The 'Alaskan Ring of Fire'.

A scientific expedition, by Bob Reid.

With a little help from Norm Hancock.
For FS2002 only

You have been chartered by a group of distinguished scientists to fly from Anchorage, Alaska (PANC), to Attu Island (ATU) in the Aleutians on a twelve leg tour. They have chosen DC-3 Airways for this charter flight because they have heard that we are a hearty bunch of pilots who don't mind a little cooler weather, or potentially dangerous flying conditions. Due to the potential dangers these flights are daylight flights only.

The Aleutian Islands are very remote and peppered with active volcanoes. The islands are situated in the north eastern part of the Pacific where several of the earth's tectonic plates meet, and is often referred to as the 'Alaskan Ring of Fire'. The area is a hotbed of seismic and volcanic activity and therefore a lure to many scientists in the field. The scientists have invented a new seismic device they believe will be able to very accurately predict future eruptions, as well as give early warning signs for potentially deadly earthquakes.

In order to properly set up the seismic system, the devices must be located along the island chain with the first one located in Anchorage and the last one at your final destination Attu, which is the last island in the chain before you cross open water into Russia.

A word of caution… If you come across any volcanic activity, you must be very cautious about approaching too close to the fiery display. Volcanic eruptions are often accompanied with the very quick release of deadly gases that spread with frightening speed in the area surrounding the release. The gases can render a pilot unconscious for brief periods, or in extreme cases cause loss of life! Despite the obvious dangers of this flight, the scenery is spectacular. So get dressed in your cold weather gear, load up the special survival equipment (just in case) and enjoy the flights.

Place the .bgl files included in the download into your FS2002/SCENEDB/ WORLD/ Scenery folder. (These files will add some 'special' effects to your flying enjoyment).

Report flights as 375-05-01 through to 375-05-12.

