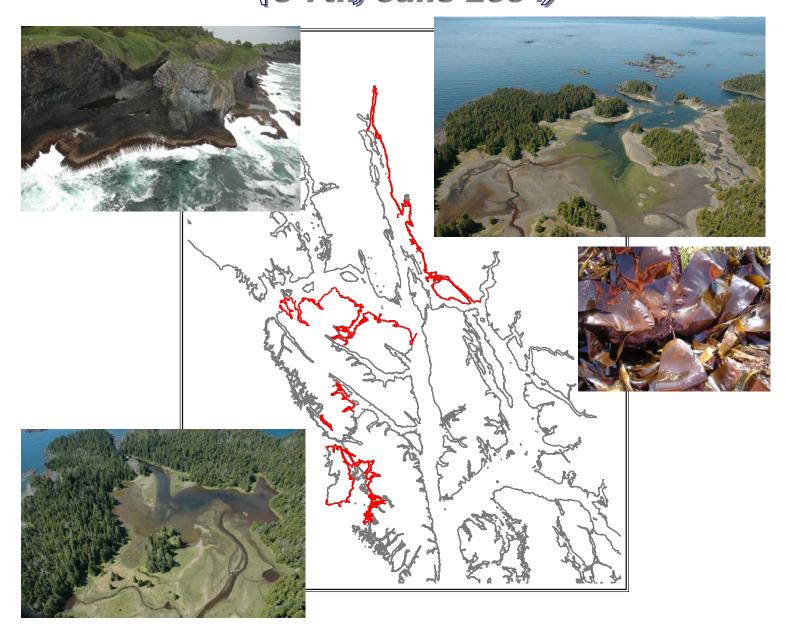
CORI Project:04-20 23 June 2004

2004 Aerial Video Imaging Survey, Southeast Alaska (3-7th, June 2004)



Prepared for the National Marine Fisheries Service



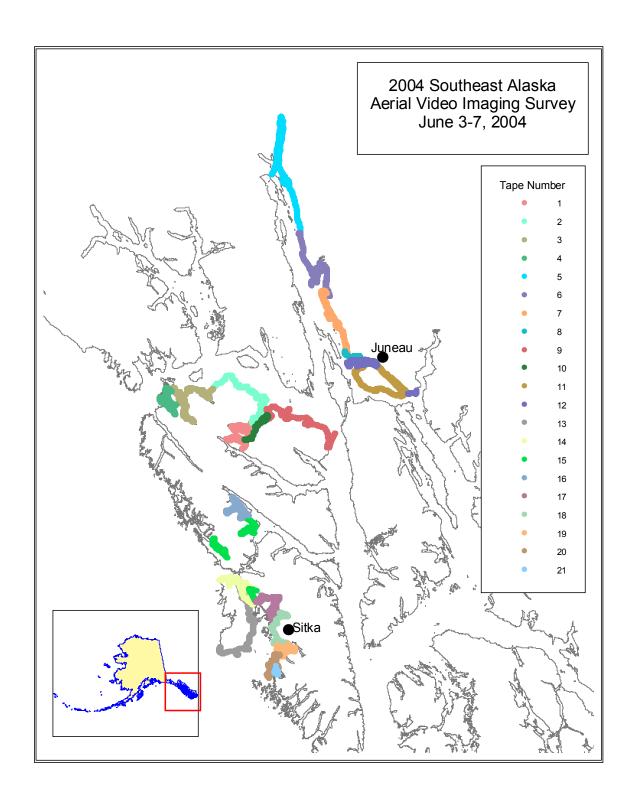


Figure 1. Location of individual tapes from the 2004 Southeast Alaska AVI Survey

This survey combines the use of digital video camera technology with real-time GPS mapping to image the shoreline of three areas in southeast Alaska: Icy Strait, Lynn Canal, and Sitka, at low tide. The unusual features of the survey are: (a) the survey was conducted during the lowest tides of the year so the entire intertidal zone is imaged; (b) the technique is not weather dependent so imagery can be collected in any conditions under which aircraft can fly and; (c) both a coastal ecologist and coastal geomorphologist were in the aircraft providing real-time commentary on intertidal features that may not be visible on the imagery.

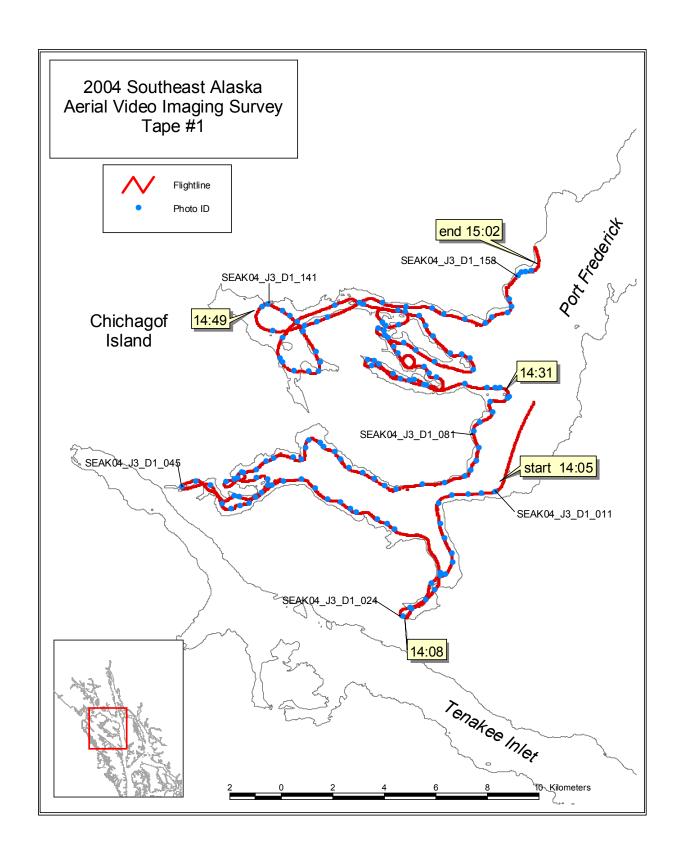
The survey was conducted by Coastal & Ocean Resources, Inc. (CORI), of Sidney, BC under contract to the NOAA and National Marine Fisheries Services, located in Juneau Alaska.

Figure 1 shows the overall flight coverage by tape number. The flight crew names and responsibilities are summarized in Table 1.

Table 1 Southeast Alaska AVI Flight Personnel and Responsibilities,

Function	Individual/ Affiliation	Responsibilities
geomorphologist project leader	John Harper CORI	co-ordination of survey, video imaging, geomorphology commentary, project reporting
coastal ecologist	Mary Morris, Archipelago Marine Resources Mandy Lindeberg, Auke Bay Marine Lab	biology commentary, digital photographs
navigator	Sheri Ward CORI Zach Ferdana The Nature Conservancy	in flight navigation & recording, post-flight track plotting
pilot	Lewis Hart, Coastal Helicopters	

