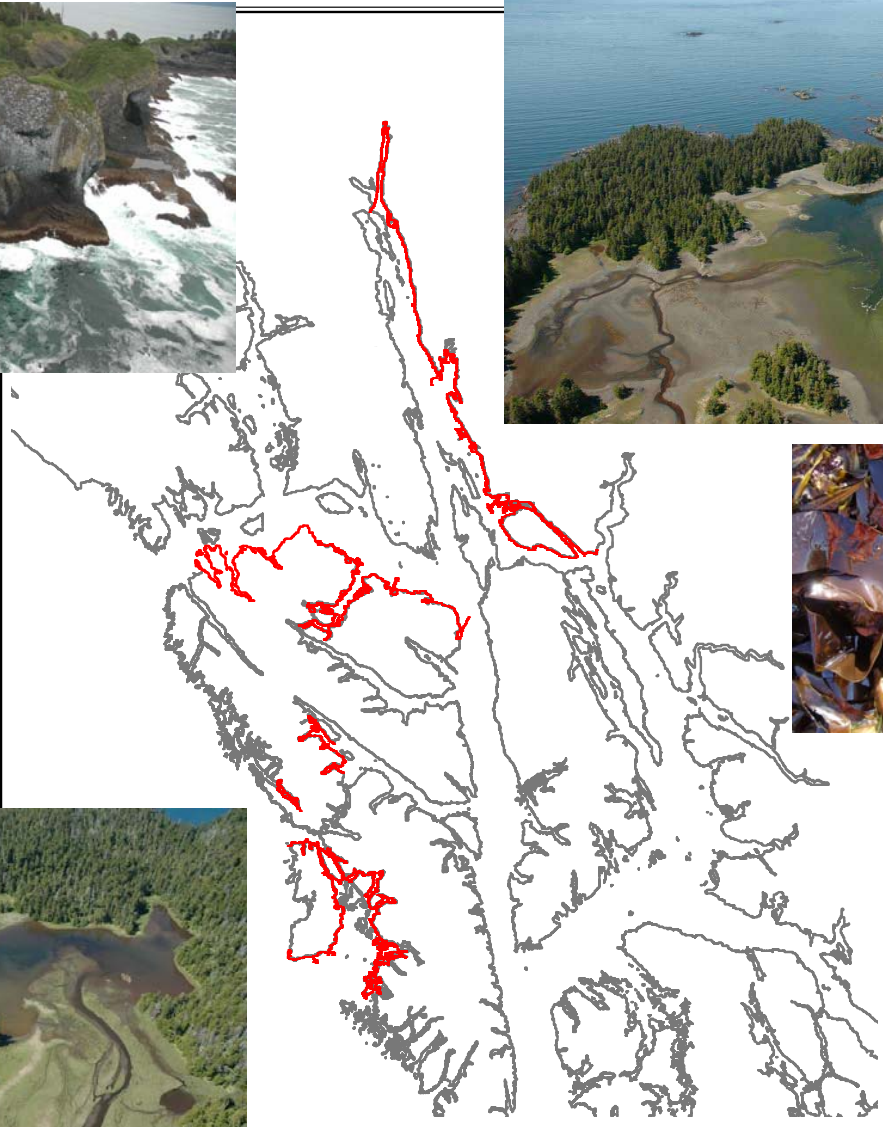


2004 Aerial Video Imaging Survey, Southeast Alaska (3-7th, June 2004)



Prepared for the National Marine Fisheries Service



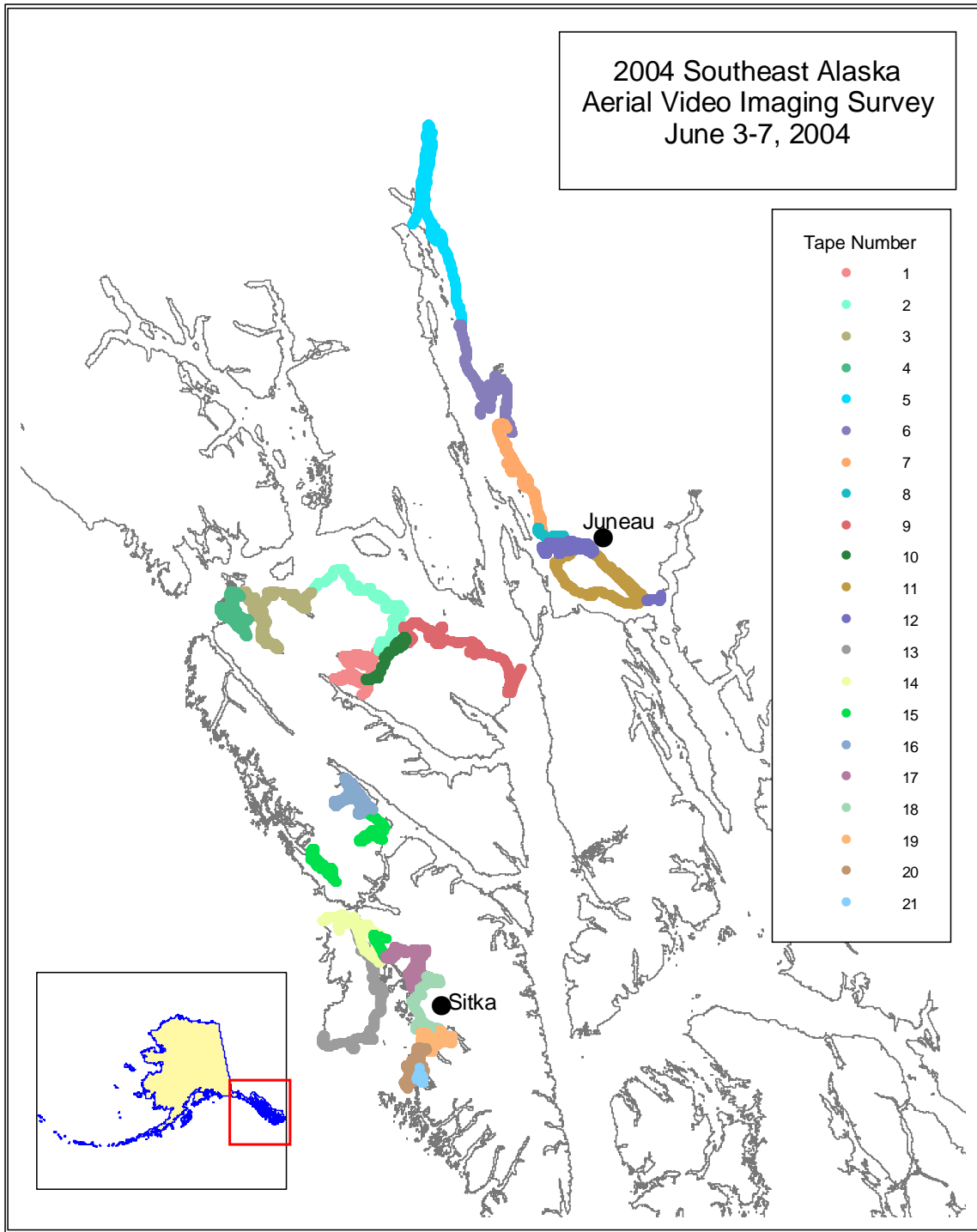


Figure 1. Location of individual tapes from the 2004 Southeast Alaska AVI Survey

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.

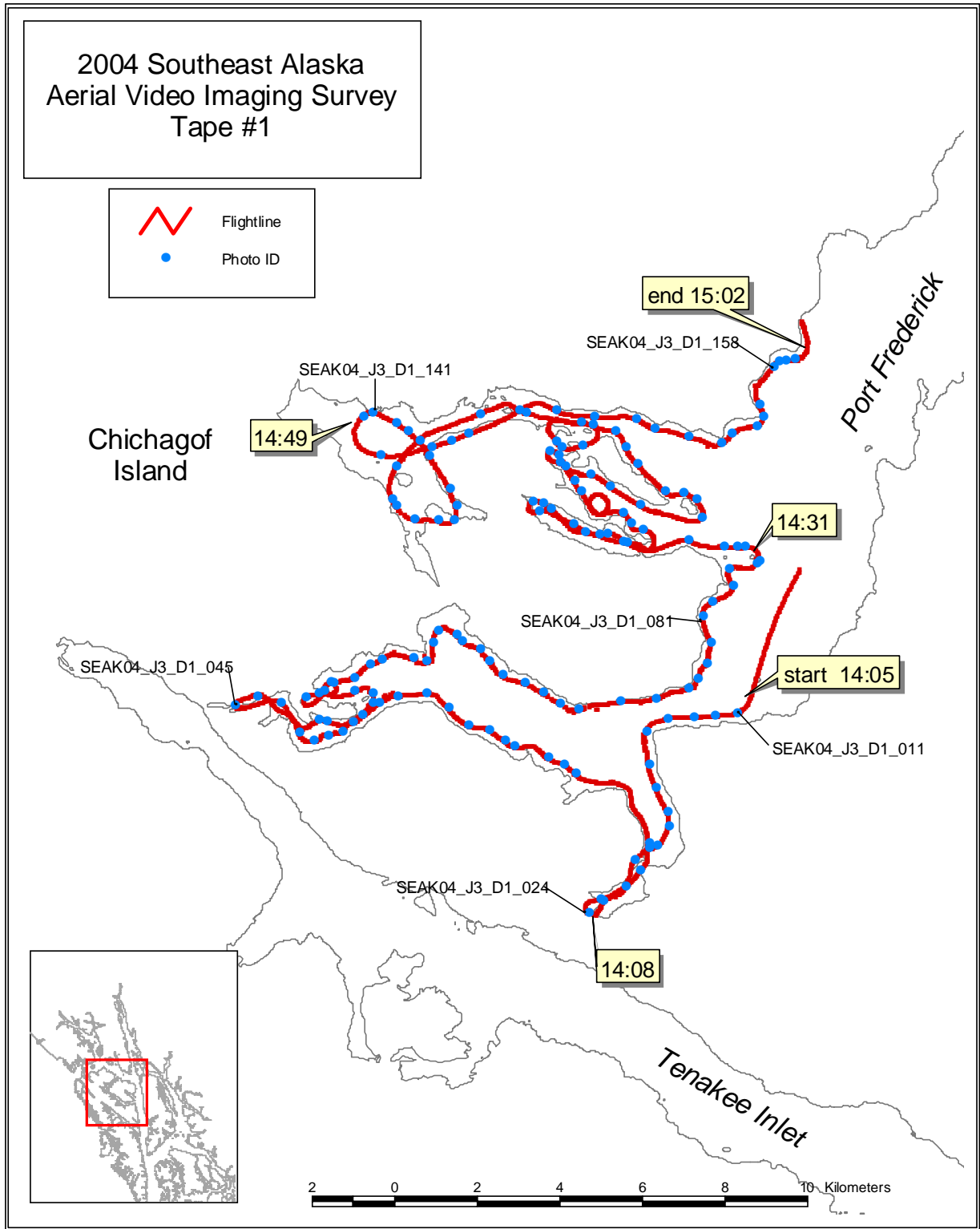
Figure 1 shows the overall flight coverage by tape number. The flight crew names and responsibilities are summarized in Table 1.

