FLIGHT SUMMARY REPORT

Flight #: 90-068

Date: 30 March 1990

Sensor Package: Wild-Heerbrug RC-10
Dual Hycon HR-732

Area(s) Covered: Nevada (ferry from Moffett Field, CA to Patrick AFB, FL)

Investigator(s): Functional Check Flight

Aircraft #: 709

Flight Request: 90X001

Julian Date: 090

SENSOR DATA

Accession #:	04011	04012	04013
Sensor ID #:	026	018	019
Sensor Type:	RC-10	HR-732	HR-732
Focal Length:	12" 304.97 mm	24" 609.6 mm	24" 609.6
Film Type:	High Definition Aerochrome IR SO-131	High Definition Color Infrared SO-131	Panatomic-X 3400
Filtration:	cc.10B	-----	Wratten 12
Spectral Band:	510-900 nm	510-900 nm	510-700 nm
f Stop:	4	8	8
Shutter Speed:	1/150	1/75	1/75
# of Frames:	21	41	41
% Overlap:	60	60	60
Quality:	Excellent	Excellent	Excellent

Remarks:

Airborne Science and Applications Program

The Airborne Science and Applications Program (ASAP) is supported by three ER-2 high altitude Earth Resources Survey aircraft. These aircraft are operated by the High Altitude Missions Branch at NASA-Ames Research Center, Moffett Field, California. The ER-2s are used as readily deployable high altitude sensor platforms to collect remote sensing and *in situ* data on earth resources, celestial phenomena, atmospheric dynamics, and oceanic processes. Additionally, these aircraft are used for electronic sensor research and development and satellite investigative support.

The ER-2s are flown from various deployment sites in support of scientific research sponsored by NASA and other federal, state, university, and industry investigators. Data are collected from deployment sites in Kansas, Texas, Virginia, Florida, and Alaska. Cooperative international scientific projects have deployed the aircraft to sites in Great Britain, Australia, Chile, and Norway.

Photographic and digital imaging sensors are flown aboard the ER-2s in support of research objectives defined by the sponsoring investigators. High resolution mapping cameras and digital multispectral imaging sensors are utilized in a variety of configurations in the ER-2s' four pressurized experiment compartments.

Camera Systems

Various camera systems and films are used for photographic data collection. Film types include high definition color infrared, natural color, and black and white emulsions. Available photographic systems are as follows:

- Wild-Heerbrug RC-10 metric mapping camera
  - 9 x 9 inch film format
  - 6 inch focal length lens provides area coverage of 16 x 16 nautical miles from 65,000 feet
  - 12 inch focal length lens provides area coverage of 8 x 8 nautical miles from 65,000 feet

- Hycon HR-732 large scale mapping camera
  - 9 x 18 inch film format
  - 24 inch focal length lens provides area coverage of 4 x 8 nautical miles from 65,000 feet

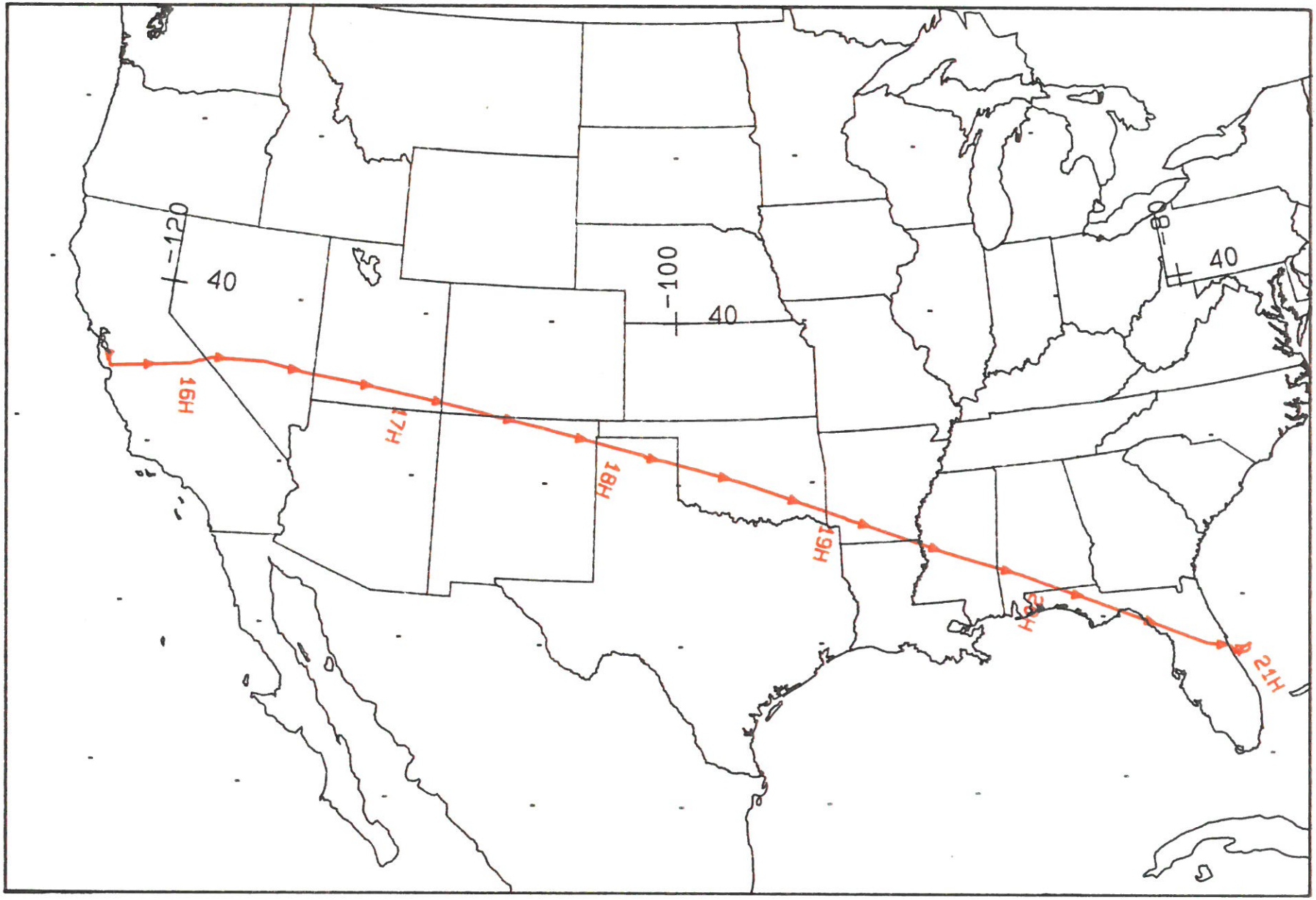
- IRIS II Panoramic camera
  - 4.5 x 34.7 inch film format
  - 24 inch focal length lens
  - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