3



Tape Number: SE_AK 2004-01

General Location: Port Frederick, The Narrows, Neka Bay

 Date:
 June 3, 2004

 Time Start:
 14:05:00

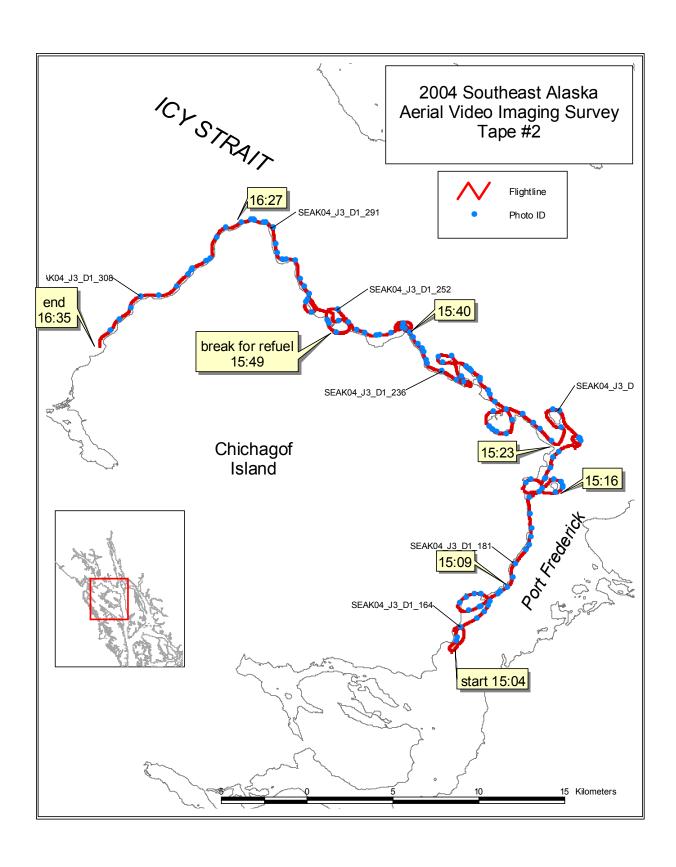
 Time Stop:
 15:01:13

 Tape Length:
 59:05

Weather: Patchy fog Juneau area, clearing to sunny, winds light

Electronic File: jun3_1.trk, jun3_1.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
14:05	East entrance to Narrows	SEAK04_J3_D1_011.JPG	17302	26
14:08	Salt Chuck	SEAK04_J3_D1_024.JPG	"	"
14:18	Portage	SEAK04_J3_D1_045.JPG	11	"
14:25	Eight Fathom Bight	SEAK04_J3_D1_065.JPG	"	32
14:31	Chimney Rock	SEAK04_J3_D1_086.JPG	"	"
14:49	Neka River (estuary)	SEAK04_J3_D1_140.JPG	"	"
15:02	log sortend tape 1	SEAK04_J3_D1_160.JPG	"	"



Tape Number: SE_AK 2004-02

General Location: West side Port Frederick, south side of Icy Strait

(west of Pt. Adolphus)

 Date:
 June 3, 2004

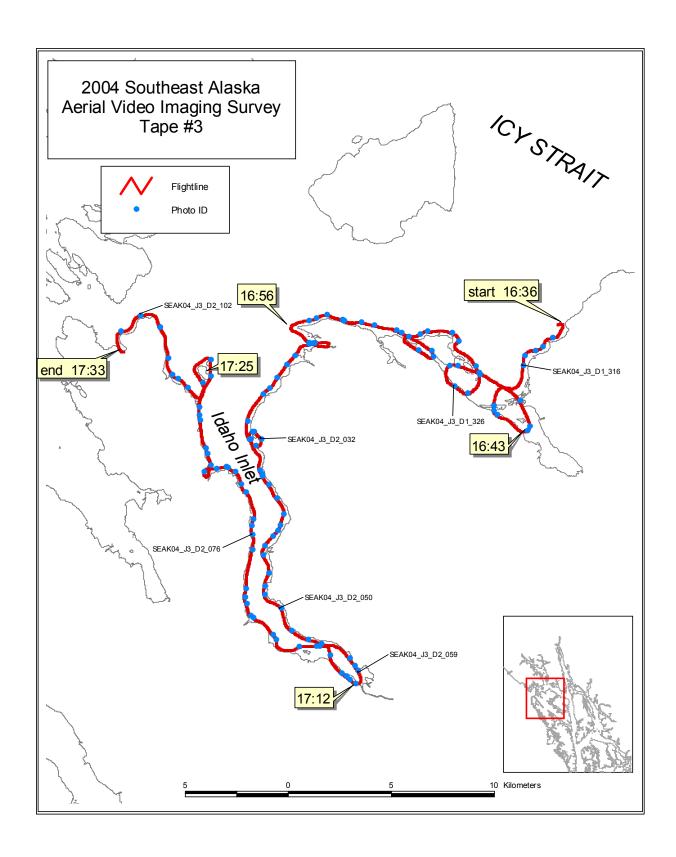
 Time Start:
 15:03:28

 Time Stop:
 16:35:41

 Tape Length:
 59:47

Weather: clear, sunny, very light winds Electronic File: jun3_1.txt, navdatav2.mbd

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
15:04:00	Log sort north of Neka Bay	SEAK04_J3_D1_162.JPG	17302	32
15:09	point north of Humpback	SEAK04_J3_D1_180.JPG	"	"
	creek			
15:16	Halibut Island	SEAK04_J3_D1_192.JPG	"	"
15:23	Crist Point	SEAK04_J3_D1_201.JPG	"	"
15:36	Flynn Cove	SEAK04_J3_D1_234.JPG	"	"
15:40	Eagle Point	SEAK04_J3_D1_243.JPG	"	11
15:48	Chicken Creek	SEAK04_J3_D1_252.JPG	"	"
	break for refuel			
16:20	Chicken Creek	SEAK04_J3_D1_253.JPG	"	"
16:27	Point Adolphus	SEAK04_J3_D1_295.JPG	"	"
16:33	point south side Icy strait	SEAK04_J3_D1_308.JPG	"	"
16:35	end of tape 2			



Tape Number: SE_AK 2004-03

General Location: Icy Strait, Mud Bay, Idaho Inlet, South Inian Pass

 Date:
 June 3, 2004

 Time Start:
 16:36:46

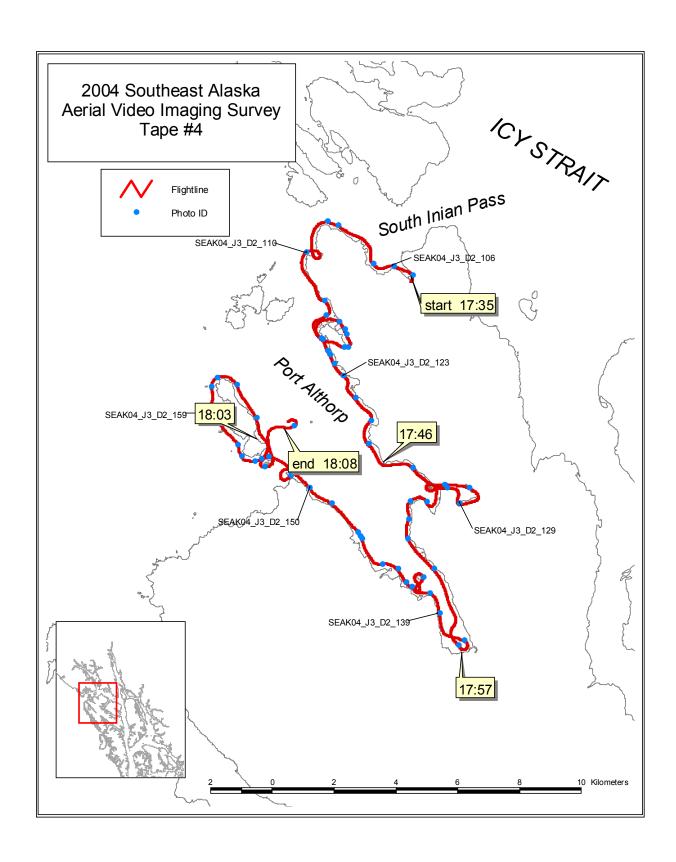
 Time Stop:
 17:32:49

 Tape Length:
 58:21

Weather: Clear, sunny, 10-15 knot westerly

Electronic File: navdatav2.mbd

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
16:36	East of Mud Bay	SEAK_J3_D1_312.jpg	17302	32
16:38	Mud Bay	SEAK_J3_D1_322.jpg	"	"
16:43	Mud Bay River	SEAK_J3_D1_321.jpg	"	"
16:48	Quartz Point	SEAK_J3_D2_001.jpg	"	31
16:56	point E. entrance Idaho Inlet	SEAK_J3_D2_018.jpg	"	"
17:06	E. side Idaho Inlet	SEAK_J3_D2_040.jpg	"	"
17:12	head of Idaho Inlet	SEAK_J3_D2_058.jpg	"	11
17:25	Shaw Island	SEAK_J3_D2_092.jpg	"	11
17:31	east end South Inian Pass	SEAK_J3_D2_102.jpg	"	11
17:33	end of tape 3			