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-01	Anchorage, Alaska to Homer, Alaska.	PANC to PAHO	126	4500	**Depart Rwy 24L. Turn left to 231deg. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To ANC VOR, 114.30. 231deg. 6.9nm 03:20** **To ENA VOR, 117.60. 198deg. 43.2nm 18:23** After station passage turn left to the 179deg radial OB from ENA VOR. **To Anchor River Airpark. 179deg. 53.0nm 21:57** After station passage turn left to 107deg. **To ACE NDB, 277.0. 107deg. 14.1nm 06:07** After station passage descend to 1500ft and slow to 120kts. Turn right to 181deg. and fly heading for one minute. Turn right to 211deg. And fly heading for one minute. Turn right through 180deg and intercept the ILS. 109.30. **Land PAHO Rwy 3. 031deg. 08.9nm 05:12**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-02	Homer, Alaska to lliamna, Alaska.	PAHO to PAIL	109	4500	**Depart Rwy 3. Turn left to 324deg. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To HOM VOR, 114.60. 324deg. 04.0nm 01:58** After station passage turn left to the 256deg. radial OB from HOM VOR. **To Camp Point. 256deg. 49.6nm 20:42** You are overhead Camp Point when the DME reads 49.6nm After station passage turn left to 244deg. and climb to 6500ft. **Track to ILI NDB, 411.0. 244deg. 53.4nm 42:28** Tune Nav1 to ILI DME, 411.4. When DME reads 39nm commence 300fpm descent to 1500ft. MSL. When Nav1 DME reads 2nm turn right to 247deg. **Land PAIL Rwy 25. 247deg. 01.6nm 00:43**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-03	lliamna, Alaska, to King Salmon, Alaska.	PAIL to PAKN	102	4500	**Depart Rwy 17. Turn right to 196deg. and intercept the 185deg. bearing from ILI NDB, 411.0. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To HCP NDB, 34.0. 185deg. 49.3nm 20:54** **To AKN VOR, 112.80. 224deg. 39.8nm 16:00** Aim to arrive at AKN VOR at 120kts and 1500ft. MSL. Turn right to 262deg. and fly heading for one minute. Turn right to 292deg. and fly heading for one minute. Turn right through 180degs. And intercept the ILS, 110.30. **Land PAKN Rwy 11. 112deg. 12.5nm 05:56**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-04	King Salmon, Alaska to Port Heiden, Alaska.	PAKN to PAPH	136	4500	**Depart Rwy 29. Turn left to 236deg. and intercept the 181deg. radial OB from AKN VOR, 112.80. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To Pilot Point. 181deg. 76.2nm 31:41** You are overhead Pilot Point when the DME reads 73nm. After station passage turn right to 205deg. **To PDN NDB, 371.0. 205deg. 51.4nm 20:43** Tune Nav1 to PDN DME, 109.50. When DME reads 20nm commence 300fpm descent to 1500ft. MSL. Aim to arrive at PDN NDB at 120kts and 1500ft. MSL. After station passage turn right to 280deg. and fly heading for one minute. Turn right to 306deg. and fly heading for one minute. Turn right through 180 deg. to 126deg. for straight in visual approach. **Land PAPH Rwy 13 126deg. 08.3nm 02:27**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-05	Port Heiden, Alaska, to Cold Bay, Alaska.	PAPH to PACD	177	4500	**Depart Rwy 23. Turn left to 202deg. and intercept the 218deg. bearing OB from PDN NDB, 3710. Climb to 4500ft. Maintain heading when signal fades.** **Course Distance ETE.(h:m:s)** **Track to CDB VOR, 112.60. 218deg. 162.5nm 01:06:18** When DME reads 10nm turn right to 226deg. **To CD NDB, 341.0. 226deg. 09.6nm 04:00** After station passage turn left to 142deg. Straight in visual approach. **Land PACD Rwy 14. 142deg. 04.8nm 02:03**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-06	Cold Bay, Alaska, to False Pass, Alaska.	PACD to KFP	47	4500	**Depart Rwy 14. Tune Nav1 to CDB VOR, 112.60. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To Fix 01. 142deg. 12.0nm 05:43** When DME reads 15nm turn right to 221deg. **To Fix 02. 221deg. 29.9nm 12:30** Reset OBS to 197 deg. Keep an eye on the DME for a reading of around 35nm. When needle starts to centralize you should be approaching the coastline. Turn right to 316deg and enter the narrows. False pass is located on the east coast of Unimak Island. **Land KFP Rwy 31. 310deg. 05.4nm 12:04** **Health Warning – This is a very short runway at 2100ft and Oil treated.**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-07	False Pass, Alaska. To Unalaska, Alaska.	KFP to PADU	138	8500	**Depart Rwy 13. Tune Nav1 to CDB VOR, 112.60. Continue on runway heading for two minutes. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To Fix 01. 139deg. 04.0nm 01:58** Nav1 DME should indicate approx 35nm on a bearing of approx 199deg. After station passage turn right to 242deg. **To Cape Sarichef 242deg. 55.8nm 23:01** Reset Nav1 OBS to 225 deg. Keep an eye on the DME for a reading of around 85nm when the needle should begin to centralize. At that point you should have visual on PACS. You will pass south of Shishaldin volcano which has three peaks and is located approximately at the centre of the island. Pogromni volcano is also located on the island and is located to the southwest, just before PACS. Shortly after your departure the scientists indicated that they had picked up seismic activity in the area around the third peak of the volcano. Keep an eye out for this! After station passage turn left to 214deg. **To Akutan. 214deg. 40.9nm 15:34** Tune Nav1 to DUT DME, 113.90. Accurate pilotage is now required to acquire visual on Akutan which should occur when the DME reads around 30nm. **To Fix 02. 236deg, 22.4nm 09:05** **To DUT NDB, 283.0. 211deg. 08.2nm 03:37** Aim to arrive at DUT NDB at 120kts, and 1500ft MSL. Turn right to 270deg. and fly heading for one minute. Turn right to 300deg. and fly heading for thirty seconds. Turn right through 180deg. to 120deg. Visual approach, **Land PADU Rwy 30. 120deg. 06.8nm 03:20**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-08	Unalaska, Alaska to Nikolski, Alaska.	PADU to IKO	110	6500	**Depart Rwy 30. Continue Rwy heading until the coast is crossed after two minutes flying time. 4.5nm. Climb to 6500ft. Tune Nav1 to DUT DME, 113.90.** **Course Distance ETE.(h:m:s)** **To Fix 01. 300deg. 04.7nm 02:17** After station passage turn left to 260deg. and maintain heading until coast is reached. DME should read 15nm. **To fix 02. 260deg. 11.6nm 05:25** After station passage turn left to 200deg. Accurate pilotage required to acquire visual on Chernofski Harbor. DME should read 47nm when overhead Chernofski Harbor. **To Chernofski Harbor. 200deg. 39.7nm 16:23** After station passage turn right to 225deg. When DME reads 62nm. commence 300fpm descent to 1000ft MSL **To Fix 03. 225deg. 51.0nm 15:13** After station passage follow along eastern coast of islands until DME reads 98nm then turn right to 256deg. for visual approach. **Land Nikolski Rwy 26. 256deg. 03.0nm 01:19**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-09	Nikolski, Alaska to Atka, Alaska.	IKO to PAAK	213	4500	**Depart Rwy 8. Turn right to 222deg. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To Fix 02. 222deg. 14.3nm 06:47** Continue heading until tip of island is reached, then turn right to 244deg. **To fix 03. 244deg. 148.5nm 61:35** Maintain heading of 244deg. You will observe to your right a string of islands called the **'Islands of the four mountains'**. You will pass Cleveland Volcano which last erupted in 1997. Beyond Cleveland is Carlisle Volcano whose last activity was noted in 1987. The next island you will meet after 25min flying time from Nikolski is Yunaska. Little activity has been reported since the ship Boxer reported a 'violent volcanic eruption' in November 1937 which was reported in the 'Anchorage Times'. The next island to appear to starboard is Amukta whose volcanic activity has been sparse recently. The last report of activity was in early July 1996 when a passing ship reported a 1-Km high plume of ash. You will pass five miles to the south of Seguam. In late December 1992 US Coast Guard pilots reported eight lava fountains close to the summit but these soon diminished and little activity has been observed since. Ten minutes flying time after passing Seguam you will approach the eastern tip of an island which is Fix 03. After station passage turn right to 263deg. **To Fix 04. 263deg. 43.9nm 18:26** Follow northern coast of island for approx seventeen minutes. Commence a 300fpm descent to 1000ft MSL eight and a half minutes after passing Fix 03. After reaching western tip of island you will cross a one mile wide narrows to reach Atka Island. Maintain heading for one and a half minutes then turn right to 340deg. Straight in approach. **Land PAAK Rwy 33. 340deg. 06.0nm 02:39**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-10	Atka, Alaska to Adak, Alaska.	PAAK to PADK	94	4500	**Depart Rwy 33. Turn right to 246deg. Tune Nav1 to ADK DME, 114.00. Climb to 4500ft.** **Course Distance ETE.(h:m:s)** **To Fix 02. 246deg. 44.2nm 19:19** Continue heading until tip of island is reached when DME will read 50nm. After station passage turn right to 255deg. **Track to NUD NDB, 347.0 255deg. 25.3nm 10:29** When DME reads 30nm commence 300fpm descent to 1500ft. When DME reads 25nm turn right to 265deg. Retune Nav1 to 108.90 and intercept the ILS. **Land PADK Rwy 23. 232deg. 24.1nm 11:08**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-11	Adak, Alaska to Eareckson AS, Alaska.	PADK to PASY	355	6500	**Depart Rwy 23. Continue on runway heading. Tune Nav1 to ADK DME, 114.00. Climb to 6500ft.** **Course Distance ETE.(h:m:s)** **To ADK NDB, 530.0 232deg. 01.0nm 01:00** After station passage turn right to 260deg. and maintain heading. You will pass to the south of Kanaga volcano which last erupted intermittently in 1994. It is situated on Kanaga Island and will be observed when Nav1 DME reads approx. 16nm. **To Fix 01. 260deg. 35.3nm 15:33** Maintain heading after Fix 01 which is at the eastern tip of Tanaga Island. You will pass to the south of Tanaga volcano which last erupted in 1914.