Table 1 Southeast Alaska AVI Flight Personnel and Responsibilities,

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

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #1

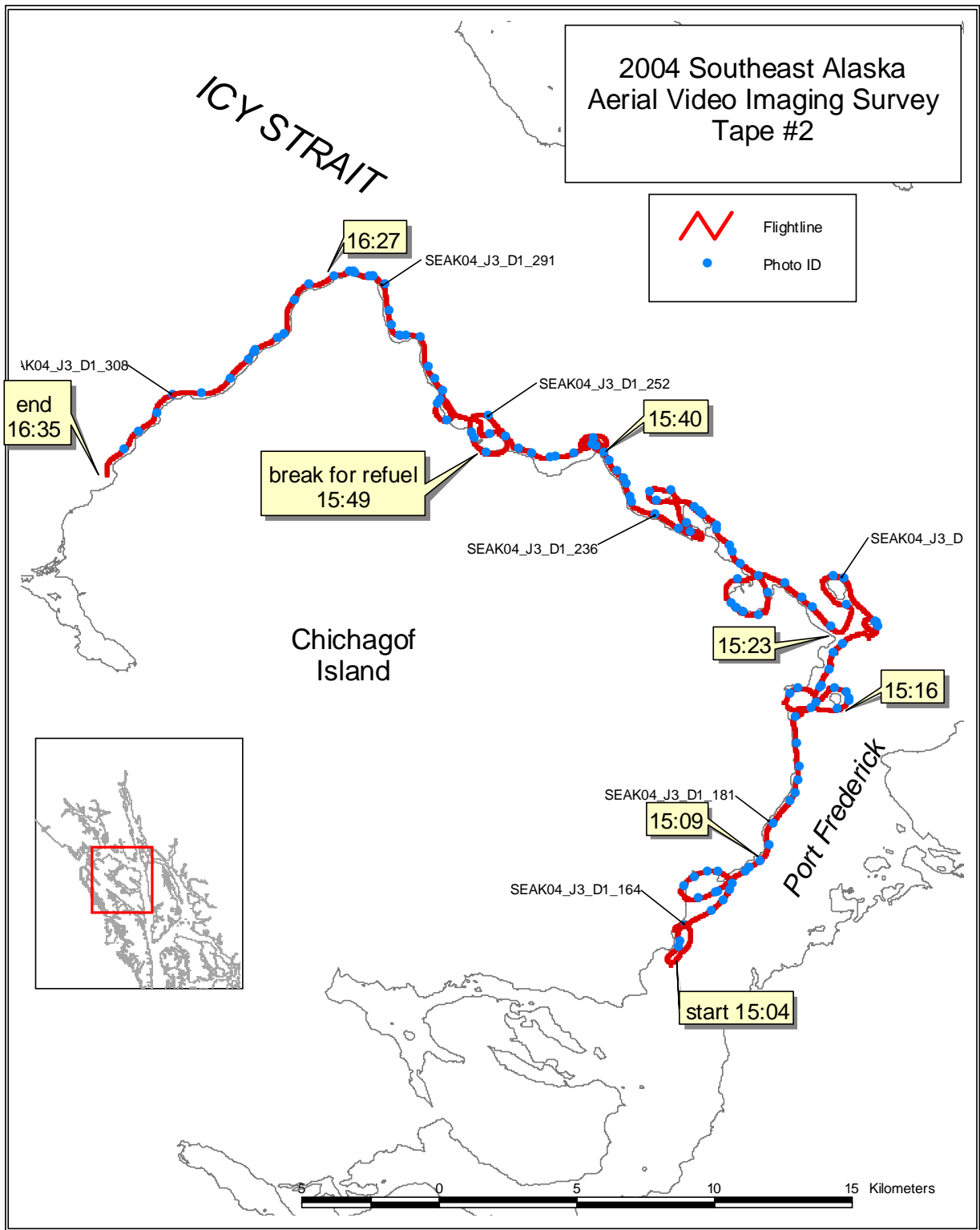
Flightline
Photo ID



Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 | " | " |
| 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 sort ---end tape 1 | SEAK04_J3_D1_160.JPG | " | " |



Southeast Alaska 2004 Aerial Video Imaging Survey

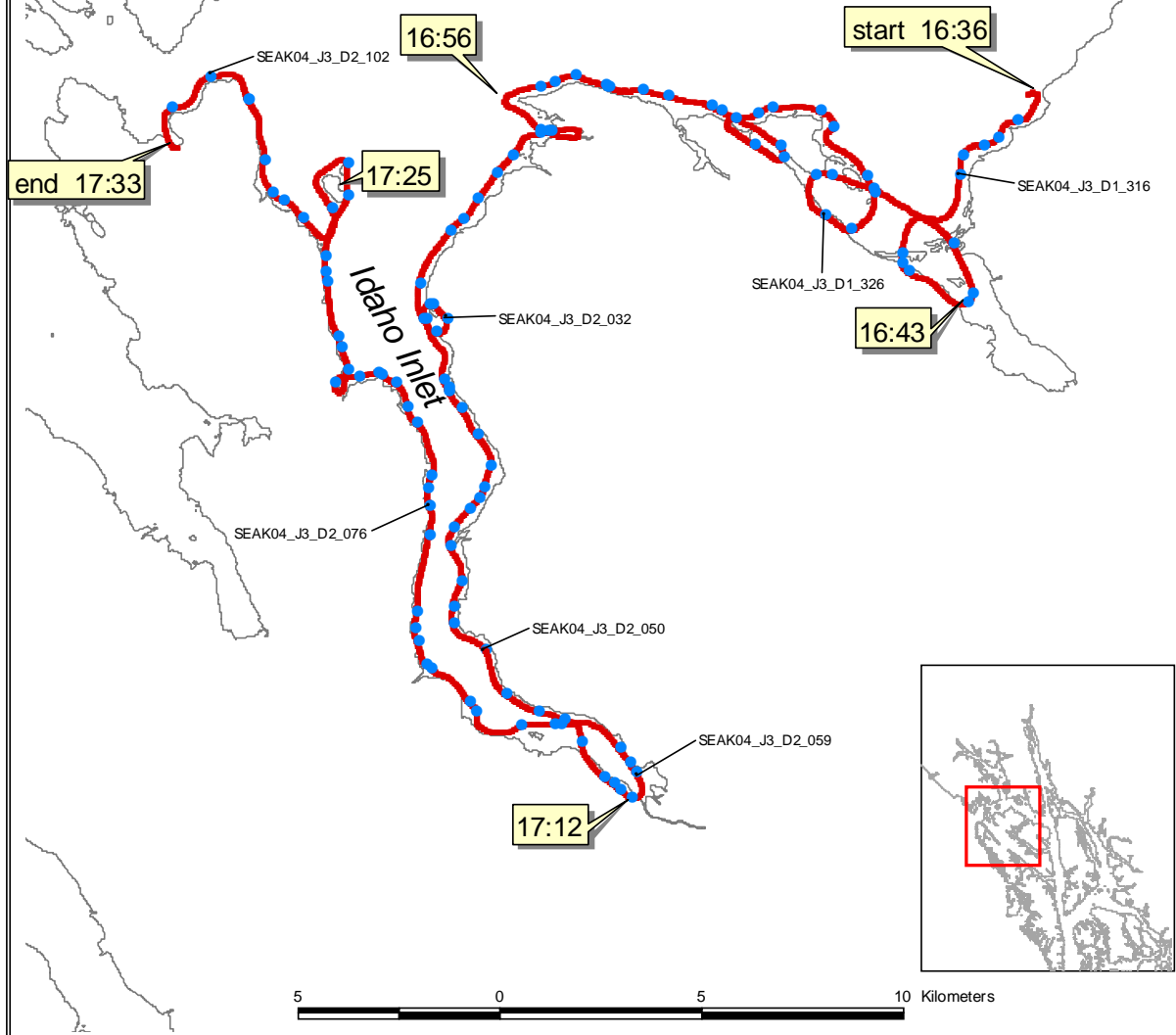
Tape Number: SE_AK 2004-02
General Location: West side Port Frederick, south side of Icy Strait
(west of Pt. Adolphus)
Date: June 3, 2004
Time Start: 15:03:28
Time Stop: 16:35:41
Tape Length: 59:47
Weather: clear, sunny, very light winds
Electronic File: jun3_1.txt, navdatav2.mbd

| Time (UTC) | Location | Film Frame | Chart | Gazette Page |
|-----------------------|----------------------------------|-----------------------|--------------|-------------------------|
| 15:04:00 | Log sort north of Neka Bay | SEAK04_J3_D1_162.JPG | 17302 | 32 |
| 15:09 | point north of Humpback creek | SEAK04_J3_D1_180.JPG | " | " |
| 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 | " | " |
| 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 | | | |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #3

