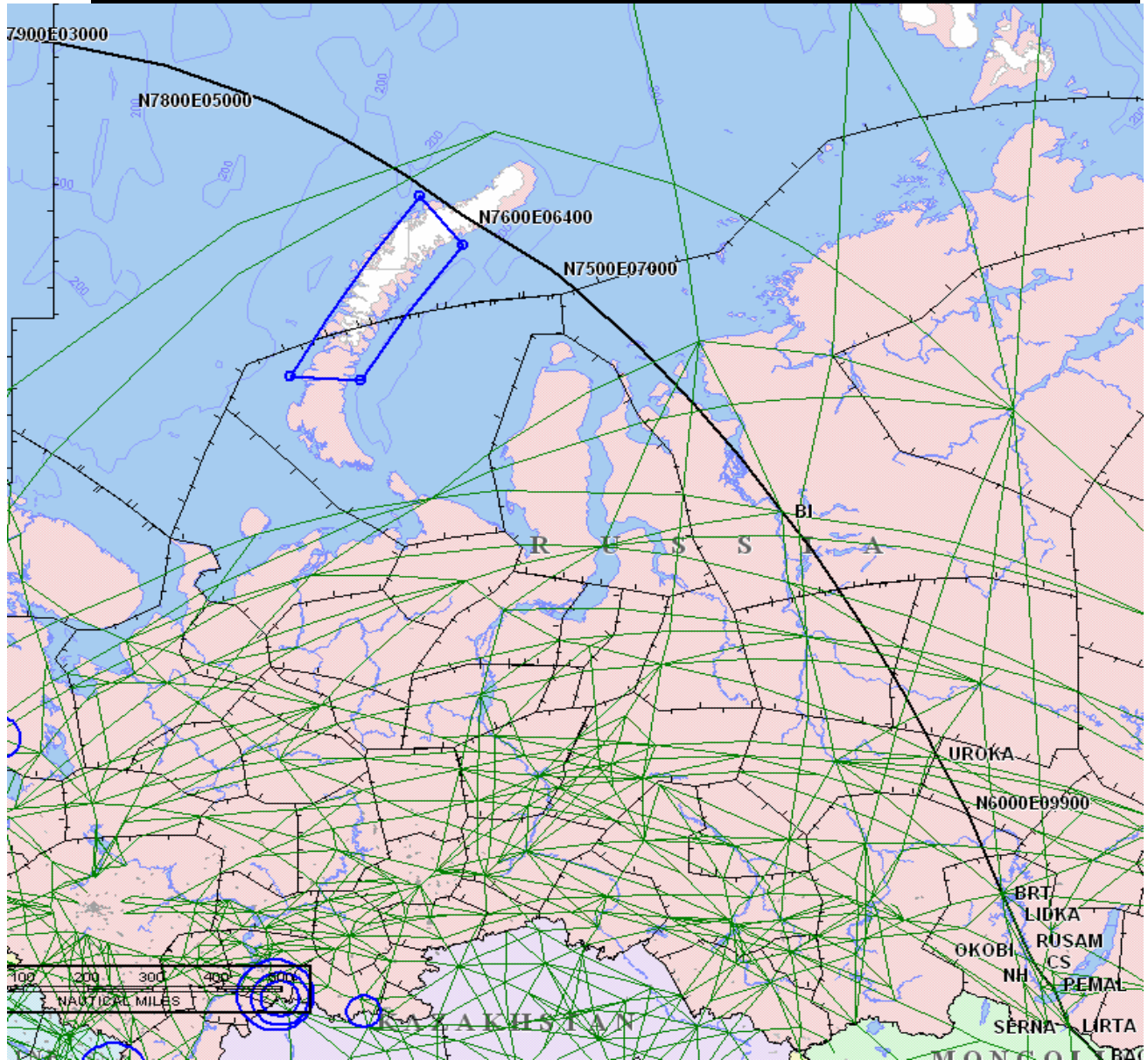
KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
S72	1-Dec-07	-50	-12300	-125	
S72	2-Dec-07	-48	-7300	-75	
S72	3-Dec-07	-77	-15700	-123	
S72	8-Dec-07	-47	-10800	-110	
S72	9-Dec-07	-35	-8500	-85	
S72	13-Dec-07	0	-400	-3	
S72	14-Dec-07	-8	-2400	-24	
S72	15-Dec-07	6	1000	11	
S72	18-Dec-07	-19	-4900	-50	
S72	20-Dec-07	-22	-5600	-57	
S72	21-Dec-07	-56	-13000	-130	
S72	25-Dec-07	-15	-5600	-57	
S72	26-Dec-07	-27	-7100	-71	
S72	27-Dec-07	-49	-9000	-76	