Tape Number: SE_AK 2004-04

General Location: South Inian Pass, Port Althorp

 Date:
 June 3, 2004

 Time Start:
 17:33:52

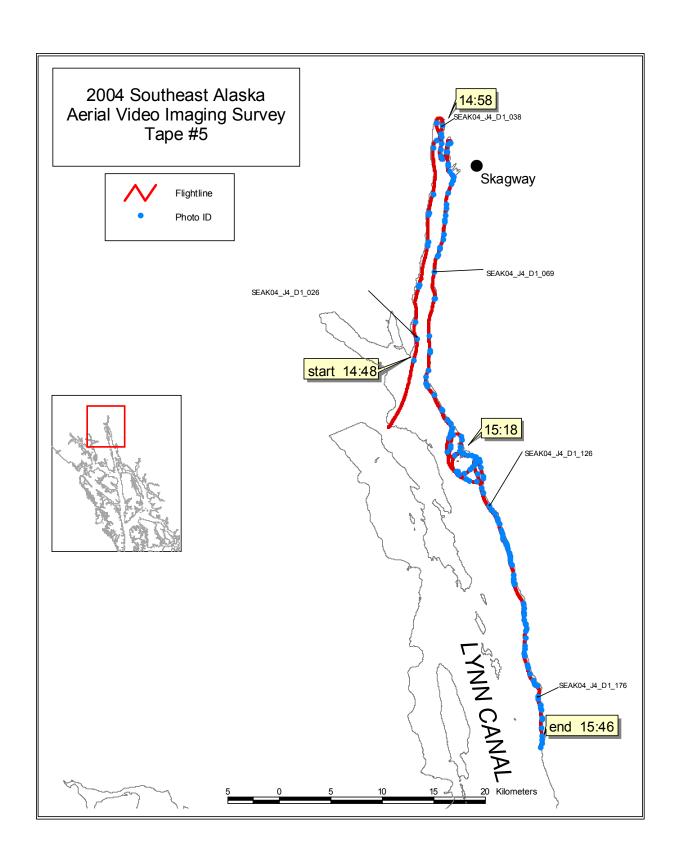
 Time Stop:
 18:08:17

 Tape Length:
 36:33

Weather: Clear, sunny, 10-15 knot westerly

Electronic File: navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
17:34	South Inian Pass	SEAK_J3_D2_105.jpg	17302	31
17:36	Point Lavinia	SEAK_J3_D2_109.jpg	"	"
17:46	Port Althorp, opposite	SEAK_J3_D2_126.jpg	"	"
	Pt.Lucan			
17:57	head of Port Althorp	SEAK_J3_D2_137.jpg	"	"
18:03	Three Hill Island	SEAK_J3_D2_155.jpg	"	"
18:08	Althorp Rockend tape 4	SEAK_J3_D2_164.jpg	"	11



Tape Number: SE_AK 2004-05

General Location: Taiya Inlet, north Lynn Canal

 Date:
 June 4, 2004

 Time Start:
 14:48:32

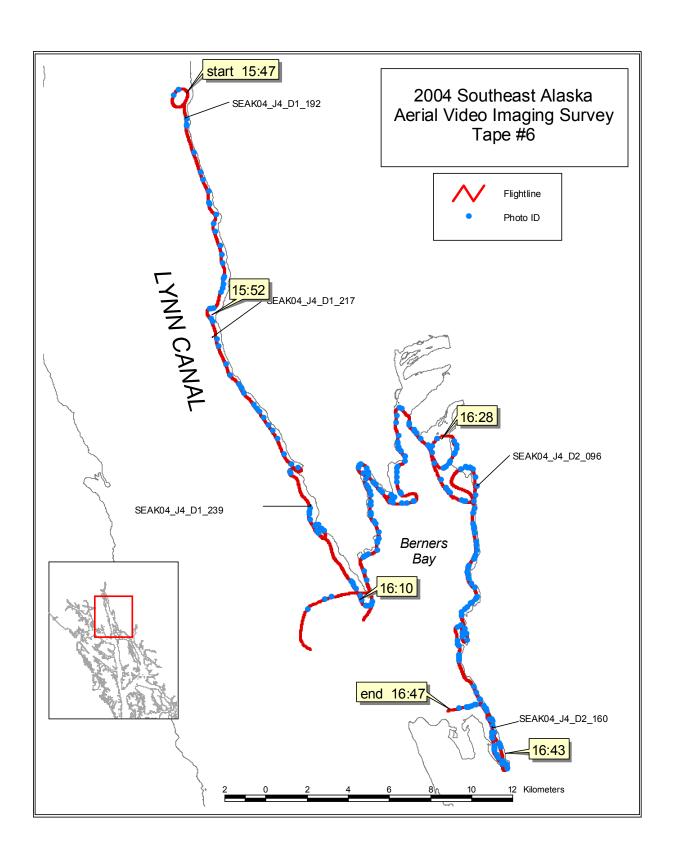
 Time Stop:
 15:45:59

 Tape Length:
 59:49

Weather: clear, northwesterly 15-20 knots

Electronic File: jun4_5.TRK, jun4_5.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
14:48	West side Taiya Inlet	SEAK04_J4_D1_026.JPG	17317	38
14:58	head of Taiya Inlet	SEAK04_J4_D1_038.JPG	"	"
15:05	Skagway	SEAK04_J4_D1_052.JPG	"	"
15:18	Katzehin delta	SEAK04_J4_D1_098.JPG	"	"
15:44	opposite Eldred Rock	SEAK04_J4_D1_183.JPG	=	32
15:46	end tape 5			



Tape Number: SE_AK 2004-06 **General Location:** East side Lynn Canal

 Date:
 June 4, 2004

 Time Start:
 15:47:06

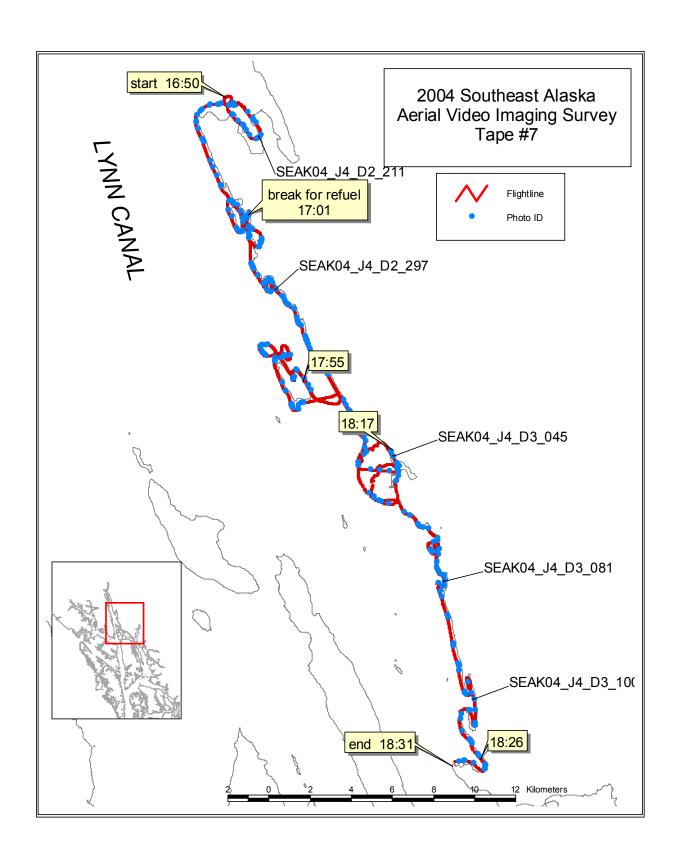
 Time Stop:
 16:47:27

 Tape Length:
 1:00:00

Weather: clear, northwesterly 20knots

Electronic File: jun4_6.TRK, jun4_6.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
15:47	East side Lynn Canal	SEAK04_J4_D1_191.JPG	17316	32
15:52	Point Sherman	SEAK04_J4_D1_212.JPG	"	"
16:10	Point St. Mary	SEAK04_J4_D1_265.JPG	"	"
16:16	Slate Creek	SEAK04_J4_D2_030.JPG	"	"
16:28	Berners Bay	SEAK04_J4_D2_064.JPG	"	"
16:43	Echo Cove	SEAK04_J4_D2_169.JPG	"	"
16:47	end tape 6	SEAK04_J4_D2_196.JPG		