					Nav1 DME will read approx. 50nm. **To Fix 02. 260deg. 43.8nm 17:38** Fix 02 is a small island called Gareloi where Mt Gareloi is located. This volcano last had a major eruption in 1929-30. It will be reached when Nav1 DME reads approx. 80nm. After station passage turn right to 270deg. and maintain heading. **To Fix 03. 270deg. 57.9nm 23:18** Fix 03 is located on the southern tip of Semisopochnoi Island where Cerberus volcano is located. This volcano has exhibited very little activity for many years. The mountain to the north of the island is Anvil Peak and has a crater lake at its foot. **To Fix 04. 265deg. 40.9nm 16:27** Fix 04 is located on the southern tip of Little Sitkin Island which is the first island in the Rat group of islands. Little Sitkin volcano has showed little activity recently but a small amount of activity was observed in 1959. After station passage turn right to 272deg. **To Fix 05. 272deg. 32.3nm 13:01** Fix 05 is located on the eastern tip of Kiska Island which is the home of Kiska volcano. In June 1990 a steam and ash was observed from an upper flank vent but appears to have been quiet since. After station passage turn right to 287deg. **To Fix 06. 287deg. 68.8nm 27:42** Fix 06 is located on Baldur Island. Tune Nav1 to SYA VOR, 109.00. Set OBS to 286deg. Station passage should occur when Nav1 DME reads 71nm and needle is centralized. After station passage turn left to 286deg. **Track to SYA VOR, 109.00. 286deg. 55.7nm 22:48** When DME reads 44nm commence 300fpm descent to 1500ft MSL. Retune Nav1 to 110.10 and when signal received correct course to intercept the ILS. **Land PASY Rwy 28. 284deg. 12.7nm 05:34**

Flight No.	From / To	Airport ID's	NM	Init. Alt.	Flight description
375-05-12	Eareckson AS, Alaska to Casco Cove CGS, Alaska,	PASY to ATU	69	4500	**After your arrival at Eareckson AS, You perform a system calibration on your instruments and notice a huge amount of seismic activity on Attu Island which is to the west. It is time to make the final flight and install the last device.** **Depart Rwy 28. Turn left and intercept the 206deg. radial OB from SYA VOR, 109.00.** **Course Distance ETE.(h:m:s)** **To Fix 02. 206deg. 27.7nm 12:18** As you approach the south eastern tip of Agattu Island the DME will read 25nm. After station passage turn right to 280deg. **To Fix 03. 280deg. 13.5nm 05:24** Follow coast to the south western tip of the island Commence 300fpm descent to 1000ft MSL four and a half minutes after passing Fix 02. After station passage turn right to 334deg. **To Fix 04. 334deg. 23.5nm 09:20** Tune ADF to ATU NDB, 375.0. Continue on heading 334deg until bearing to station indicates 021deg. Turn right to 021 deg. for straight in approach. **Land ATU Rwy 2. 021deg. 03.9nm 02:10**