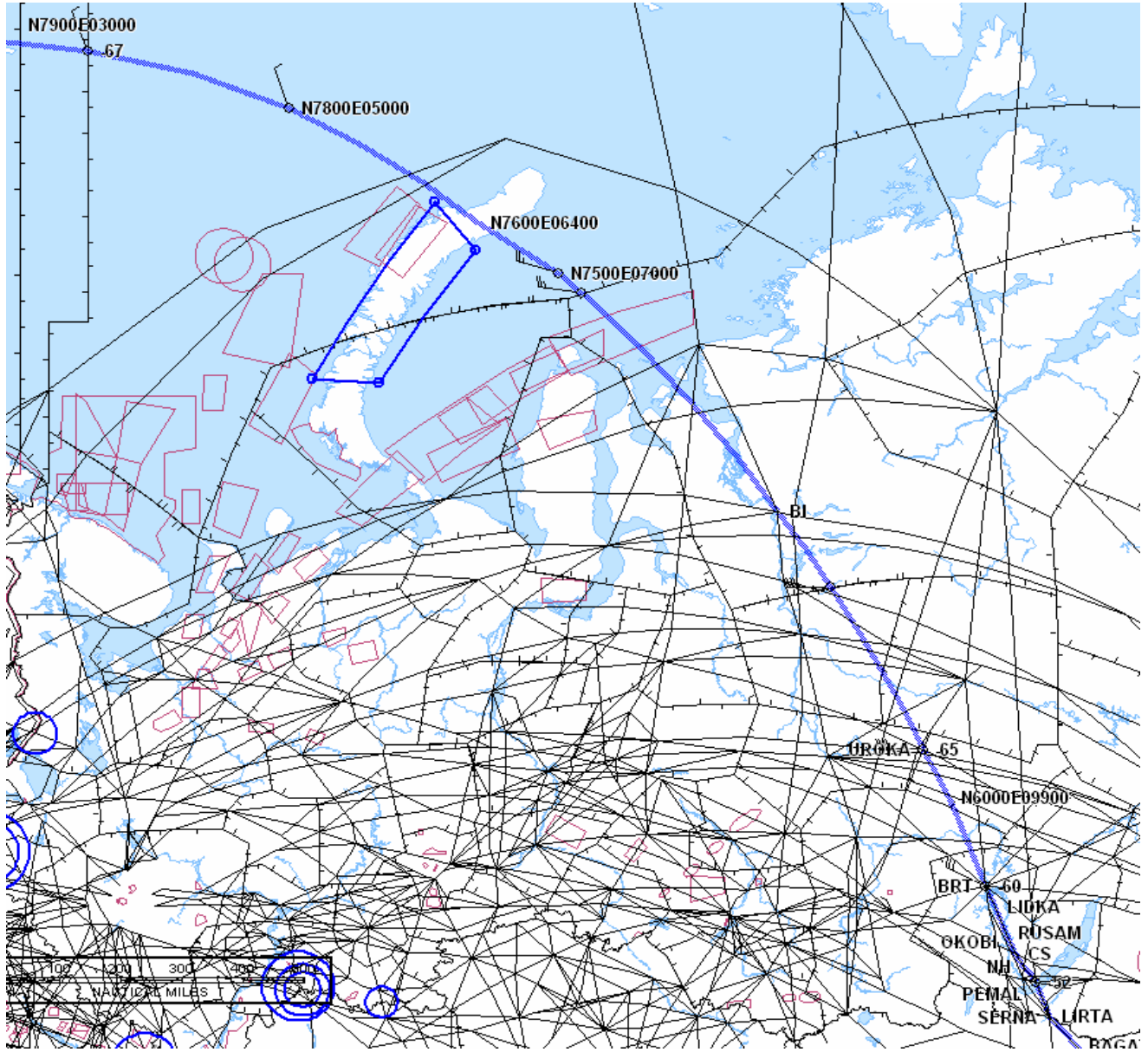
Proposed Route S76

(Same as KEWR-VHHH S76 thru Russian Airspace)

79N020E..79N030E..78N050E..76N064E..75N070E..BI..UROKA..

60N099E..BRT.G490.LIRTA..SERNA.M520.POLHO





KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
S76	1-Jan-08	16	5200	0	
S76	2-Jan-08	16	5900	0	
S76	3-Jan-08	8	3400	16	
S76	4-Jan-08	-12	-3200	0	
S76	5-Jan-08	-20	-5400	-28	
S76	6-Jan-08	-28	-5100	-51	
S76	7-Jan-08	-14	-3300	-5	
S76	8-Jan-08	-17	-4000	-13	
S76	12-Jan-08	1	800	0	
S76	18-Jan-08	5	1100	0	
S76	19-Jan-08	3	1600	0	
S76	20-Jan-08	3	1000	0	
S76	23-Jan-08	-13	-2900	-10	
S76	26-Jan-08	-11	-3100	-31	
S76	27-Jan-08	9	1800	18	