Tape Number: SE_AK 2004-07

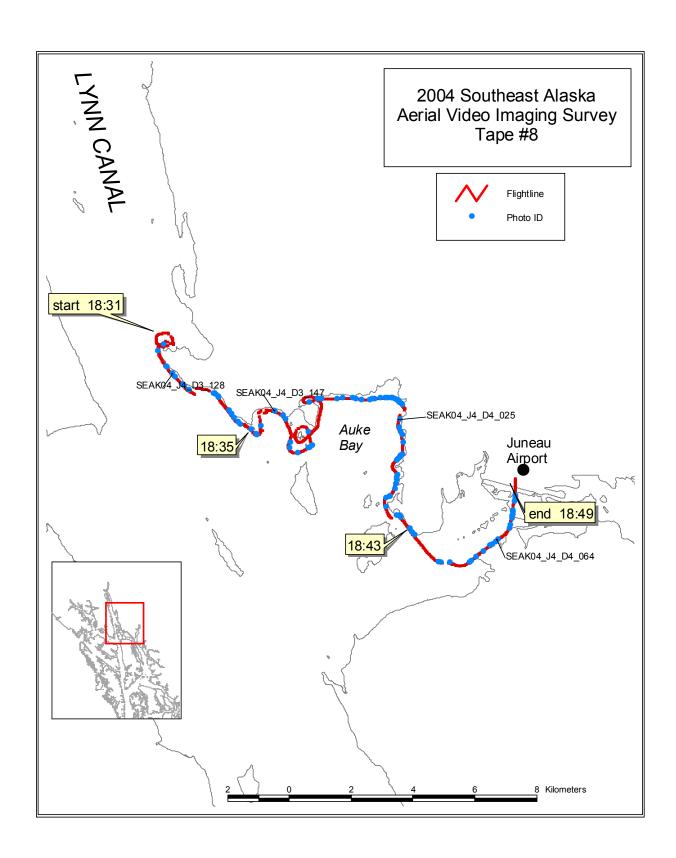
General Location: Echo Cove, Point Bridget to Lena Cove

Date:June 4, 2004Time Start:16:48:40Time Stop:18:30:40Tape Length:59:58

Weather: clear to high overcast

Electronic File: jun4_7.TRK, jun4_7.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
16:50	Cowee Creek	SEAK04_J4_D2_210.JPG	17316	32
16:54	Mab Island	SEAK04_J4_D2_263.JPG	"	"
17:01	break for refuel			
17:47	Bridget Cove	SEAK04_J4_D2_251.JPG	"	"
17:55	Benjamin Island	SEAK04_J4_D3_001.JPG	"	"
18:17	Amalga Harbour	SEAK04_J4_D3_057.JPG	"	"
18:26	Lena Cove	SEAK04_J4_D3_115.JPG	11	"
18:31	end tape 7	SEAK04_J4_D3_123.JPG	"	"



Tape Number: SE_AK 2004-08

General Location: Auke Bay, Mendenhall delta

 Date:
 June 4, 2004

 Time Start:
 18:31:32

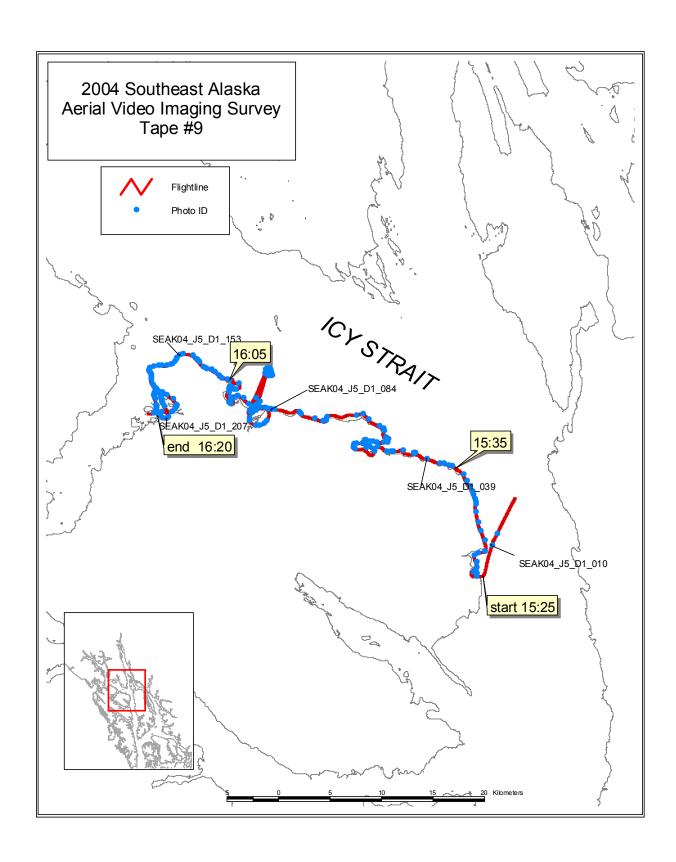
 Time Stop:
 18:49:26

 Tape Length:
 20:11

Weather: high overcast

Electronic File: jun5_8.TRK, jun5_8.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
18:31	Lena Cove	SEAK04_J4_D3_125.JPG	17316	32
18:35	Pt Louisa	SEAK04_J4_D3_143.JPG	"	"
18:43	Fritz Cove	SEAK04_J4_D4_049.JPG	"	"
18:45	Mendenhall delta	SEAK04_J4_D4_060.JPG	"	"
18:48	end tape 8	SEAK04_J4_D4_075.JPG	"	"



Tape Number: SE AK 2004-09

General Location: False Bay, Chatham & Icy Straits

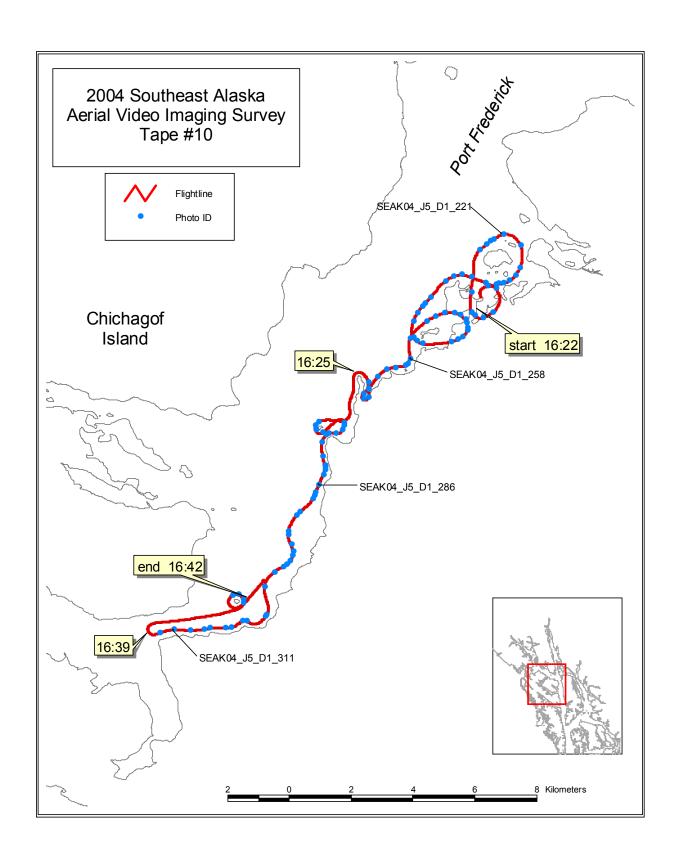
Date: June 5, 2004

Time Start: 15:24:43 imagery time not synched, 27 seconds behind GPS

Time Stop: 16:20:21 **Tape Length:** 55:38

Weather: Overcast, light rain, winds light to moderate jun5_9.TRK, jun5_9.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
15:25	False Bay	SEAK04_J5_D1_011.JPG	17300	27
15:35	Point Augusta	SEAK04_J5_D1_034.JPG	11	32
16:05	Neck Point	SEAK04_J5_D1_138.JPG	"	"
16:10	Cannery Point	SEAK04_J5_D1_162.JPG	17302	"
16:20	end tape 9	SEAK04_J5_D1_199.JPG	"	"