Flightline
Photo ID

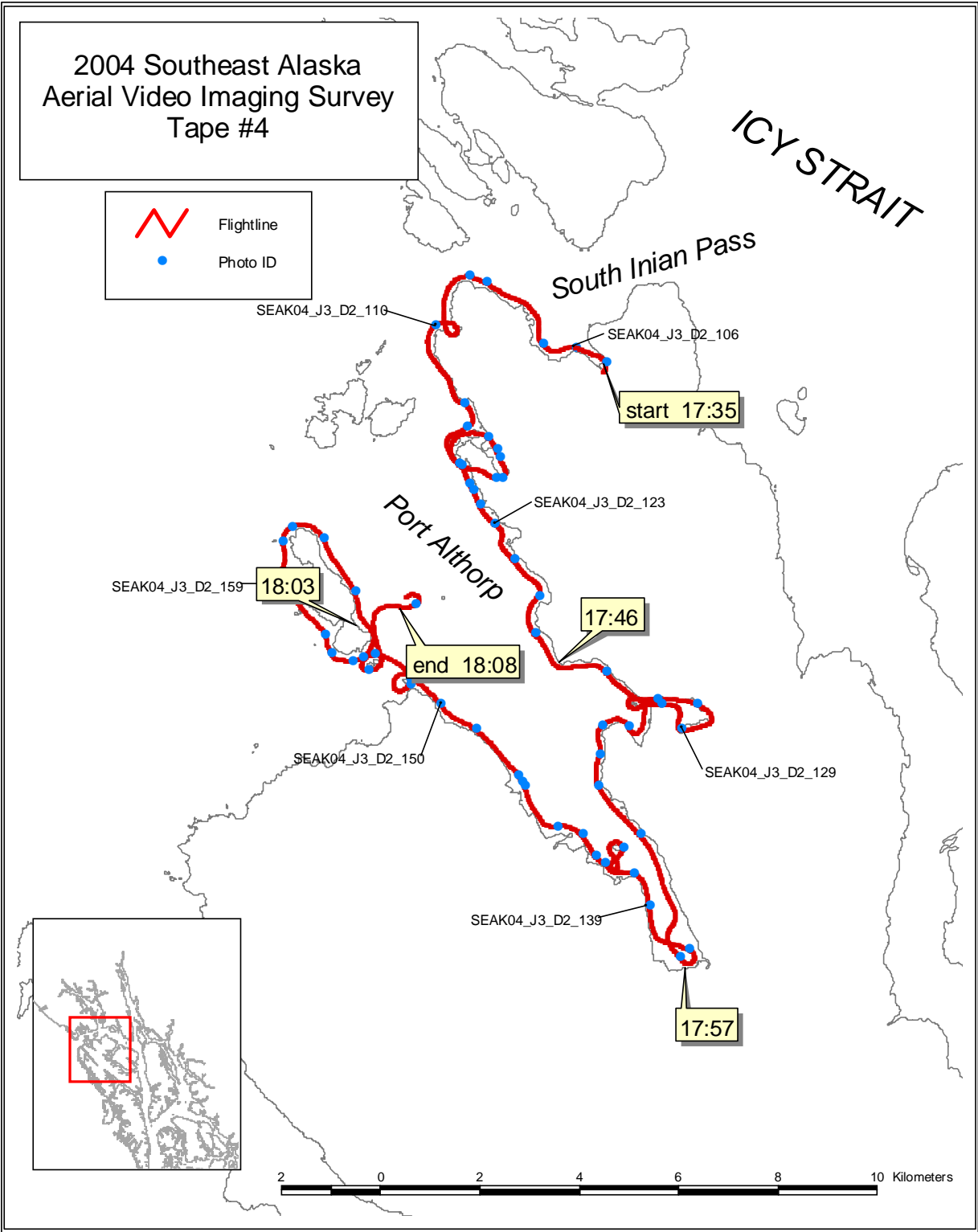
ICY STRAIT



Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 | " | " |
| 17:25 | Shaw Island | SEAK_J3_D2_092.jpg | " | " |
| 17:31 | east end South Inian Pass | SEAK_J3_D2_102.jpg | " | " |
| 17:33 | end of tape 3 | | | |




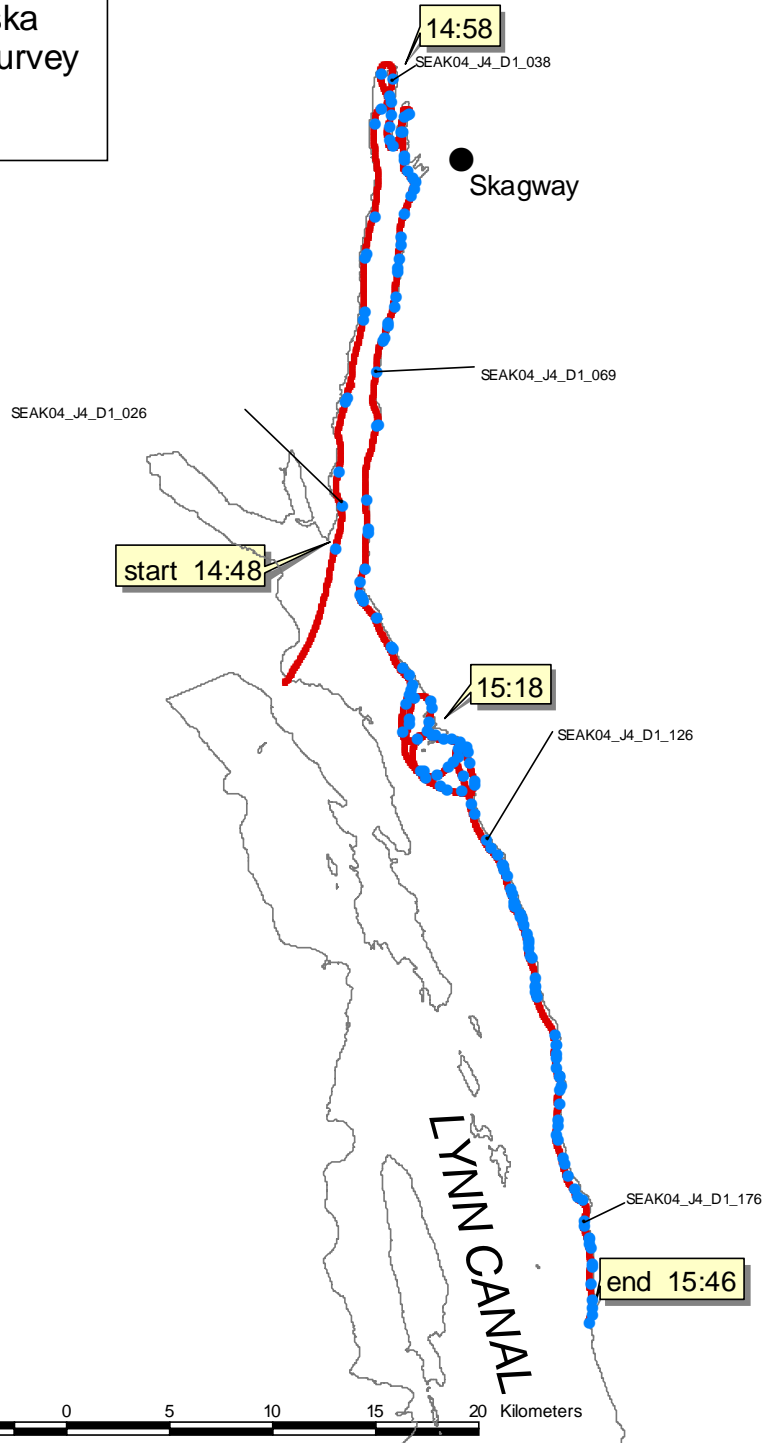
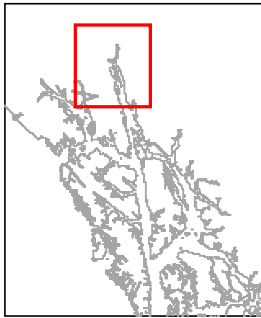
Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 Pt.Lucan | SEAK_J3_D2_126.jpg | " | " |
| 17:57 | head of Port Althorp | SEAK_J3_D2_137.jpg | " | " |
| 18:03 | Three Hill Island | SEAK_J3_D2_155.jpg | " | " |
| 18:08 | Althorp Rock ---end tape 4 | SEAK_J3_D2_164.jpg | " | " |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #5