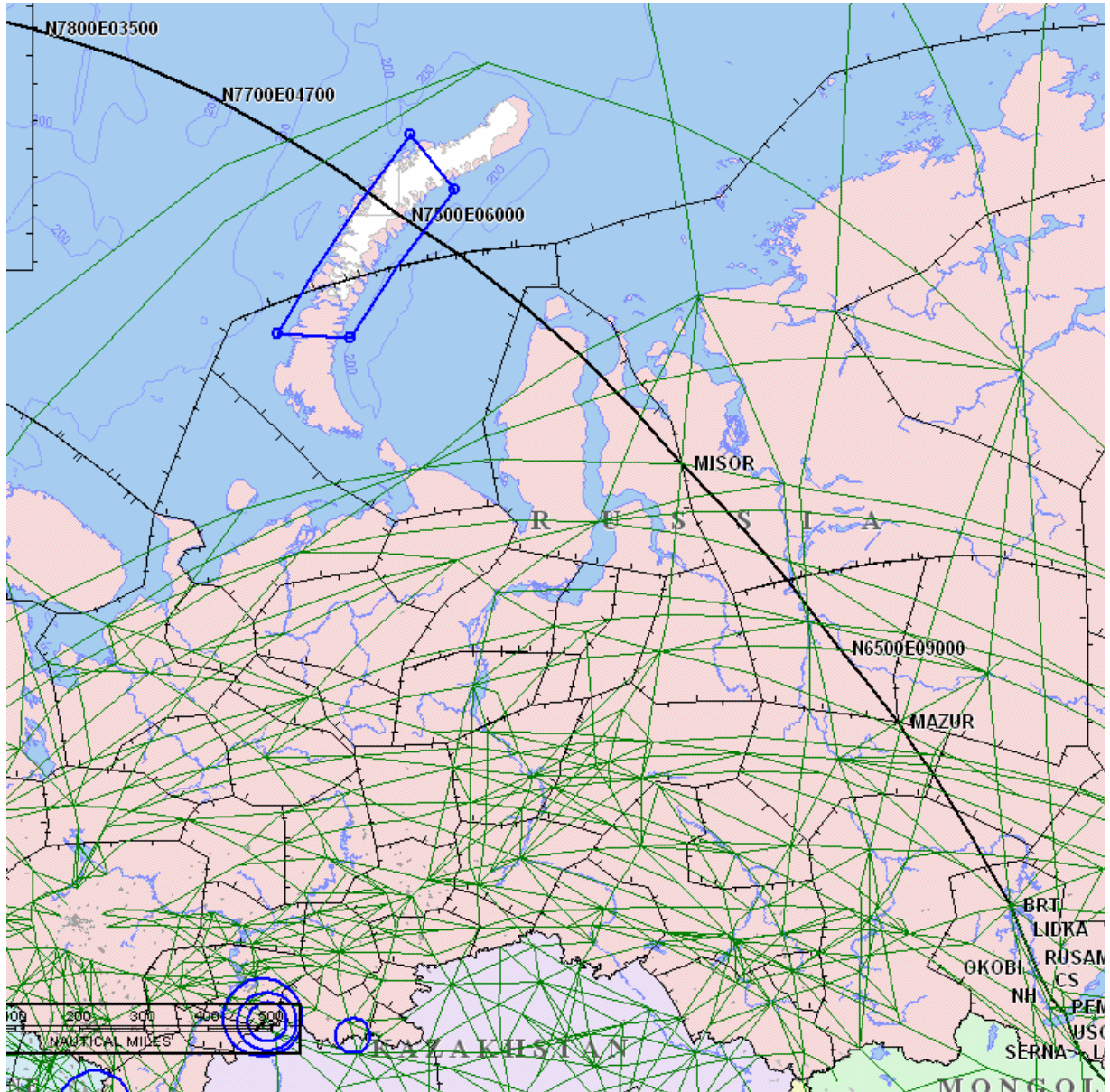
KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
S76	1-Dec-07	-27	-5100	-53	
S76	2-Dec-07	-21	-1400	-14	
S76	3-Dec-07	-51	-10300	-69	
S76	8-Dec-07	2	500	3	
S76	9-Dec-07	2	400	4	
S76	13-Dec-07	6	600	7	
S76	14-Dec-07	9	1400	15	
S76	15-Dec-07	14	2200	22	
S76	18-Dec-07	12	2500	24	
S76	20-Dec-07	12	1300	13	
S76	21-Dec-07	-14	-2500	-26	
S76	25-Dec-07	4	-800	-8	
S76	26-Dec-07	6	1000	10	
S76	27-Dec-07	2	300	0	