Tape Number:SE_AK 2004-10General Location:Port Frederick,Date:June 5, 2004

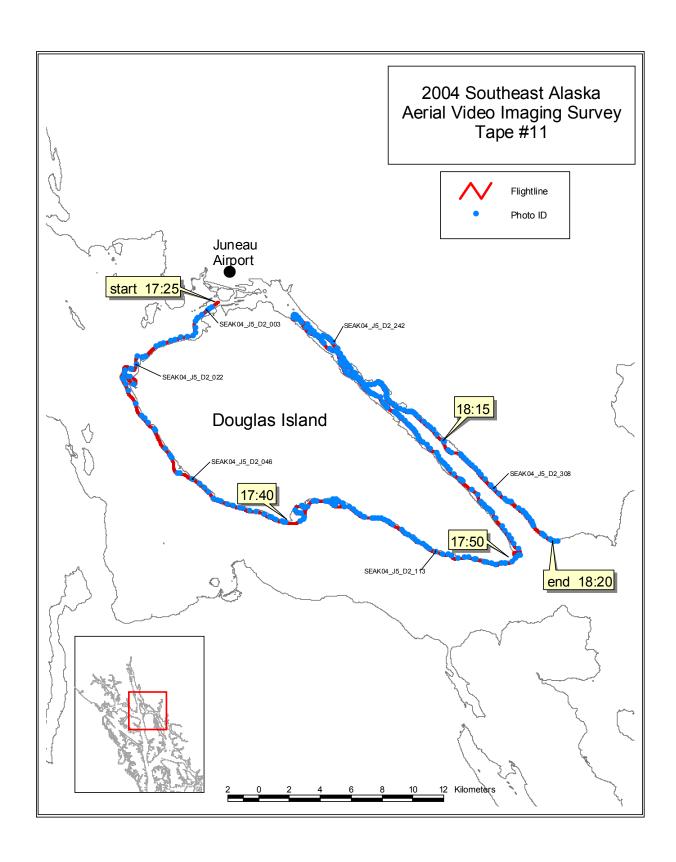
Time Start: 16:21:43 imagery time not synched, 27 seconds behind GPS

Time Stop: 16:42:17 **Tape Length:** 20:34

Weather:

Electronic File: jun5_10.TRK, jun5_10.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
16:25	north of Burnt Point	SEAK04_J5_D1_275.JPG	17302	32
16:39	the Narrows, Port Frederick	SEAK04_J5_D1_310.JPG		
16:42	Midway Island; tape end	SEAK04_J5_D1_316.JPG	"	26



Tape Number: SE_AK 2004-11

General Location: Mendenhall Delta, Douglas Island, Gastineau Channel

 Date:
 June 5, 2004

 Time Start:
 17:24:37

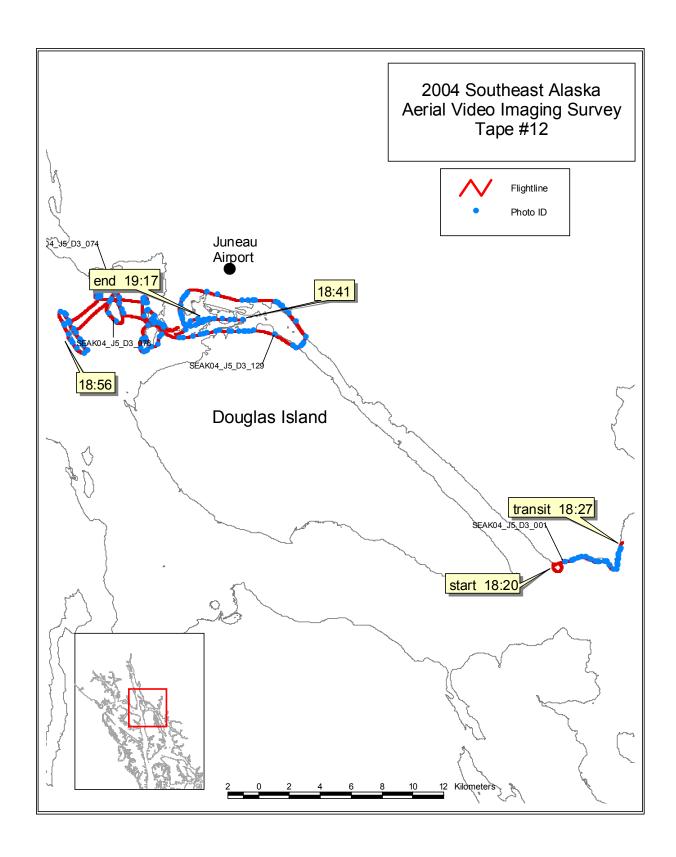
 Time Stop:
 18:21:13

 Tape Length:
 56:36

Weather:

Electronic File: jun5_11.TRK, jun5_11.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
17:25	Mendenhall delta	SEAK04_J5_D2_001.JPG	17315	33
17:30	Outer Point, Douglas Island	SEAK04_J5_D2_030.JPG	"	"
17:40	Point Hilda	SEAK04_J5_D2_066.JPG		
17:50	Tantallon Point	SEAK04_J5_D2_132.JPG	"	"
18:15	Thane	SEAK04_J5_D2_295.JPG	"	"
18:20	Pt. Salisburyend tape 11	SEAK04_J5_D2_330.JPG		"



Tape Number: SE_AK 2004-12

General Location: Gastineau Channel, Portland Island

Date: June 5, 2004

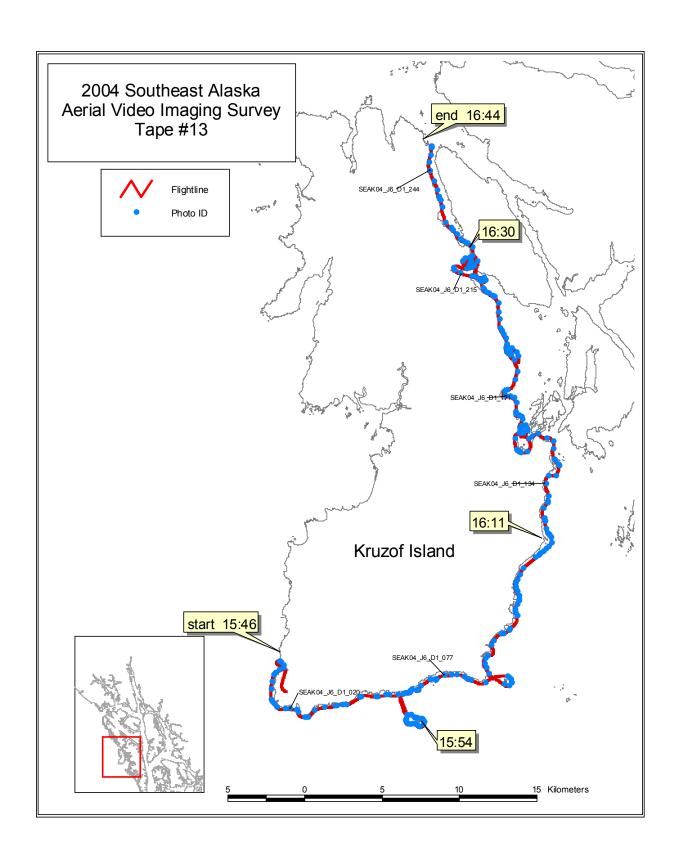
Time Start: 18:22:17 lost 14 minutes on recorder, ok on camera