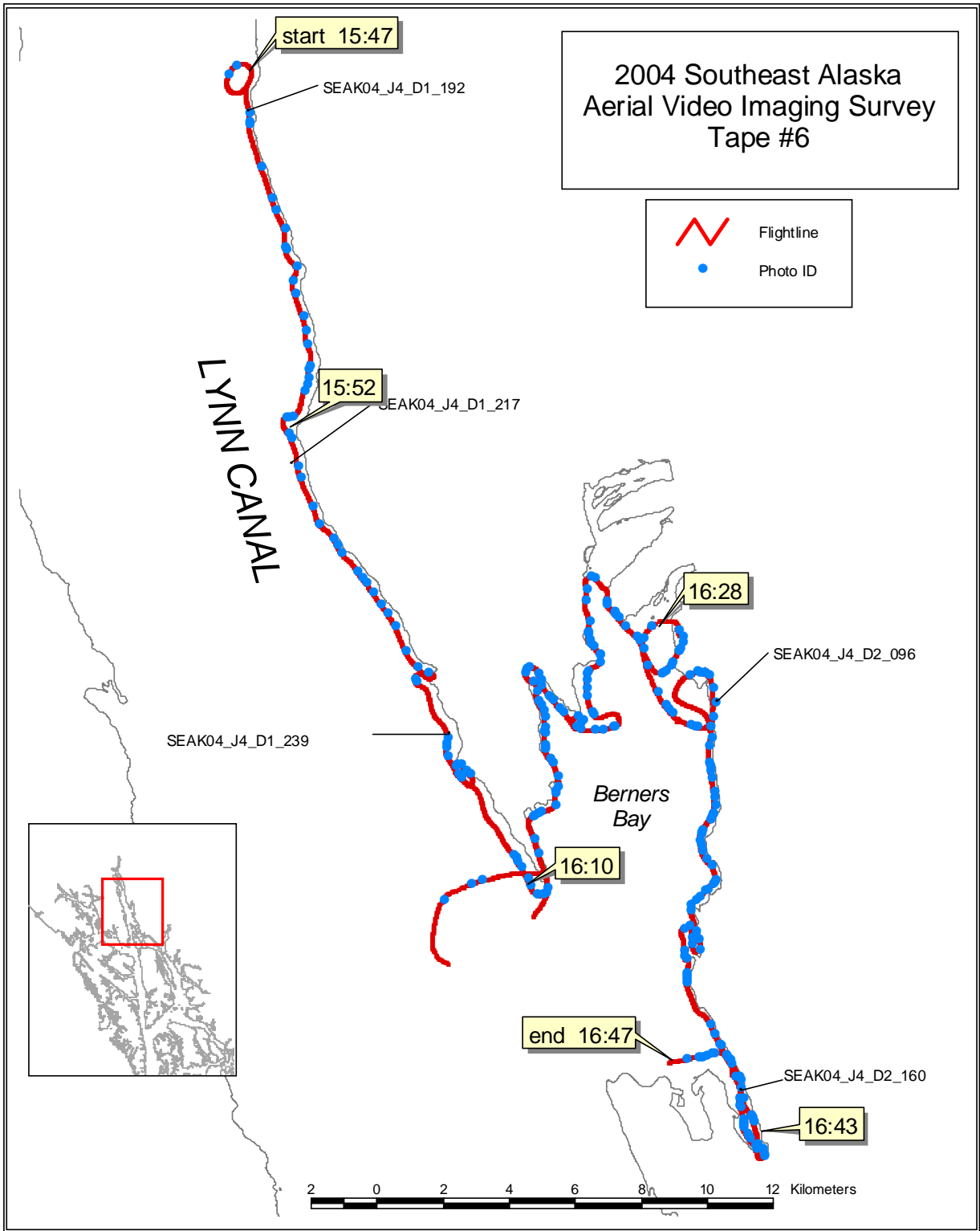
 Flightline
 Photo ID



Southeast Alaska 2004 Aerial Video Imaging Survey

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

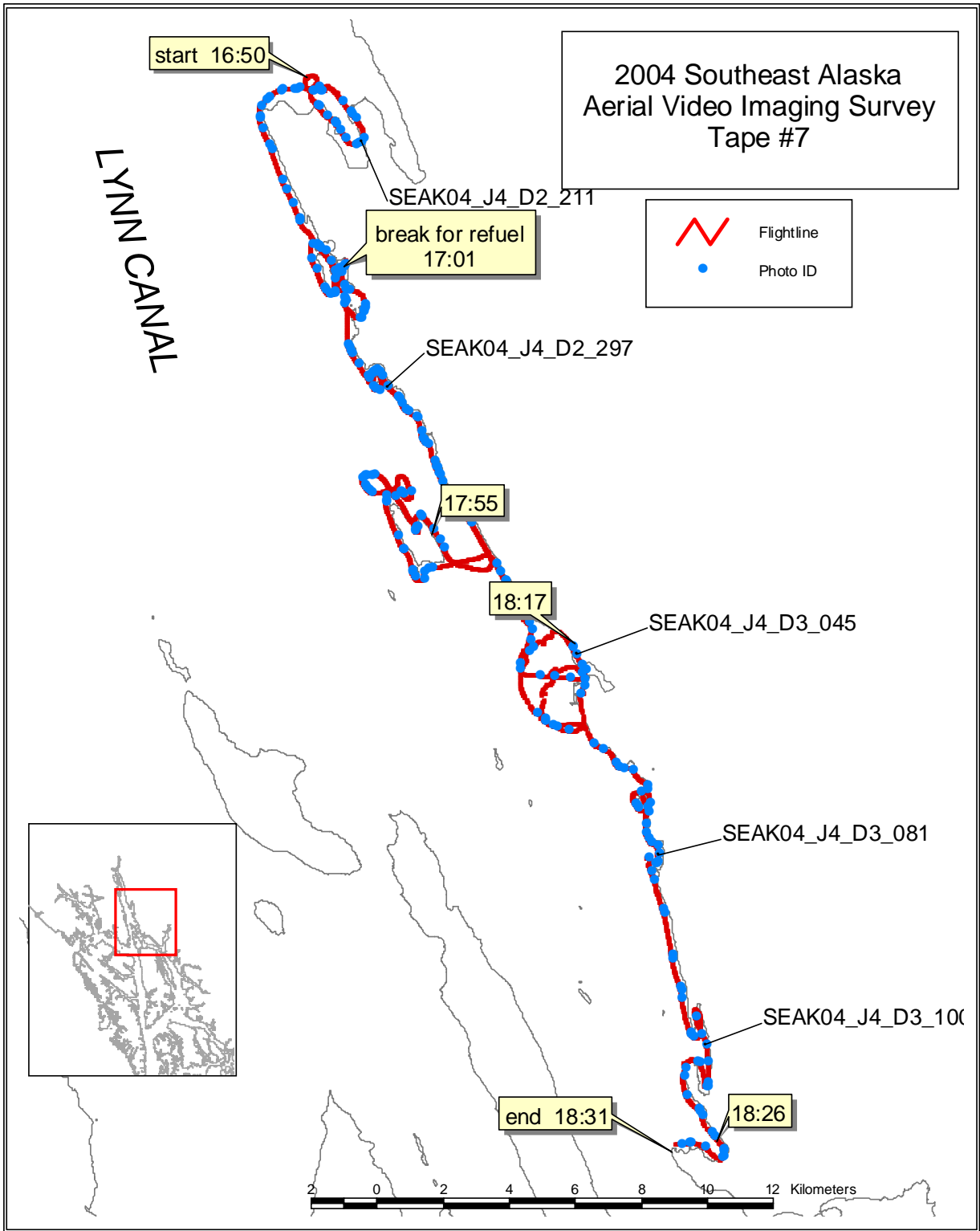
| Time (UTC) | Location | Film Frame | Chart | Gazette Page |
|-----------------------|-----------------------|-----------------------|--------------|-------------------------|
| 14:48 | West side Taiya Inlet | SEAK04_J4_D1_026.JPG | 17317 | 38 |
| 14:58 | head of Taiya Inlet | SEAK04_J4_D1_038.JPG | " | " |
| 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 | | | |



Southeast Alaska 2004 Aerial Video Imaging Survey

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

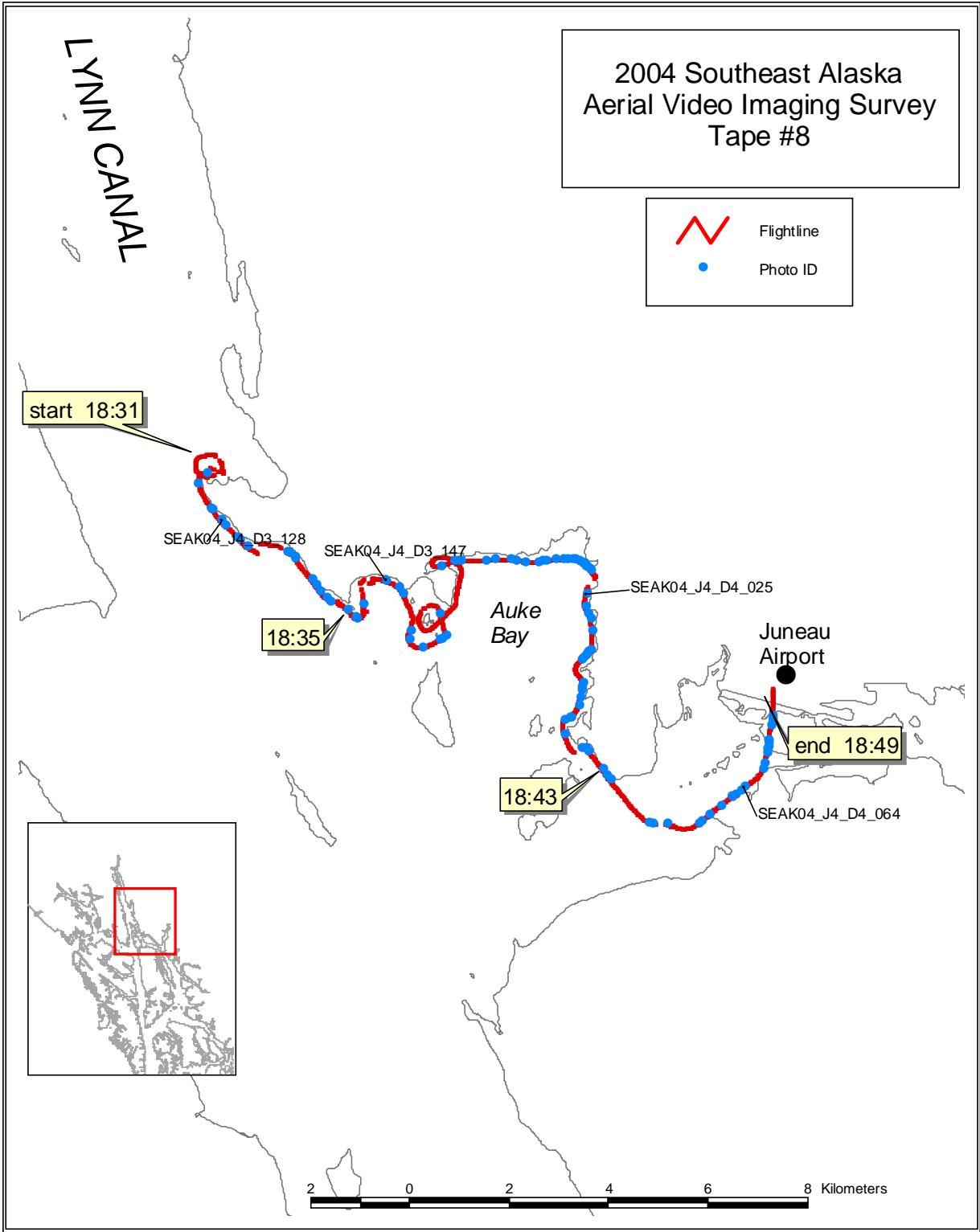
| Time (UTC) | Location | Film Frame | Chart | Gazette Page |
|-----------------------|----------------------|-----------------------|--------------|-------------------------|
| 15:47 | East side Lynn Canal | SEAK04_J4_D1_191.JPG | 17316 | 32 |
| 15:52 | Point Sherman | SEAK04_J4_D1_212.JPG | " | " |
| 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 | | |



Southeast Alaska 2004 Aerial Video Imaging Survey

Tape Number: SE_AK 2004-07
General Location: Echo Cove, Point Bridget to Lena Cove
Date: June 4, 2004
Time Start: 16:48:40
Time Stop: 18:30:40
Tape Length: 59:58
Weather: clear to high overcast
Electronic File: jun4_7.TRK, jun4_7.txt, navdatav2.mdb

| Time (UTC) | Location | Film Frame | Chart | Gazette 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 | " | " |
| 18:31 | end tape 7 | SEAK04_J4_D3_123.JPG | " | " |



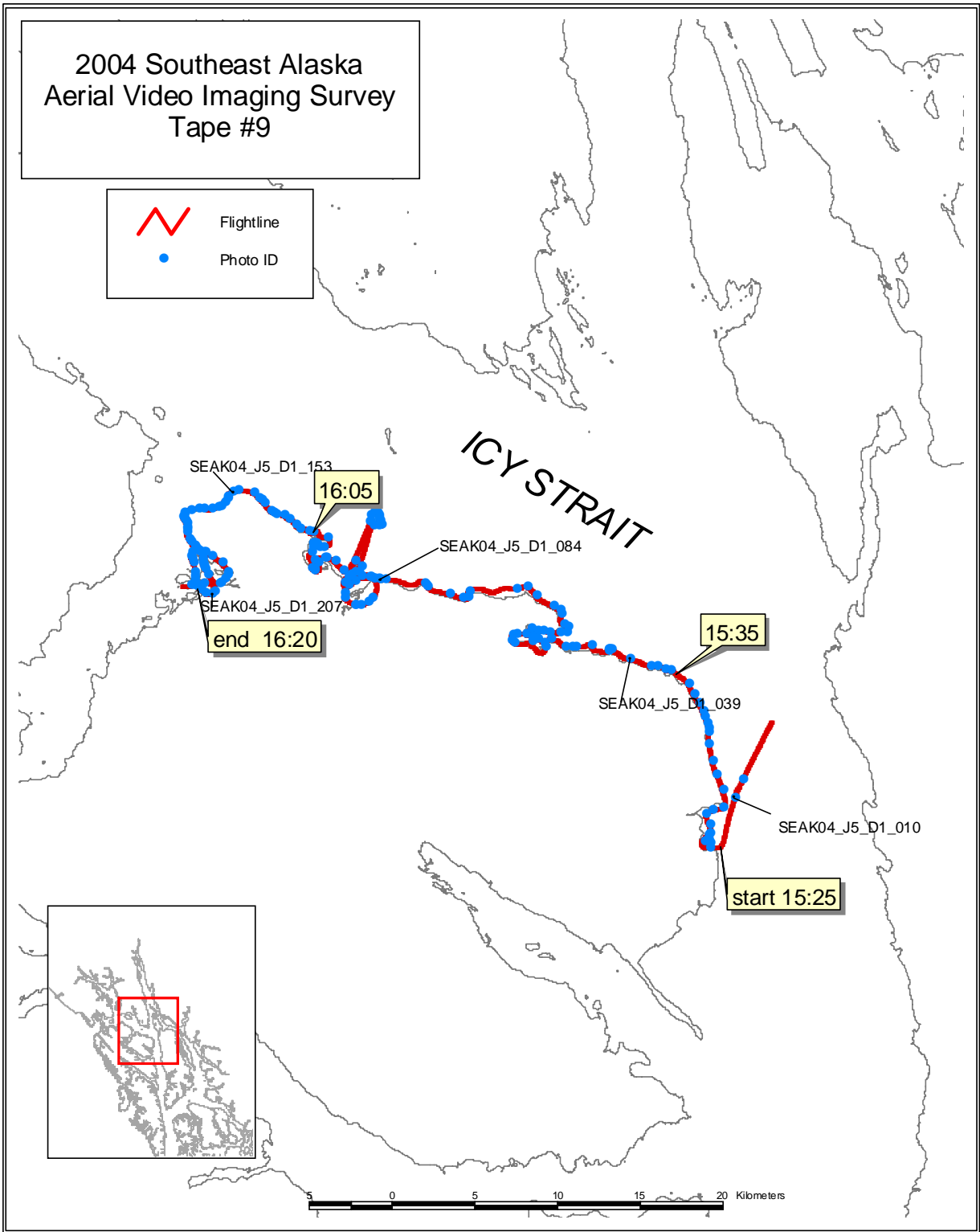
Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 | " | " |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #9