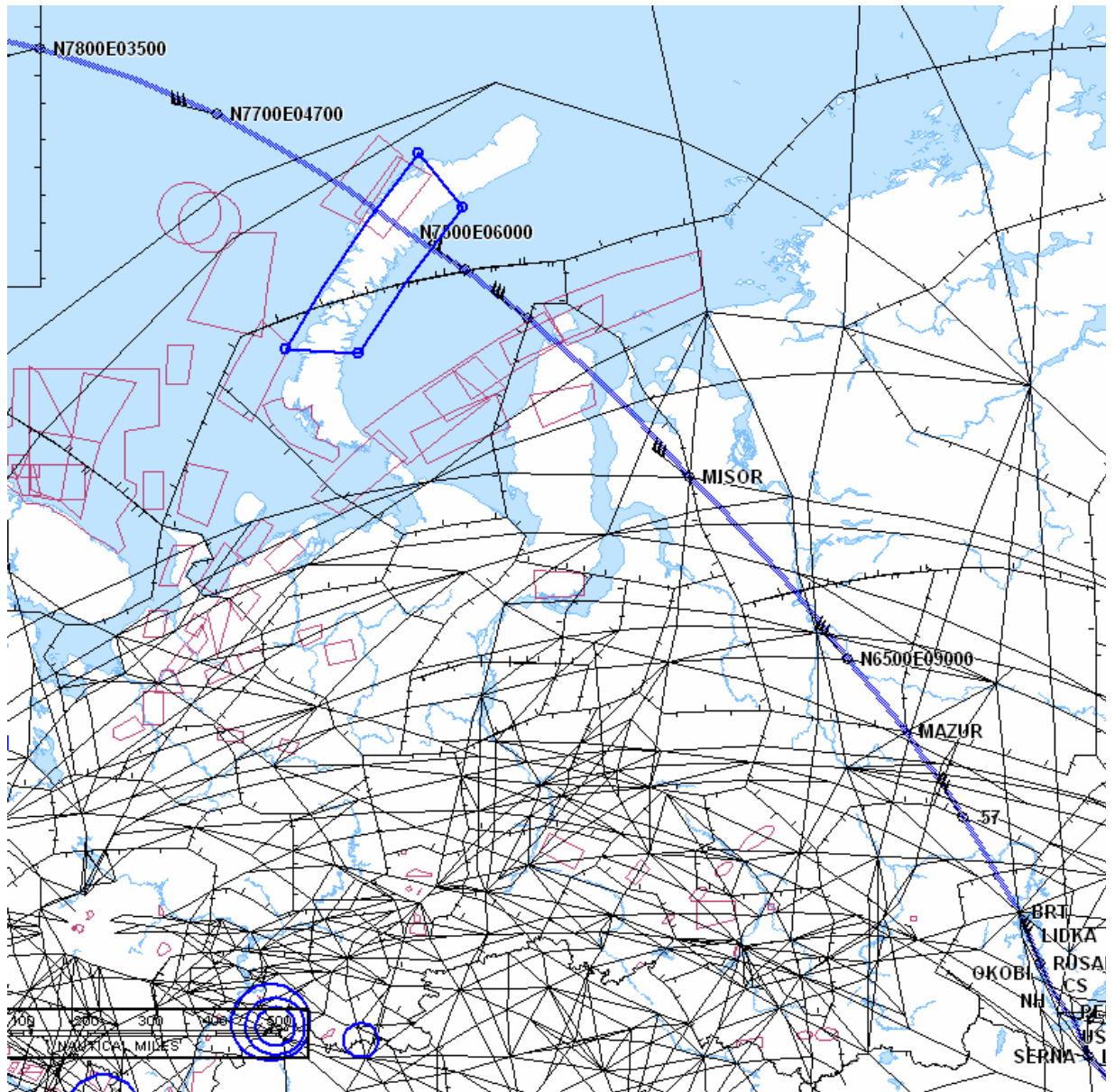
KEWR-ZBAA		Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
	dd-Mon-yr				
S76	3-Nov-07	-2	100	0	
S76	4-Nov-07	-6	-1900	-10	
S76	5-Nov-07	-5	-2300	-22	
S76	6-Nov-07	-2	-2100	-21	
S76	7-Nov-07	13	3300	6	
S76	8-Nov-07	8	2600	2	
S76	9-Nov-07	0	500	-5	
S76	10-Nov-07	16	4700	17	
S76	11-Nov-07	16	4800	34	
S76	12-Nov-07	12	2800	28	
S76	13-Nov-07	19	4600	33	
S76	14-Nov-07	9	2900	0	
S76	15-Nov-07	-8	-2100	0	
S76	16-Nov-07	-17	-3900	0	
S76	17-Nov-07	-12	-2700	0	
S76	19-Nov-07	7	3300	0	
S76	20-Nov-07	-9	-1600	-17	
S76	25-Nov-07	16	4100	23	
S76	26-Nov-07	-8	-1200	-13	
S76	27-Nov-07	-1	200	2	
S76	28-Nov-07	1	1600	15	
S76	29-Nov-07	-4	-200	0	
S76	30-Nov-07	-9	-1000	-11	

Proposed Route S99

(Same as KEWR to VHHH S99 through Russian Airspace)

77N010W..78N035E..77N047E..75N060E..MISOR..65N090E..
MAZUR..BRT.G490.LIRTA..SERNA.M520.POLHO.