Time Stop: 19:17:33 **Tape Length:** 00:00

Weather:

Electronic File: jun5 12.TRK, jun5 12.txt, navdatav2.mdb

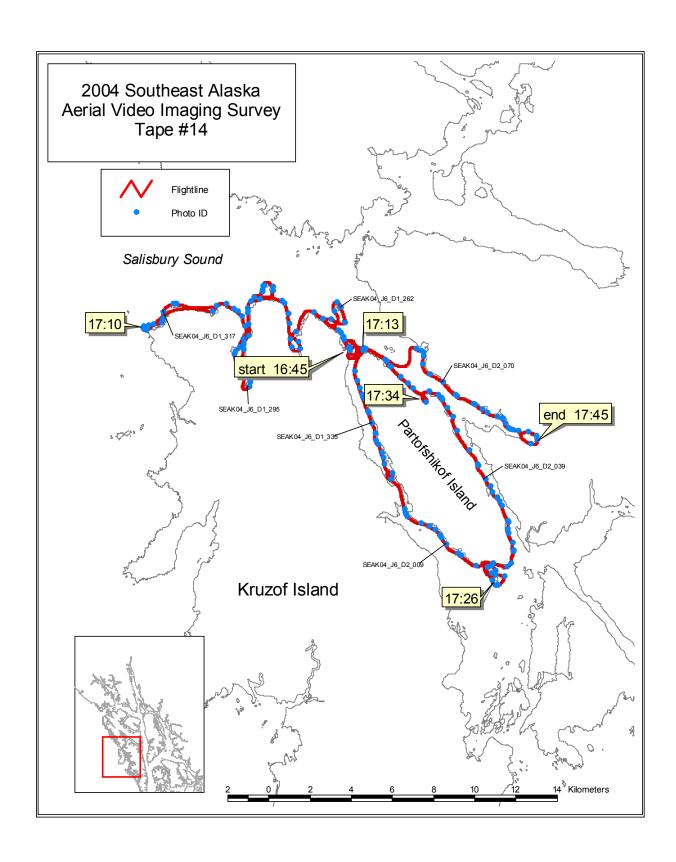
Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
18:20	Gastineau Channel	SEAK04_J5_D3_001.JPG	17315	33
18:27	Bishop Point	SEAK04_J5_D3_024.JPG	"	"
	break,transit		"	"
18:47	Spuhn Island	SEAK04_J5_D3_061.JPG	"	32/33
19:17	Juneau Airport/Mendenhall Delta	SEAK04_J5_D3_160.JPG		



Tape Number:SE_AK 2004-13General Location:Kruzof IslandDate:June 6, 2004Time Start:15:46:06Time Stop:16:43:56Tape Length:1:00:36

Weather: High overcast, occasional light rain, clearing Electronic File: 6jun 13.TRK, 6jun 13.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
15:46	Cape Edgecumbe	SEAK04_J6_D1_001.JPG	17325	26
15:54	St. Lazaria Island	SEAK04_J6_D1_040.JPG	"	11
16:11	Inner Point	SEAK04_J6_D1_123.JPG	17324	27
16:30	Sukoi Inlet	SEAK04_J6_D1_220.JPG	"	26
16:44	Sukoi Pointend tape 13	SEAK04_J6_D1_248.JPG	"	11



Tape Number: SE AK 2004-14

General Location: North end Kruzof Is. Partofshikof Is., St John Baptist Bay

 Date:
 June 6, 2004

 Time Start:
 16:44:55

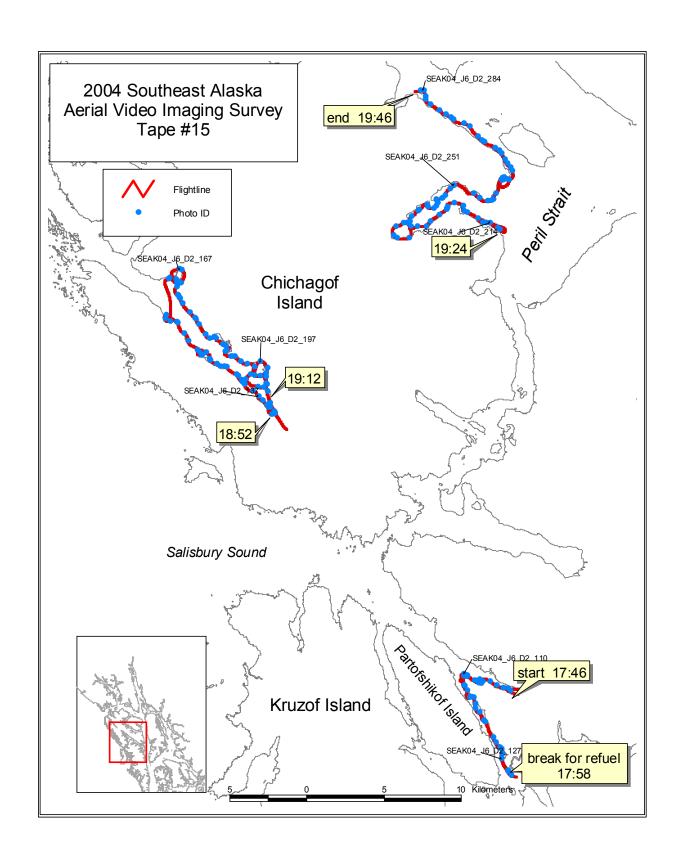
 Time Stop:
 17:45:57

 Tape Length:
 57:37

Weather: Clearing, Light northwesterly

Electronic File: 6jun 14.TRK, 6jun 14.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
16:45	Sukoi Point	SEAK04_J6_D1_254.JPG	17323	26
17:05	Kalinin Point	SEAK04_J6_D1_311.JPG	"	11
17:10	Cape Georgiana	SEAK04_J6_D1_326.JPG	11	"
17:13	Hayward Point	SEAK04_J6_D1_328.JPG	17324	11
17:26	Partof Point	SEAK04_J6_D2_025.JPG	"	27
17:34	Gilmer Cove	SEAK04_J6_D2_050.JPG	"	26
17:45	Head of St. John Baptist	SEAK04_J6_D2_087.JPG	"	27
	Bay			
	end tape 14	SEAK04_J6_D2_087.JPG		



Tape Number: SE AK 2004-15

General Location: St. John Baptist Bay, Neva Strait, Slocum Arm

 Date:
 June 6, 2004

 Time Start:
 17:46:42

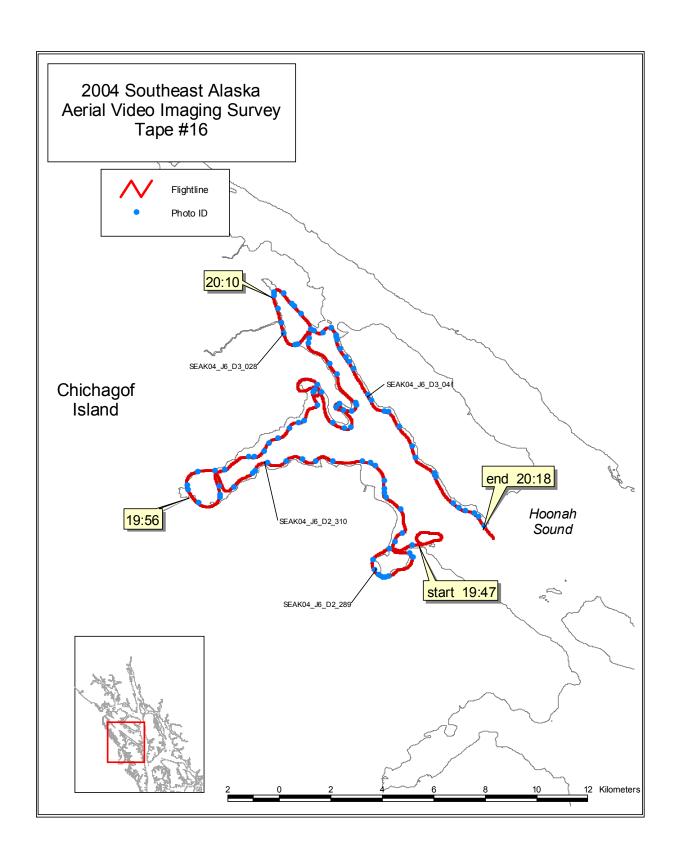
 Time Stop:
 19:44:10

 Tape Length:
 55:40

Weather: Clearing, patchy cloud

Electronic File: 6jun 15.TRK, 6jun 15.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
17:46	Head St. John Baptist Bay	SEAK04_J6_D2_087.JPG	17324	27
17:52	Entrance Island	SEAK04_J6_D2_116.JPG	"	26
17:58	Neva Point	SEAK04_J6_D2_130.JPG	"	27
	break for refuel Sitka		"	
18:52	Head Slocum Arm	SEAK04_J6_D2_133.JPG	17323	26
19:12	Head Slocum Arm	SEAK04_J6_D2_206.JPG	"	"
	transit to Peril strait			
19:24	Point Marie	SEAK04_J6_D2_212.JPG	"	27
19:35	Ushk Point	SEAK04_J6_D2_256.JPG	11	26
19:46	Fick Cove end of tape 15	SEAK04_J6_D2_285.JPG	11	"