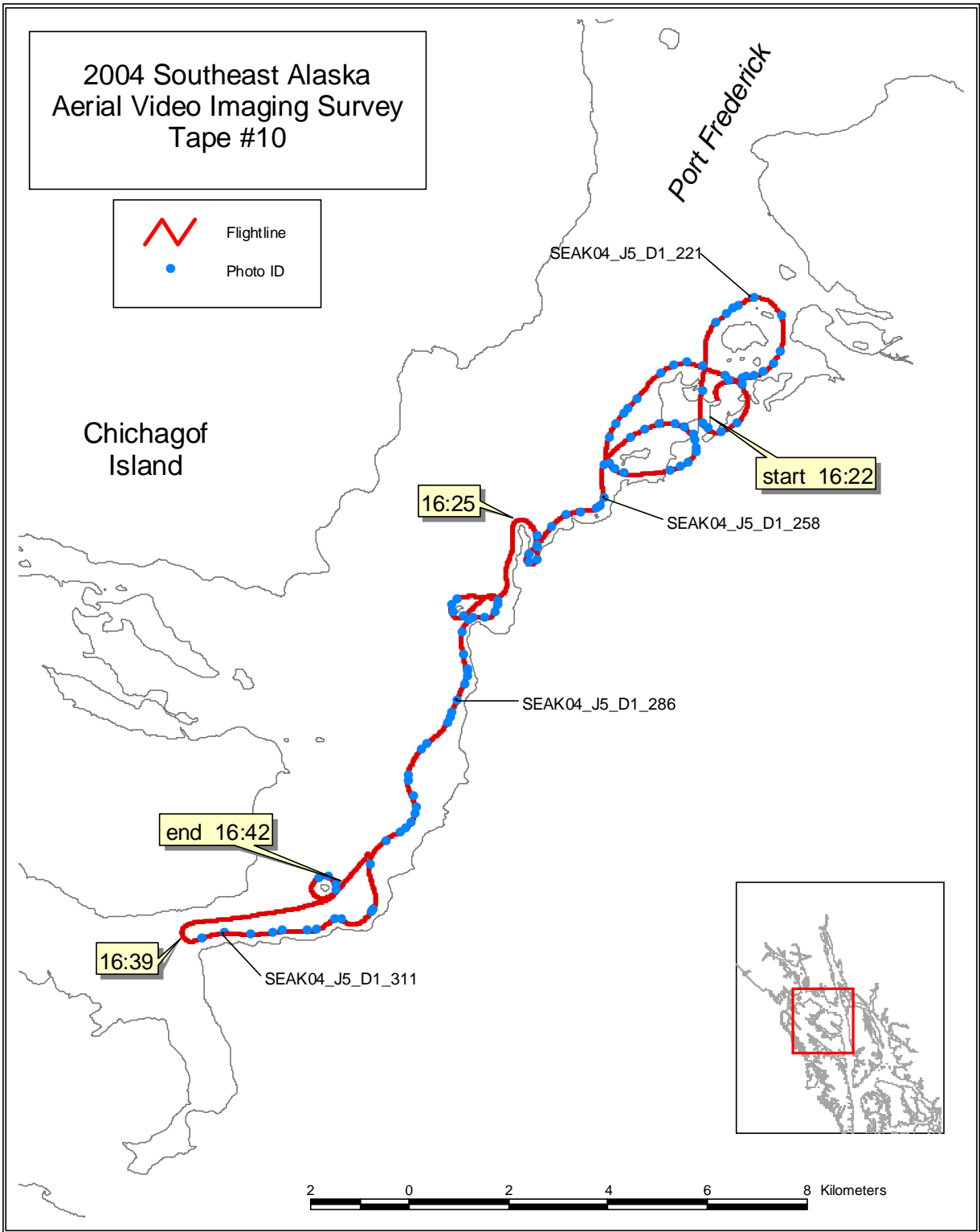
- Flightline
- Photo ID



Southeast Alaska 2004 Aerial Video Imaging Survey

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
Electronic File: jun5_9.TRK, jun5_9.txt, navdatav2.mdb

| Time (UTC) | Location | Film Frame | Chart | Gazette Page |
|-----------------------|-----------------|-----------------------|--------------|-------------------------|
| 15:25 | False Bay | SEAK04_J5_D1_011.JPG | 17300 | 27 |
| 15:35 | Point Augusta | SEAK04_J5_D1_034.JPG | " | 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 | " | " |



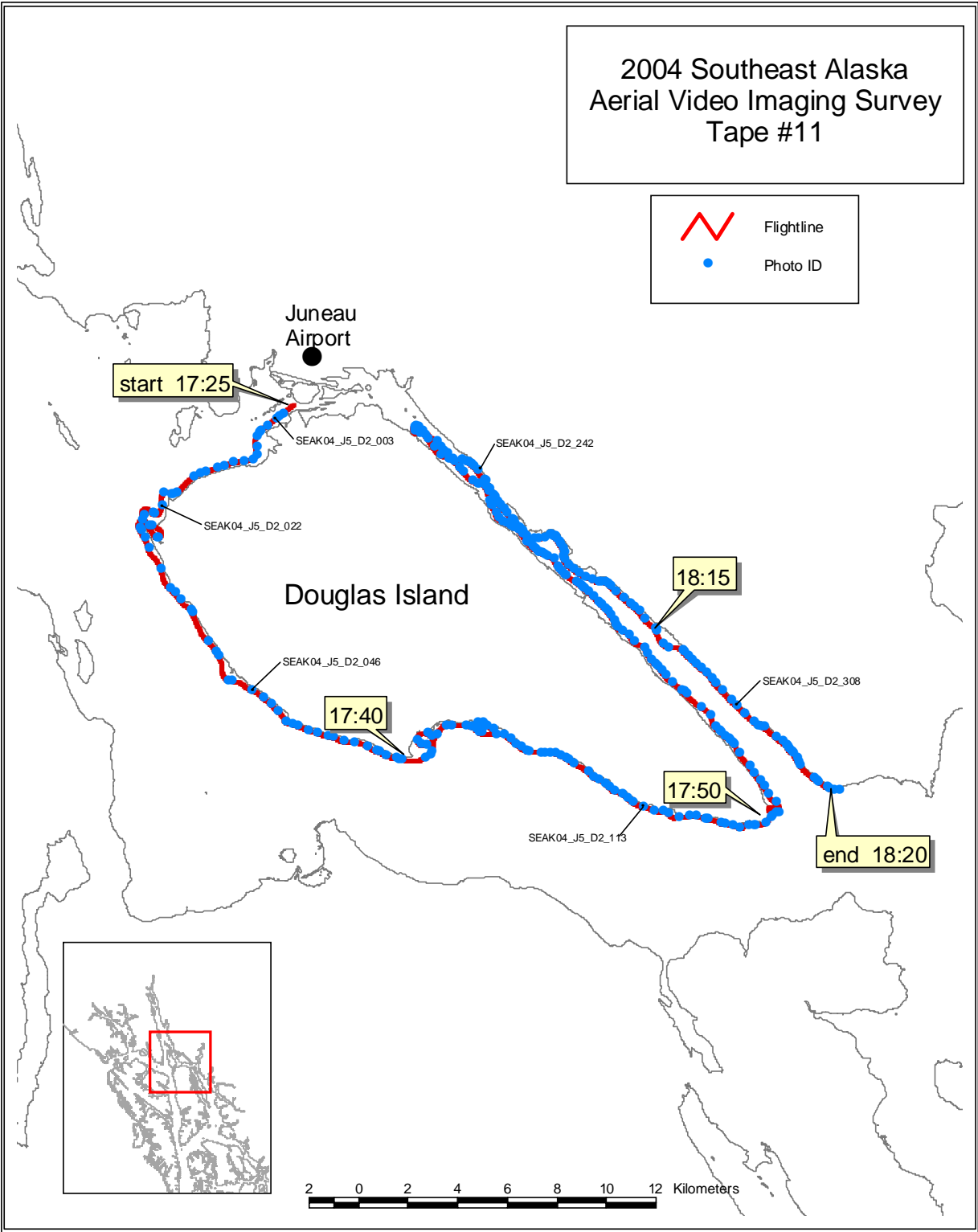
Southeast Alaska 2004 Aerial Video Imaging Survey

Tape Number: SE_AK 2004-10
General 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 (UTC) | Location | Film Frame | Chart | Gazette 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 |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #11

Flightline
Photo ID



Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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. Salisbury---end tape 11 | SEAK04_J5_D2_330.JPG | | " |