KEWR-ZBAA		Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
	dd-Mon-yr				
S99	1-Jan-08	16	5100	0	
S99	2-Jan-08	14	5300	0	
S99	3-Jan-08	4	2300	16	
S99	4-Jan-08	-13	-3900	0	
S99	5-Jan-08	-18	-5200	-26	
S99	6-Jan-08	-30	-5800	-58	
S99	7-Jan-08	-16	-3900	-11	
S99	8-Jan-08	-16	-4300	-16	
S99	12-Jan-08	0	500	0	
S99	18-Jan-08	2	300	0	
S99	19-Jan-08	0	800	0	
S99	20-Jan-08	3	1100	0	
S99	23-Jan-08	-16	-3700	-18	
S99	26-Jan-08	-9	-3600	-38	
S99	27-Jan-08	10	1500	16	

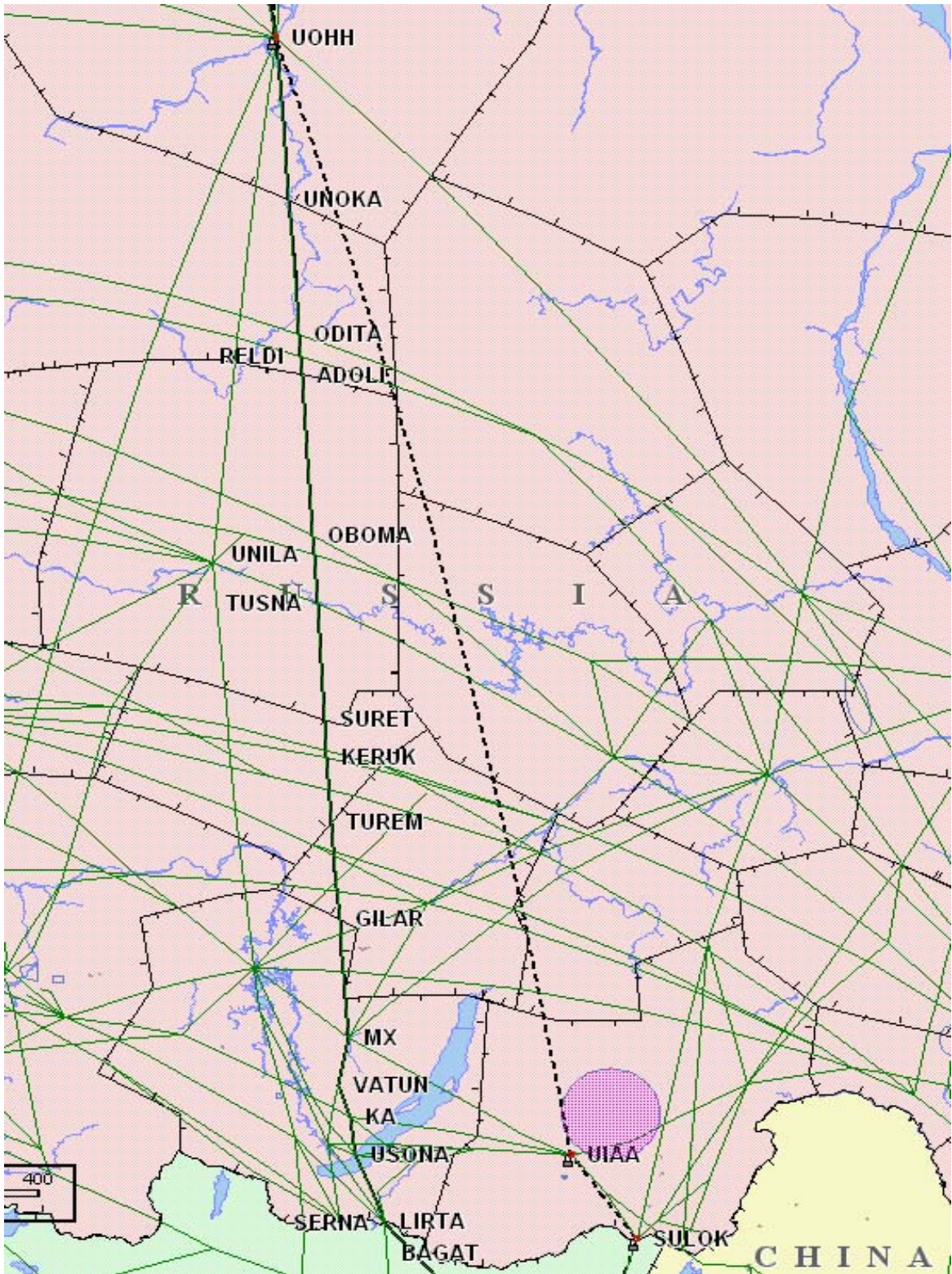
KEWR-ZBAA		Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
	dd-Mon-yr				
S99	1-Dec-07	-32	-6100	-62	
S99	2-Dec-07	-19	-1200	-13	
S99	3-Dec-07	-44	-8800	-55	
S99	8-Dec-07	2	500	3	
S99	9-Dec-07	2	300	3	
S99	13-Dec-07	13	1500	17	
S99	14-Dec-07	14	2100	22	
S99	15-Dec-07	9	3300	33	
S99	18-Dec-07	16	2900	28	
S99	20-Dec-07	22	3600	37	
S99	21-Dec-07	-15	-3200	-33	
S99	25-Dec-07	5	500	-5	
S99	26-Dec-07	6	1400	14	
S99	27-Dec-07	3	600	0	