Tape Number: SE AK 2004-16

General Location: South Arm Hoonah Sound

 Date:
 June 6, 2004

 Time Start:
 19:45:29

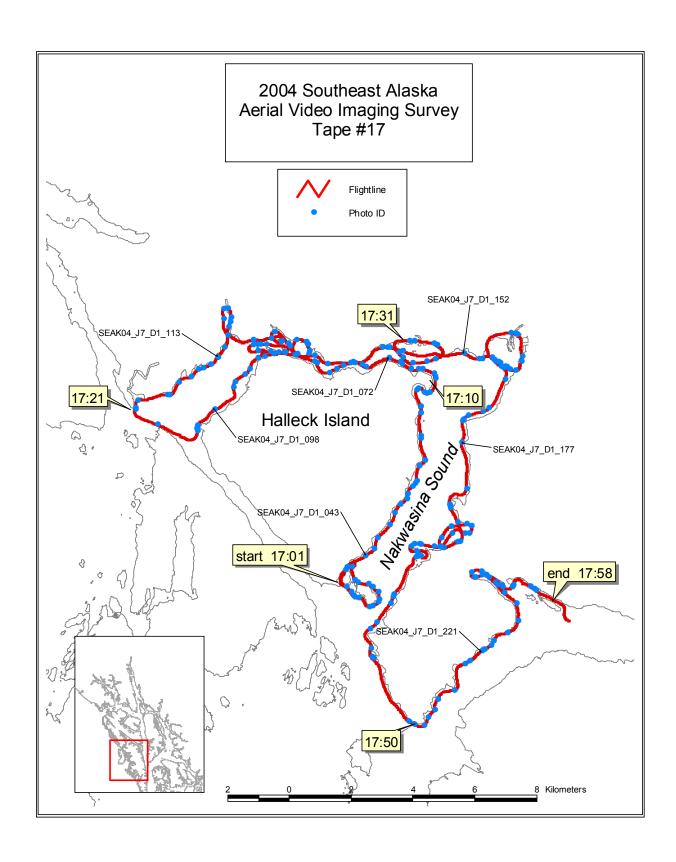
 Time Stop:
 20:18:24

 Tape Length:
 34:58

 Weather:
 Clear

Electronic File: 6jun 16.TRK, 6jun 16.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
19:47	Fick Cove	SEAK04_J6_D2_285.JPG	17323	26
19:56	Head Patterson Bay	SEAK04_J6_D2_318.JPG	"	"
20:10	Head Douglas Bay	SEAK04_J6_D3_025.JPG	"	"
20:18	White Cliff Point	SEAK04_J6_D2_055.JPG	11	"
	end of tape 16			



Tape Number: SE AK 2004-17

General Location: Nakwasina Sound, Nakwasina Passage, Katlian Bay

 Date:
 June 7, 2004

 Time Start:
 17:01:54

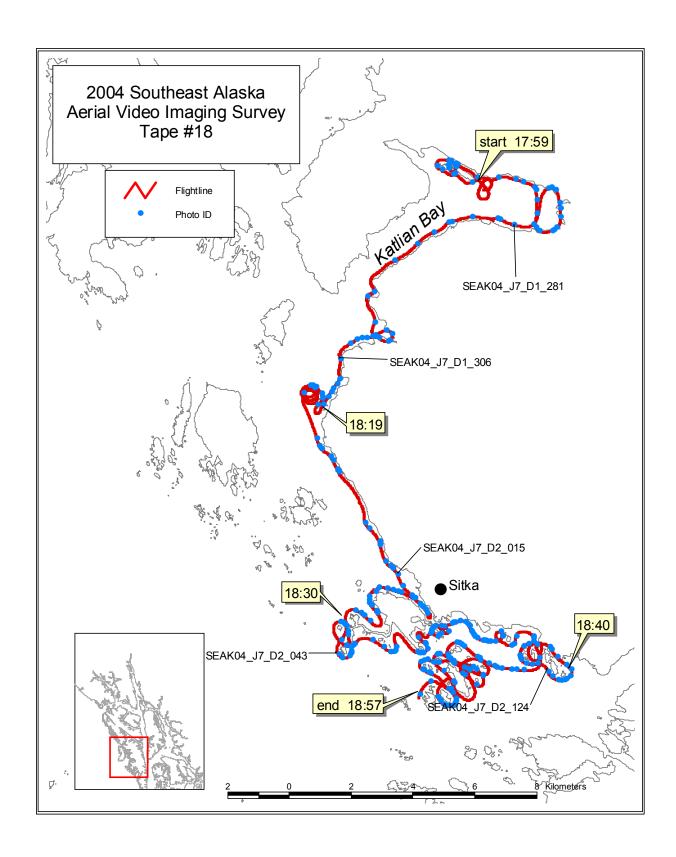
 Time Stop:
 17:57:29

 Tape Length:
 55:35

Weather: Fog, clearing from north

Electronic File: 7jun 17.TRK, 7jun 17.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
17:01	Krugloi Point	SEAK04_J7_D1_065.JPG	17324	27
17:10	Allen Point	SEAK04_J7_D1_028.JPG	11	
17:21	Neva Point	SEAK04_J7_D1_106.JPG	11	
17:31	Nakwasina Passage/River	SEAK04_J7_D1_168.JPG	11	
17:50	Lisianski Point	SEAK04_J7_D1_212.JPG	11	11
17:55	Cedar Cove	SEAK04_J7_D1_233.JPG	11	11
17:58		SEAK04_J7_D1_242.JPG		