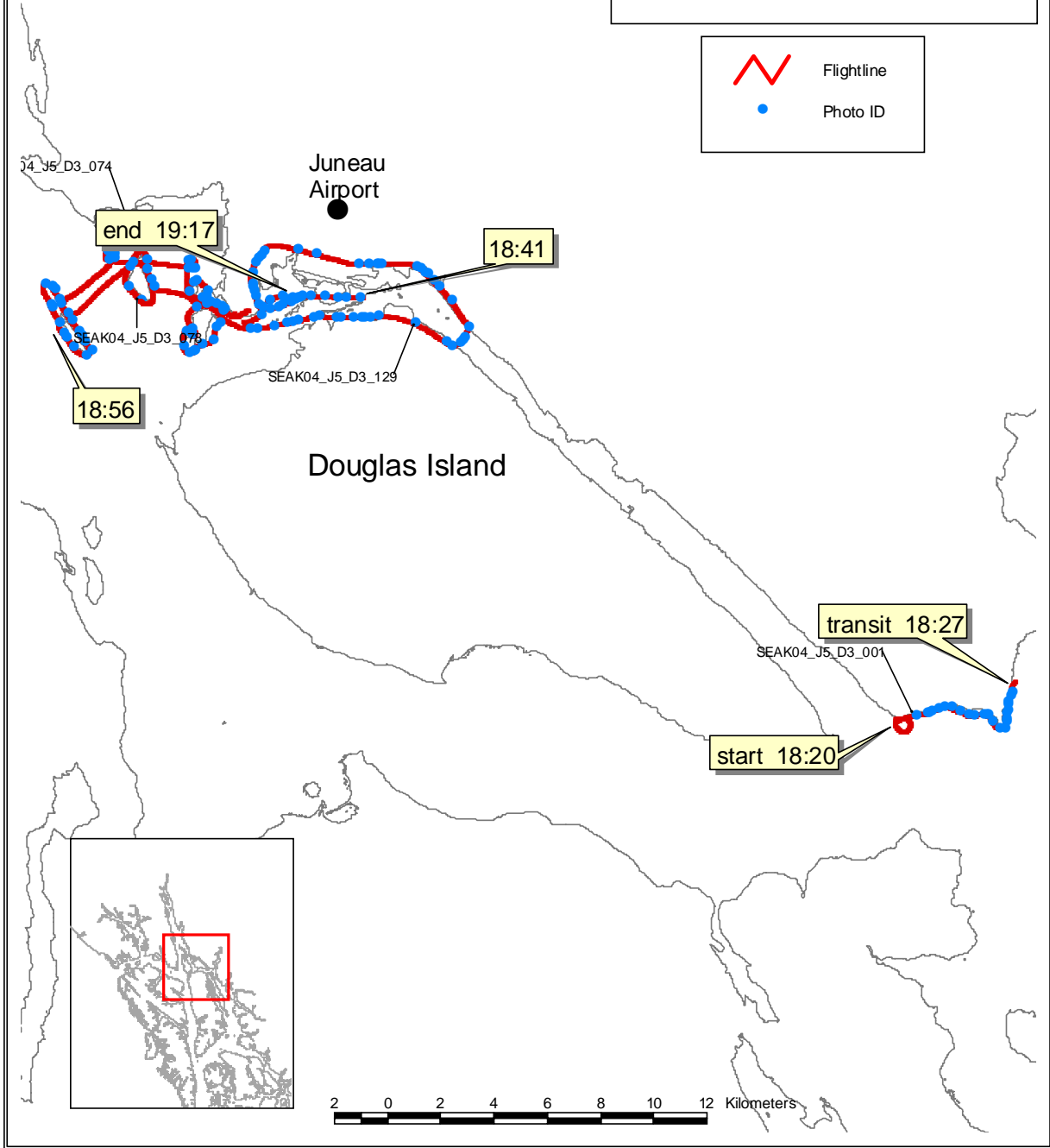
2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #12



Flightline



Photo ID



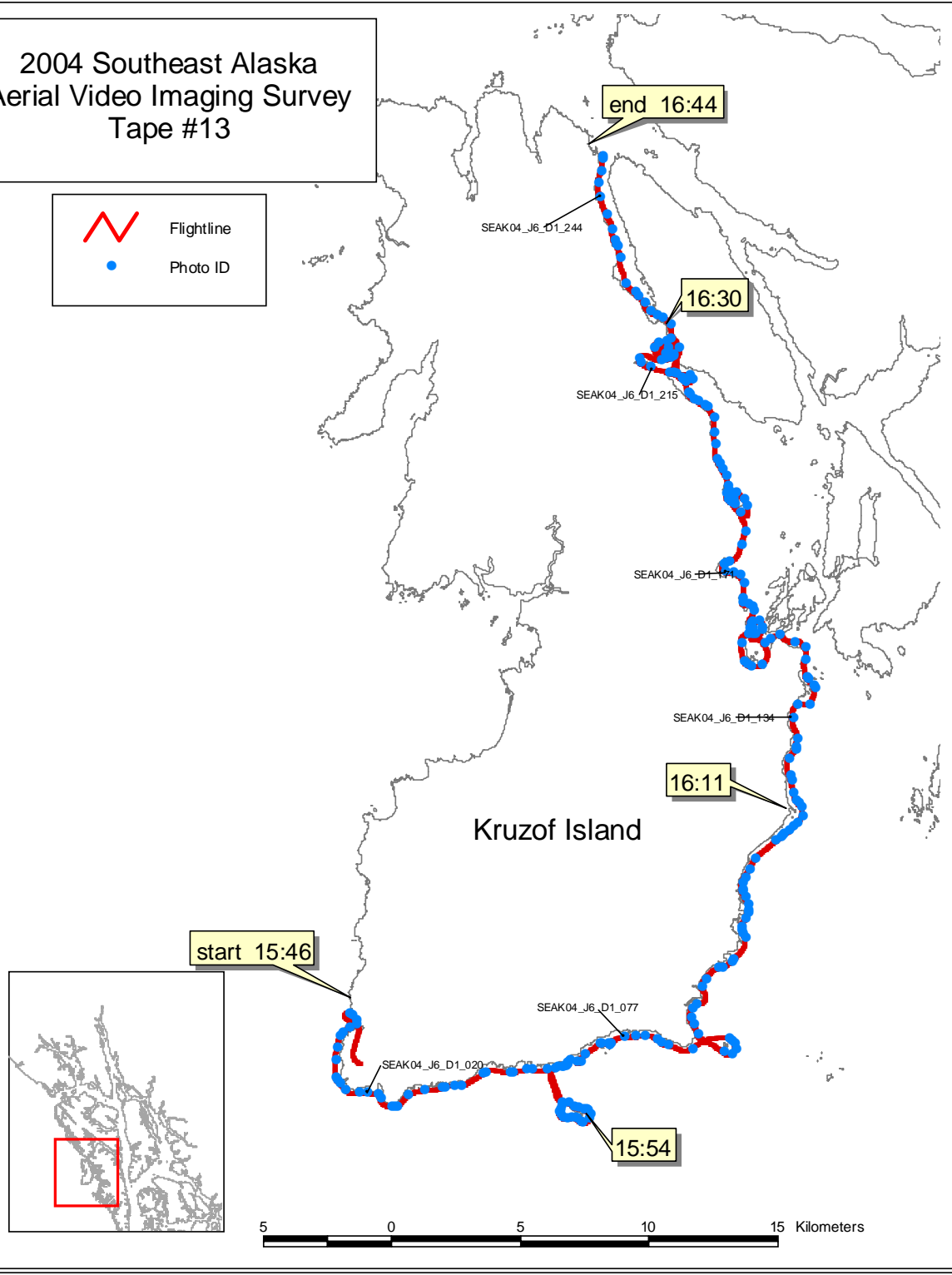
Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 | | |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #13

Flightline
Photo ID





Southeast Alaska 2004 Aerial Video Imaging Survey

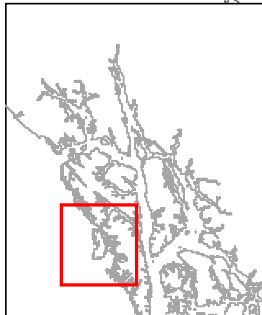
Tape Number: SE_AK 2004-13
General Location: Kruzof Island
Date: June 6, 2004
Time Start: 15:46:06
Time Stop: 16:43:56
Tape Length: 1:00:36
Weather: High overcast, occasional light rain, clearing
Electronic File: 6jun_13.TRK, 6jun_13.txt, navdatav2.mdb

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

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #14

 Flightline
 Photo ID

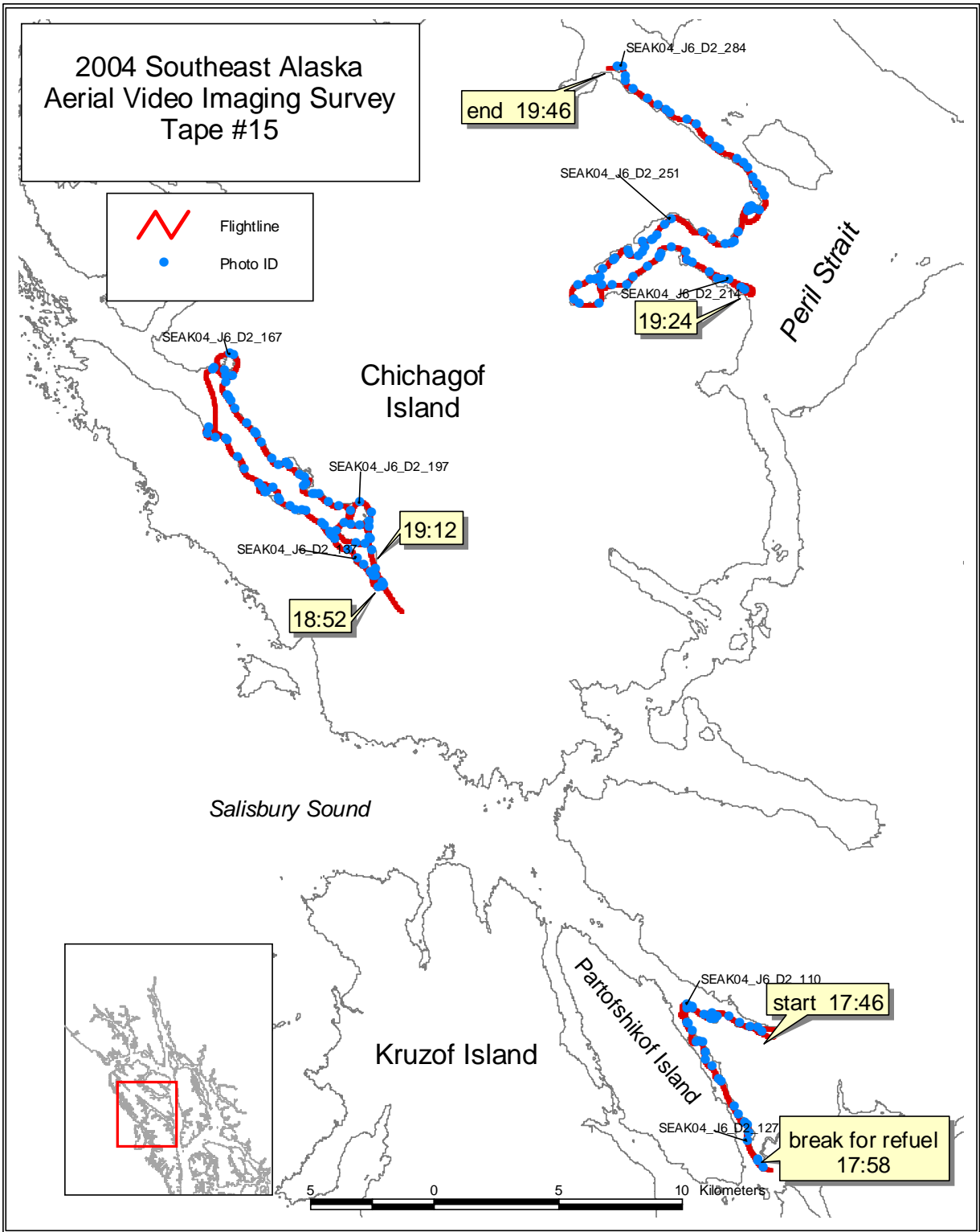
Salisbury Sound



Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette Page |
|-------------------|------------------------------|----------------------|--------------|---------------------|
| 16:45 | Sukoi Point | SEAK04_J6_D1_254.JPG | 17323 | 26 |
| 17:05 | Kalinin Point | SEAK04_J6_D1_311.JPG | " | " |
| 17:10 | Cape Georgiana | SEAK04_J6_D1_326.JPG | " | " |
| 17:13 | Hayward Point | SEAK04_J6_D1_328.JPG | 17324 | " |
| 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 Bay | SEAK04_J6_D2_087.JPG | " | 27 |
| | end tape 14 | SEAK04_J6_D2_087.JPG | | |





Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 | " | 26 |
| 19:46 | Fick Cove --- end of tape 15 | SEAK04_J6_D2_285.JPG | " | " |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #16

 Flightline
 Photo ID

Chichagof
Island

Hoonah
Sound

20:10

19:56

end 20:18

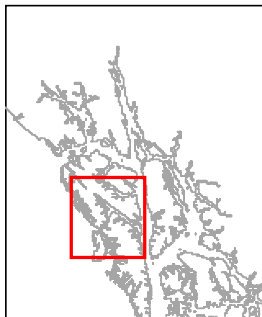
start 19:47

SEAK04_J6_D3_028

SEAK04_J6_D3_041

SEAK04_J6_D2_310

SEAK04_J6_D2_289



2 0 2 4 6 8 10 12 Kilometers

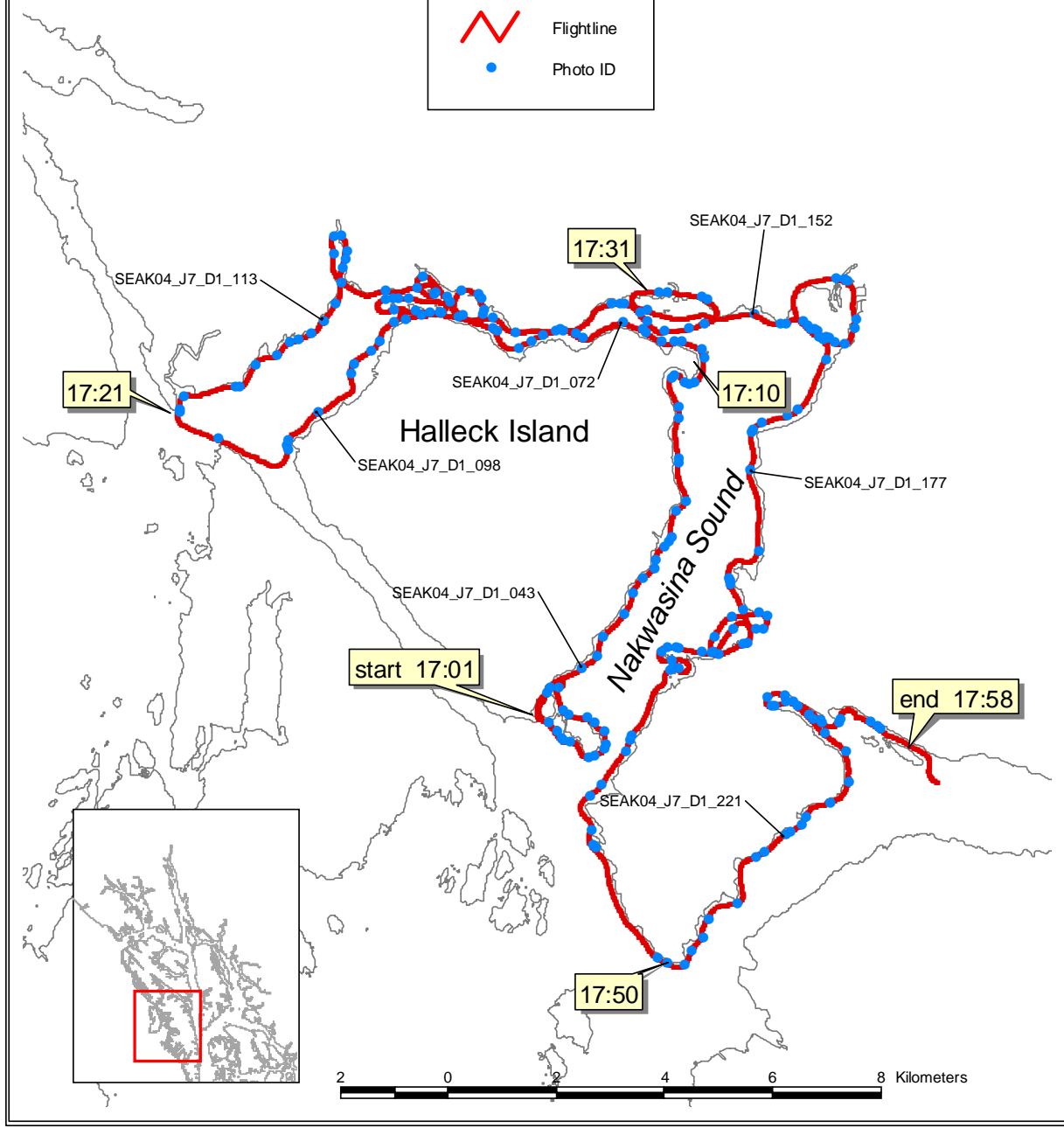
Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette 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 | " | " |
| | end of tape 16 | | | |

2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #17

Flightline
Photo ID



Southeast Alaska 2004 Aerial Video Imaging Survey

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

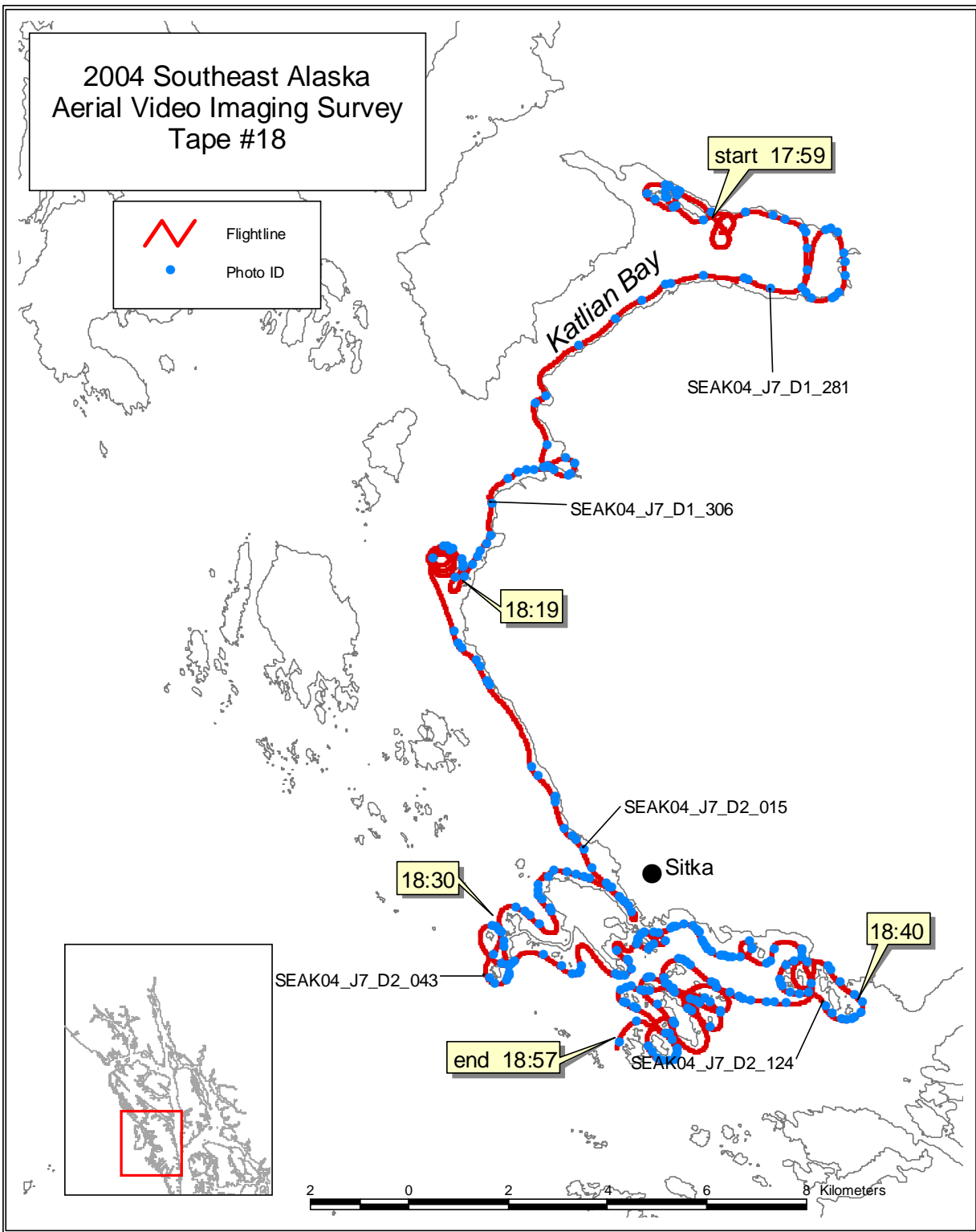
2004 Southeast Alaska
Aerial Video Imaging Survey
Tape #18