KEWR-ZBAA		Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
	dd-Mon-yr				
S99	3-Nov-07	-4	-400	0	
S99	4-Nov-07	-12	-3400	-26	
S99	5-Nov-07	-2	-1400	-13	
S99	6-Nov-07	1	-1400	-14	
S99	7-Nov-07	7	1800	6	
S99	8-Nov-07	15	5200	2	
S99	9-Nov-07	3	200	2	
S99	10-Nov-07	10	3600	17	
S99	11-Nov-07	14	5200	34	
S99	12-Nov-07	14	4400	43	
S99	13-Nov-07	24	6300	33	
S99	14-Nov-07	11	3600	0	
S99	15-Nov-07	-10	-2400	0	
S99	16-Nov-07	-26	-7100	0	
S99	17-Nov-07	-20	-5700	0	
S99	19-Nov-07	7	3400	0	
S99	20-Nov-07	-16	-3600	-37	
S99	25-Nov-07	14	3500	23	
S99	26-Nov-07	-6	-600	-7	
S99	27-Nov-07	0	600	6	
S99	28-Nov-07	-2	1200	11	
S99	29-Nov-07	-9	-1400	0	
S99	30-Nov-07	-18	-3400	-36	

Proposed Route US8 - UOHH DCT UIAA

Existing "great" route is in solid black/blue, proposed **alternate** routing in dotted black/blue

ABERI.B934.UOHH.UIAA.A91.AGINO.A808.SULOK



KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
US8	1-Jan-08	-2	-600	0	
US8	2-Jan-08	4	1300	0	
US8	3-Jan-08	-2	-600	-6	
US8	4-Jan-08	-5	-1700	0	
US8	5-Jan-08	-6	-2700	0	
US8	6-Jan-08	-6	-1400	-14	
US8	7-Jan-08	-7	-2500	0	
US8	8-Jan-08	-3	-700	0	
US8	12-Jan-08	-7	-2100	-12	
US8	18-Jan-08	-6	-2600	0	
US8	19-Jan-08	-1	-300	0	
US8	20-Jan-08	2	0	0	
US8	23-Jan-08	5	1000	0	
US8	26-Jan-08	-9	-1600	-16	
US8	27-Jan-08	-9	-2100	-20	

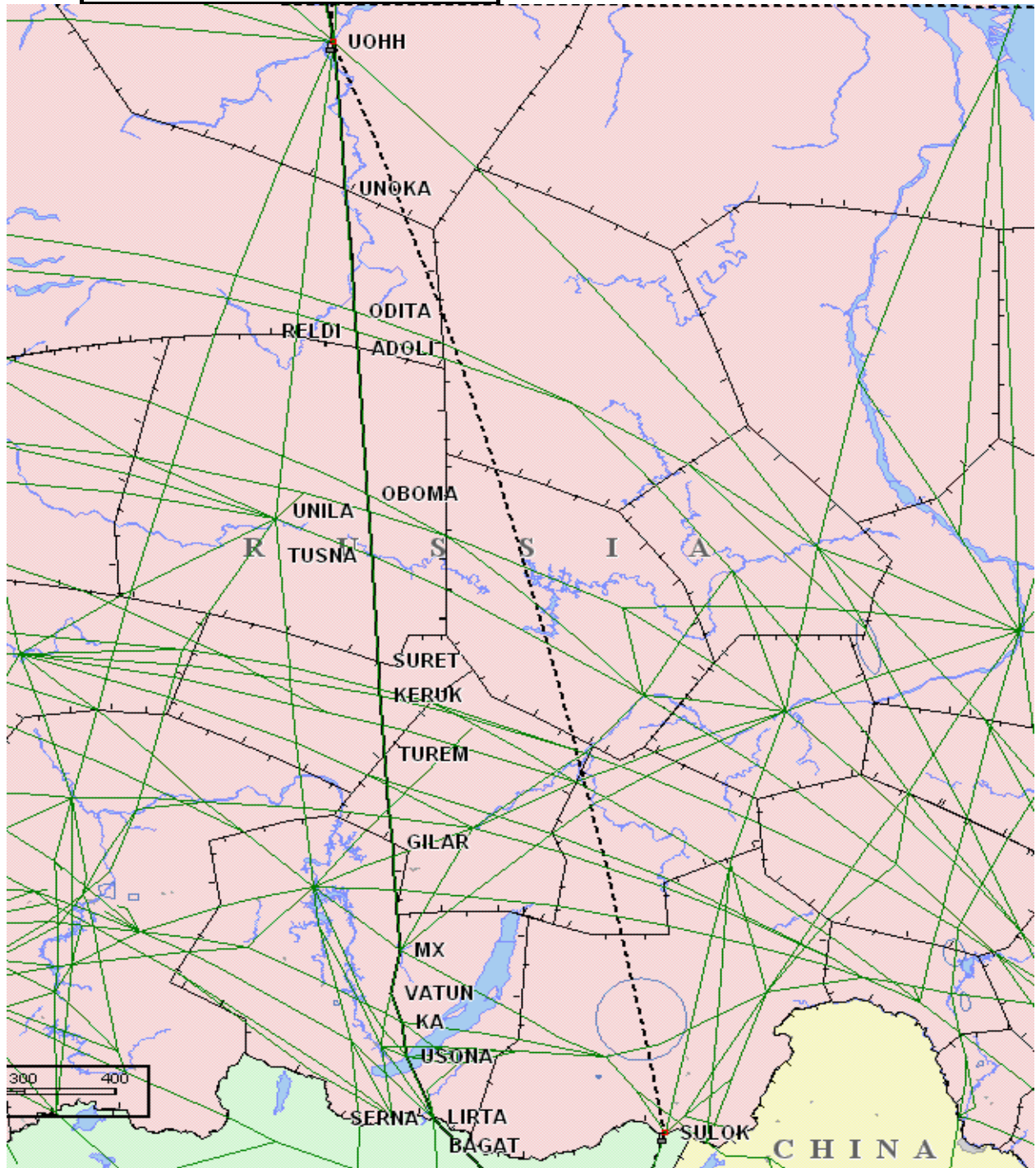
KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
US8	1-Dec-07	2	100	0	
US8	2-Dec-07	-33	-4600	-48	
US8	3-Dec-07	-57	-13700	-104	
US8	8-Dec-07	-5	-1600	-17	
US8	9-Dec-07	3	700	7	
US8	13-Dec-07	-5	-1000	-10	
US8	14-Dec-07	0	200	2	
US8	15-Dec-07	-2	-300	-3	
US8	18-Dec-07	2	100	0	
US8	20-Dec-07	-13	-2900	-30	
US8	21-Dec-07	-12	-2400	-25	
US8	25-Dec-07	0	-200	2	
US8	26-Dec-07	-4	-600	-7	
US8	27-Dec-07	-2	-400	0	