Tape Number: SE_AK 2004-18

General Location: Katlian Bay, Sitka, Islands in Middle Channel

 Date:
 June 7, 2004

 Time Start:
 17:59:01

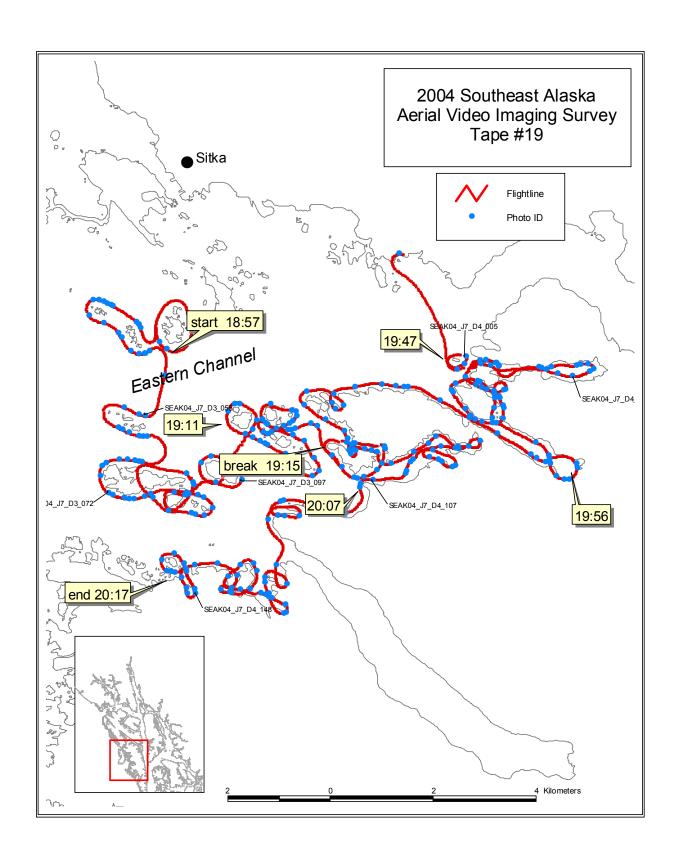
 Time Stop:
 18:55:39

 Tape Length:
 54:08

Weather: Sunny, v. light winds

Electronic File: 7jun_18.TRK, 7jun_18.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
17:59	Katlian Bay, east point of	SEAK04_J7_D1_245.JPG	17324	27
	island			
18:03	Katlian River	SEAK04_J7_D1_279.JPG	"	"
18:19	Halibut Point	SEAK04_J7_2_001.JPG	"	"
18:23	Sitka waterfront	SEAK04_J7_D2_015.JPG	17323	"
18:30	Group of islands off Sitka	SEAK04_J7_D2_043.JPG	"	"
	Airport			
18:40	Harris Island	SEAK04_J7_D2_124.JPG	"	"
18:50	Islands at Sitka	SEAK04_J7_D2_168.JPG	"	"
18:57	Bamdoroshni Island; end tape	SEAK04_J7_D3_010.JPG	"	"



Tape Number: SE_AK 2004-19 **General Location:** Sitka, Aleutkina Bay,

 Date:
 June 7, 2004

 Time Start:
 18:55:39

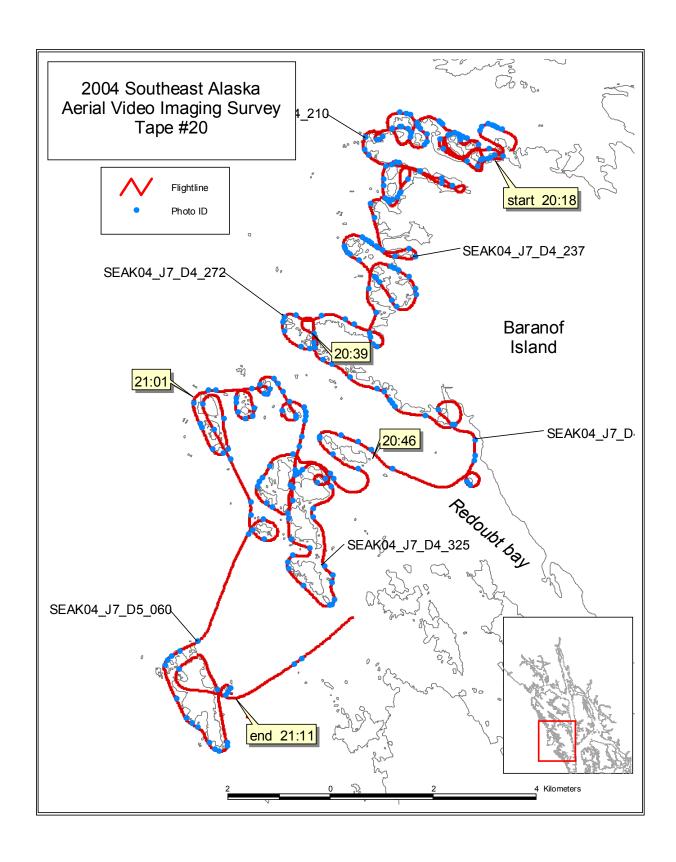
 Time Stop:
 20:16:39

Tape Length:

Weather: Sunny, v. light winds

Electronic File: 7jun_19.TRK, 7jun_19.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
18:57	Whale Island	SEAK04_J7_D3_020.JPG	17323	27
19:11	Kutchuma Islands	SEAK04_J7_D3_055.JPG	"	"
	Break for fuel		"	
19:47	Head of No Thorofare Bay	SEAK04_J7_D4_003.JPG	"	
19:56	Head of Camp Coogan bay	SEAK04_J7_D4_061.JPG		
20:07	S. entrance to Leesoffskaia	SEAK04_J7_D4_107.JPG		
	Bay			
20:17	Samsing Coveend tape 19	SEAK04_J7_D4_148.JPG		



Tape Number: SE_AK 2004-20

General Location: Samsing Cove to Road Island, Islands off Redoubt Bay

 Date:
 June 7, 2004

 Time Start:
 20:17:26

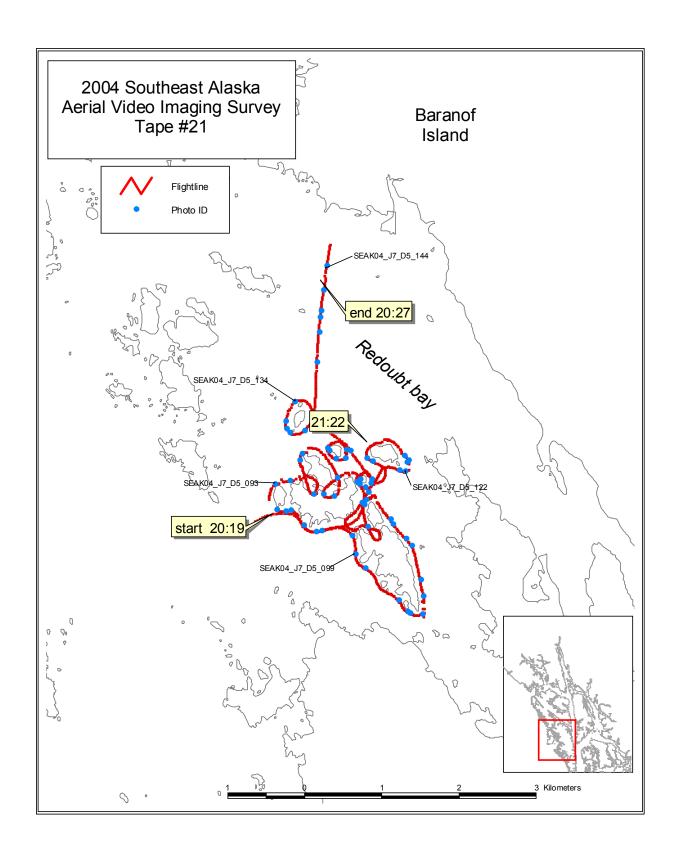
 Time Stop:
 21:11:26

 Tape Length:
 54:00

 Weather:
 Sunny

Electronic File: 7jun_20.TRK, 7jun_20.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
20:18	Samsing Cove	SEAK04_J7_D4_158.JPG	17323	22
20:25	Cape Burunof	SEAK04_J7_D4_210.JPG	11	"
20:39	Povorotni Point	SEAK04_J7_D4_272.JPG	11	"
20:46	Korga Island	SEAK04_J7_D4_299.JPG	11	"
21:01	Kita Island	SEAK04_J7_D5_044.JPG	11	"
21:08	Peisar Island	SEAK04_J7_D5_060.JPG	11	"
21:19	Kanga Islandend tape	SEAK04_J7_D5_081.JPG	11	"
	20			



Tape Number: SE_AK 2004-21

General Location: Islands off Redoubt Bay

 Date:
 June 7, 2004

 Time Start:
 21:12:50

 Time Stop:
 21:26:44

 Tape Length:
 13:54

 Weather:
 Sunny

Electronic File: jun7_21.TRK, jun7_21.txt, navdatav2.mdb

Time		Film		Gazette
(UTC)	Location	Frame	Chart	Page
21:19	Kanga Island	SEAK04_J7_D5_082.JPG	17323	22
21:22	Fankuda Island	SEAK04_J7_D5_122.JPG	11	"
21:27	Korga Islandend	SEAK04_J7_D5_144.JPG	"	
	tape 21			