Flightline



Photo ID



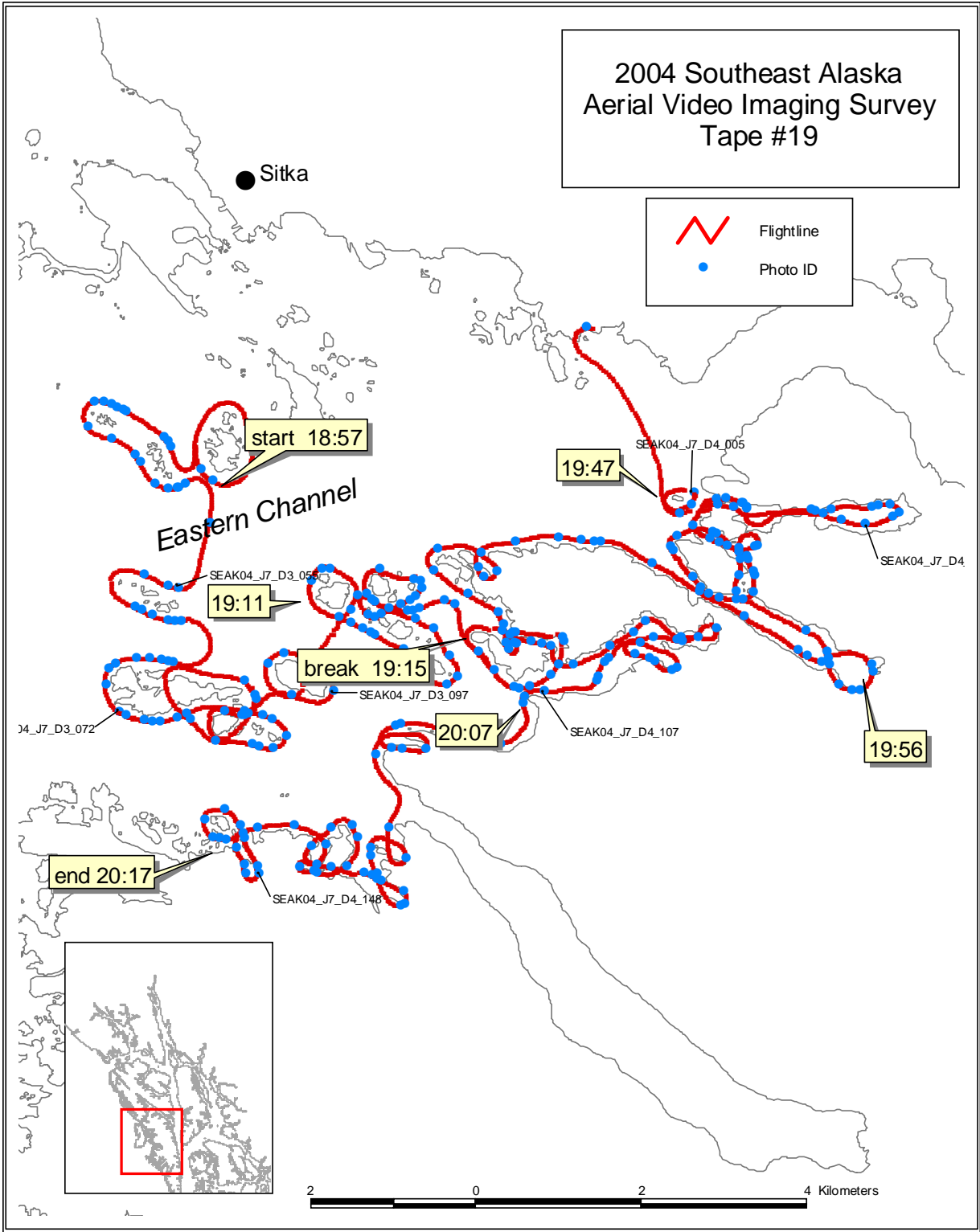
Southeast Alaska 2004 Aerial Video Imaging Survey

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 (UTC) | Location | Film Frame | Chart | Gazette Page |
|-------------------|------------------------------------|----------------------|--------------|---------------------|
| 17:59 | Katlian Bay, east point of island | SEAK04_J7_D1_245.JPG | 17324 | 27 |
| 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 Airport | SEAK04_J7_D2_043.JPG | " | " |
| 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 | " | " |
| | | | | |

2004 Southeast Alaska Aerial Video Imaging Survey Tape #19

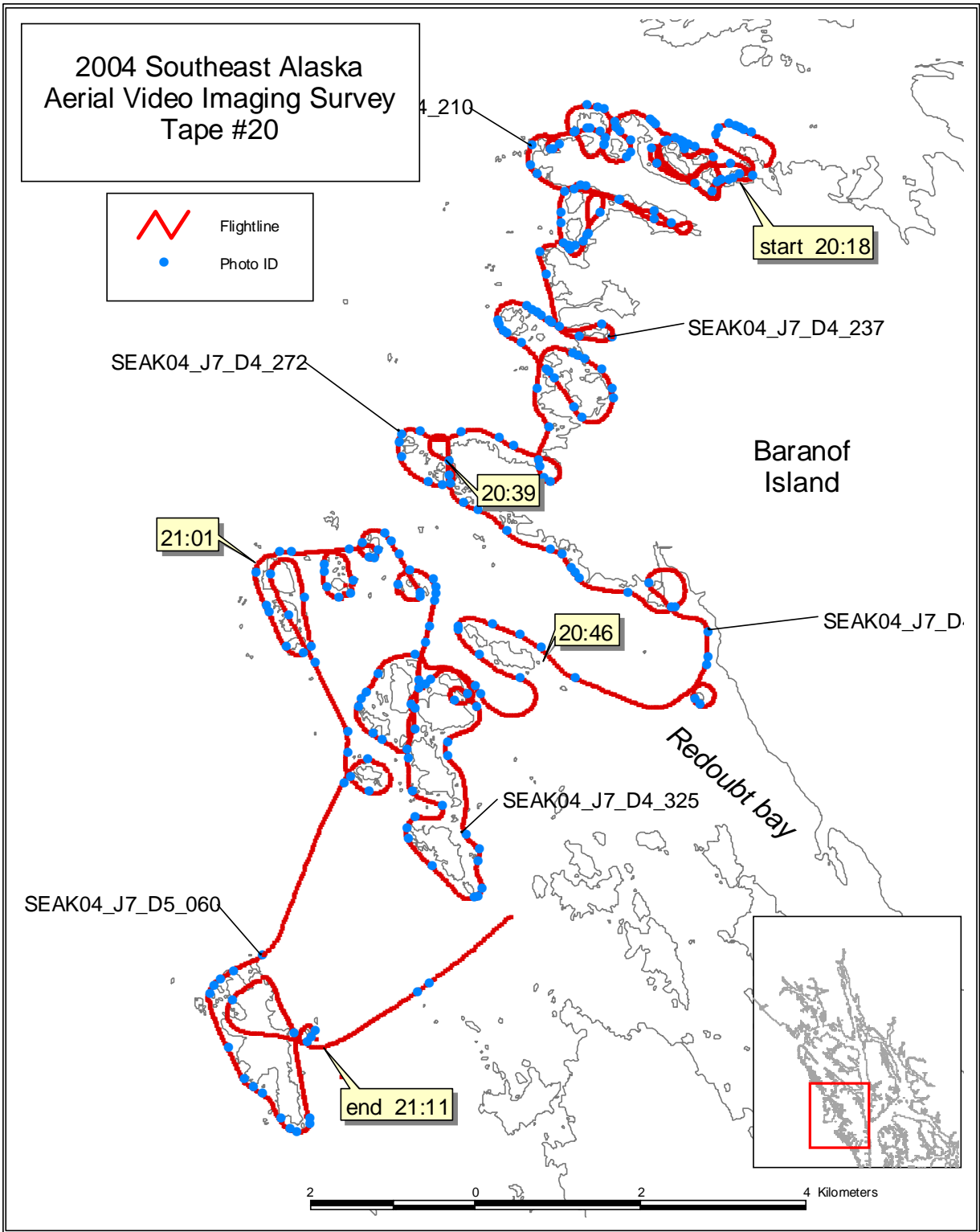
Flightline
Photo ID



Southeast Alaska 2004 Aerial Video Imaging Survey

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

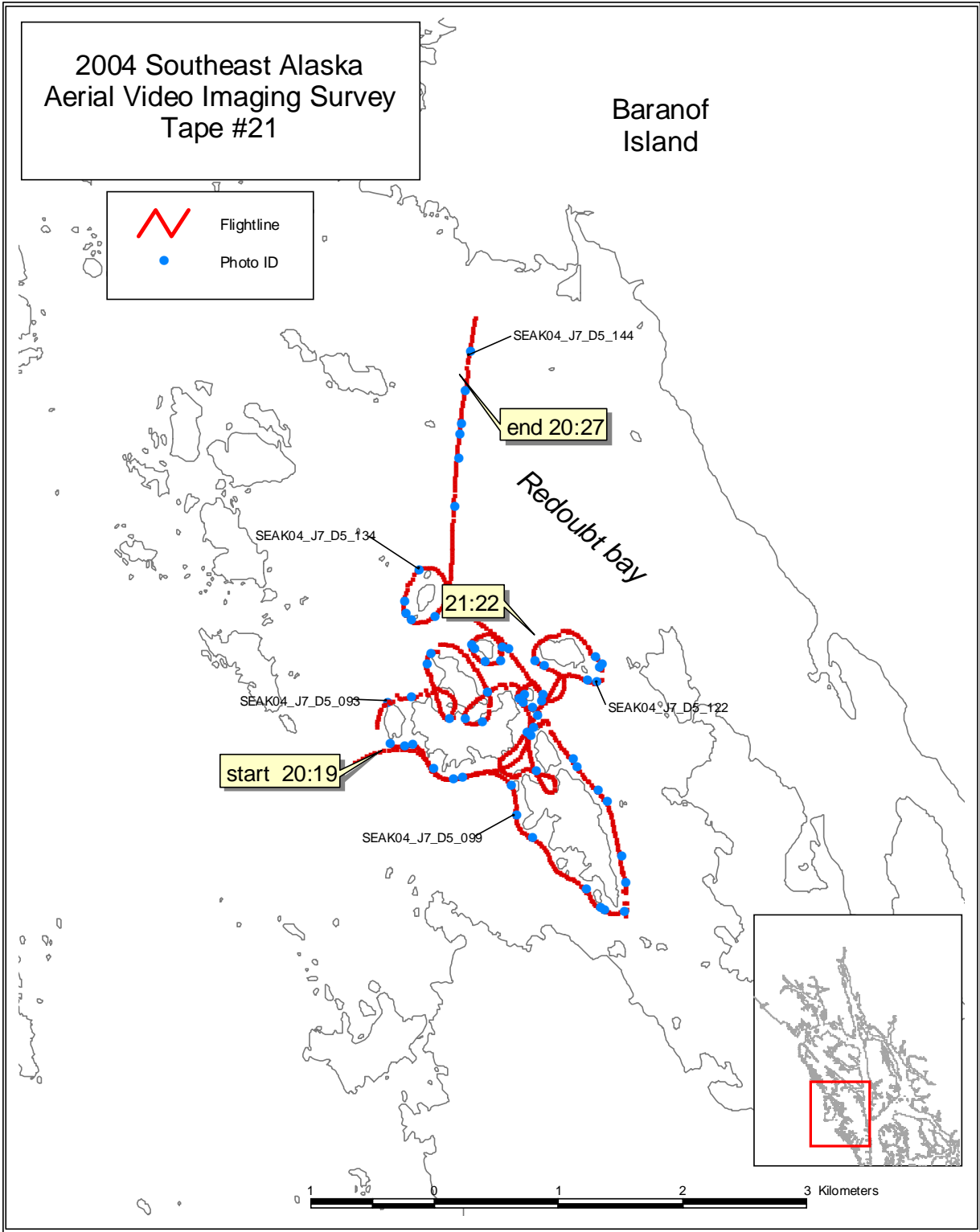
| Time (UTC) | Location | Film Frame | Chart | Gazette Page |
|-----------------------|---------------------------------|-----------------------|--------------|-------------------------|
| 18:57 | Whale Island | SEAK04_J7_D3_020.JPG | 17323 | 27 |
| 19:11 | Kutchuma Islands | SEAK04_J7_D3_055.JPG | " | " |
| | 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 Bay | SEAK04_J7_D4_107.JPG | | |
| 20:17 | Samsing Cove ---end tape 19 | SEAK04_J7_D4_148.JPG | | |



Southeast Alaska 2004 Aerial Video Imaging Survey

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



Southeast Alaska 2004 Aerial Video Imaging Survey

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