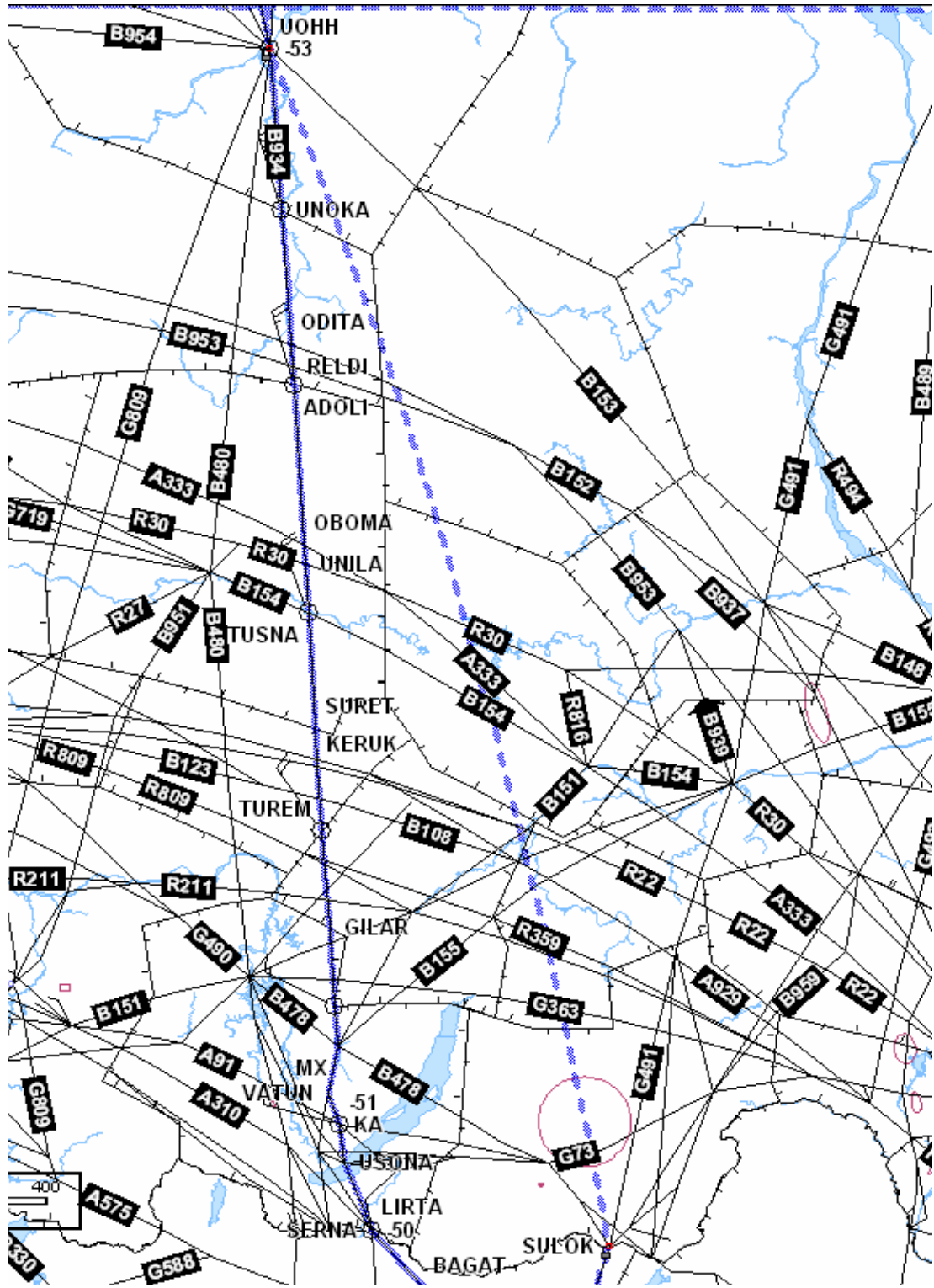
KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
US8	3-Nov-07	7	2500	0	
US8	4-Nov-07	3	1200	0	
US8	5-Nov-07	2	300	3	
US8	6-Nov-07	0	0	0	
US8	7-Nov-07	0	0	0	
US8	8-Nov-07	1	200	2	
US8	9-Nov-07	9	1800	11	
US8	10-Nov-07	4	1400	13	
US8	11-Nov-07	-4	-900	-9	
US8	12-Nov-07	-9	-2200	-23	
US8	13-Nov-07	-6	-1600	-16	
US8	14-Nov-07	-4	-1300	-13	
US8	15-Nov-07	-11	-3700	0	
US8	16-Nov-07	2	-300	0	
US8	19-Nov-07	-12	-3900	-16	
US8	20-Nov-07	6	200	2	
US8	25-Nov-07	5	1200	12	
US8	26-Nov-07	-14	-3300	-32	
US8	27-Nov-07	2	-100	-1	
US8	28-Nov-07	2	200	1	
US8	29-Nov-07	5	1000	0	
US8	30-Nov-07	0	-300	-4	

Proposed Route US9 - UOHH DCT SULOK

Existing "great" route is in solid black/blue, proposed **alternate** routing in dotted black/blue

ABERI.B934.UOHH..SULOK.





KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
US9	1-Jan-08	0	-200	0	
US9	2-Jan-08	6	1600	0	
US9	3-Jan-08	-1	-400	-4	
US9	4-Jan-08	-3	-1300	0	
US9	5-Jan-08	-5	-2200	0	
US9	6-Jan-08	-4	-1000	0	
US9	7-Jan-08	-5	-2000	0	
US9	8-Jan-08	-1	-400	0	
US9	12-Jan-08	-5	-1700	-8	
US9	18-Jan-08	-5	-2300	0	
US9	19-Jan-08	1	200	0	
US9	20-Jan-08	4	500	0	
US9	23-Jan-08	6	1500	0	
US9	26-Jan-08	-7	-1100	-11	
US9	27-Jan-08	-7	-1800	-18	

KEWR-ZBAA	dd-Mon-yr	Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
US9	1-Dec-07	-4	400	4	
US9	2-Dec-07	-31	-4400	-46	
US9	3-Dec-07	1	-1200	-16	
US9	8-Dec-07	-3	-1100	-12	
US9	9-Dec-07	4	1000	11	
US9	13-Dec-07	1	300	-1	
US9	14-Dec-07	-2	-400	0	
US9	15-Dec-07	-1	0	0	
US9	18-Dec-07	3	500	4	
US9	20-Dec-07	-11	-2500	-26	
US9	21-Dec-07	-10	-2000	-21	
US9	25-Dec-07	2	200	2	
US9	26-Dec-07	-2	-100	-2	
US9	27-Dec-07	0	200	0	

KEWR-ZBAA		Time Saved over "normal" best time	Fuel saved	Additional Payload able to carry	Emissions
US9	3-Nov-07	11	3500	0	
US9	4-Nov-07	6	2100	0	
US9	5-Nov-07	4	600	6	
US9	6-Nov-07	3	400	4	
US9	8-Nov-07	2	600	2	
US9	9-Nov-07	12	2700	11	
US9	10-Nov-07	6	1900	17	
US9	11-Nov-07	-3	-600	-6	
US9	12-Nov-07	-8	-1800	-19	
US9	13-Nov-07	-4	-1300	-13	
US9	14-Nov-07	-3	-1100	-11	
US9	15-Nov-07	-10	-3200	0	
US9	16-Nov-07	4	200	0	
US9	17-Nov-07	-11	-3800	0	
US9	19-Nov-07	-10	-3600	-12	
US9	20-Nov-07	8	500	5	
US9	25-Nov-07	7	1300	13	
US9	26-Nov-07	-12	-2900	-28	
US9	27-Nov-07	4	300	3	
US9	28-Nov-07	4	600	5	
US9	29-Nov-07	7	1500	0	
US9	30-Nov-07	1	0	-1	