CAMERA FLIGHT LINE DATA
FLIGHT NO. 90-068

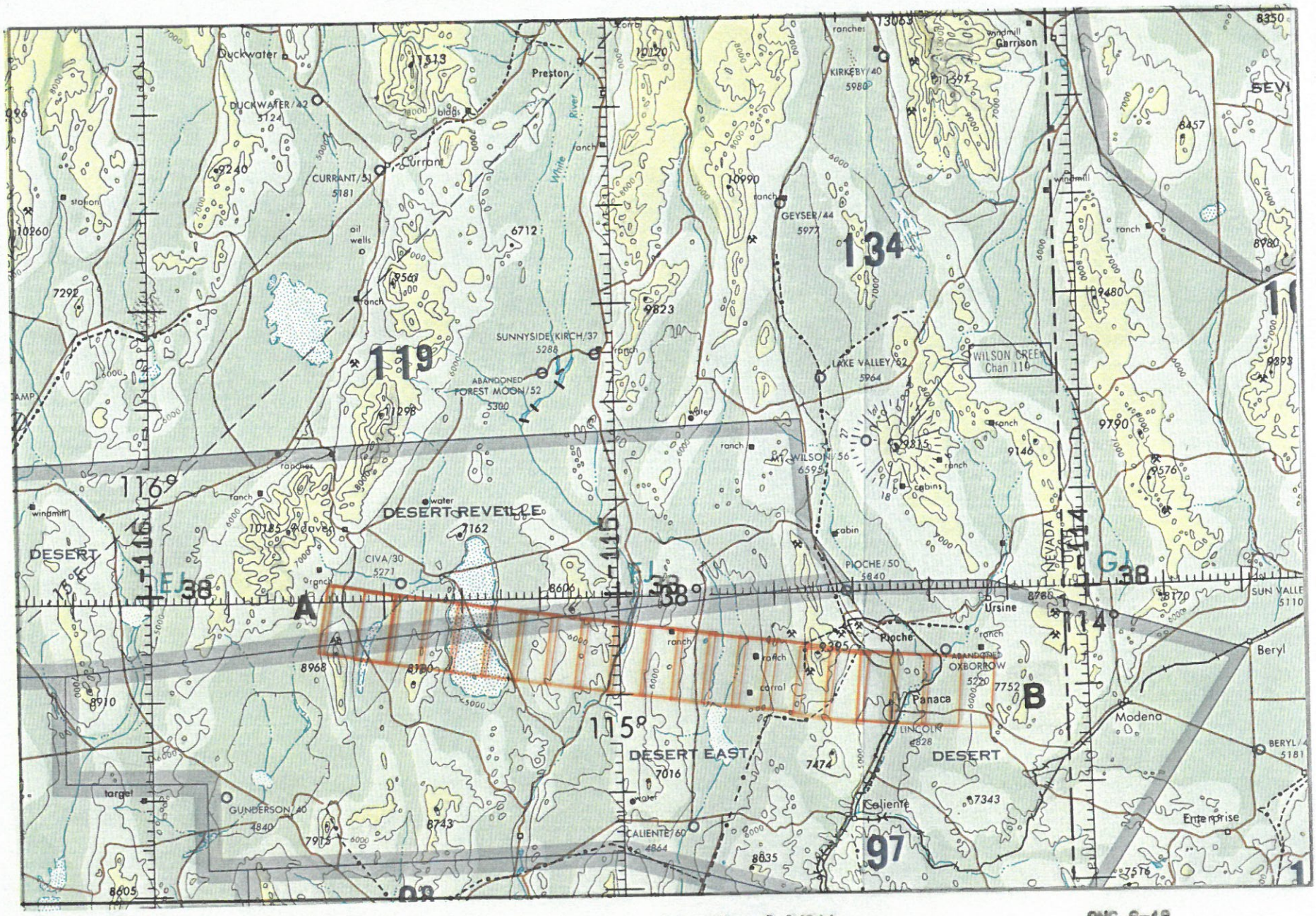
Accession # 04011 04012 04013

Sensor # 026 018 019

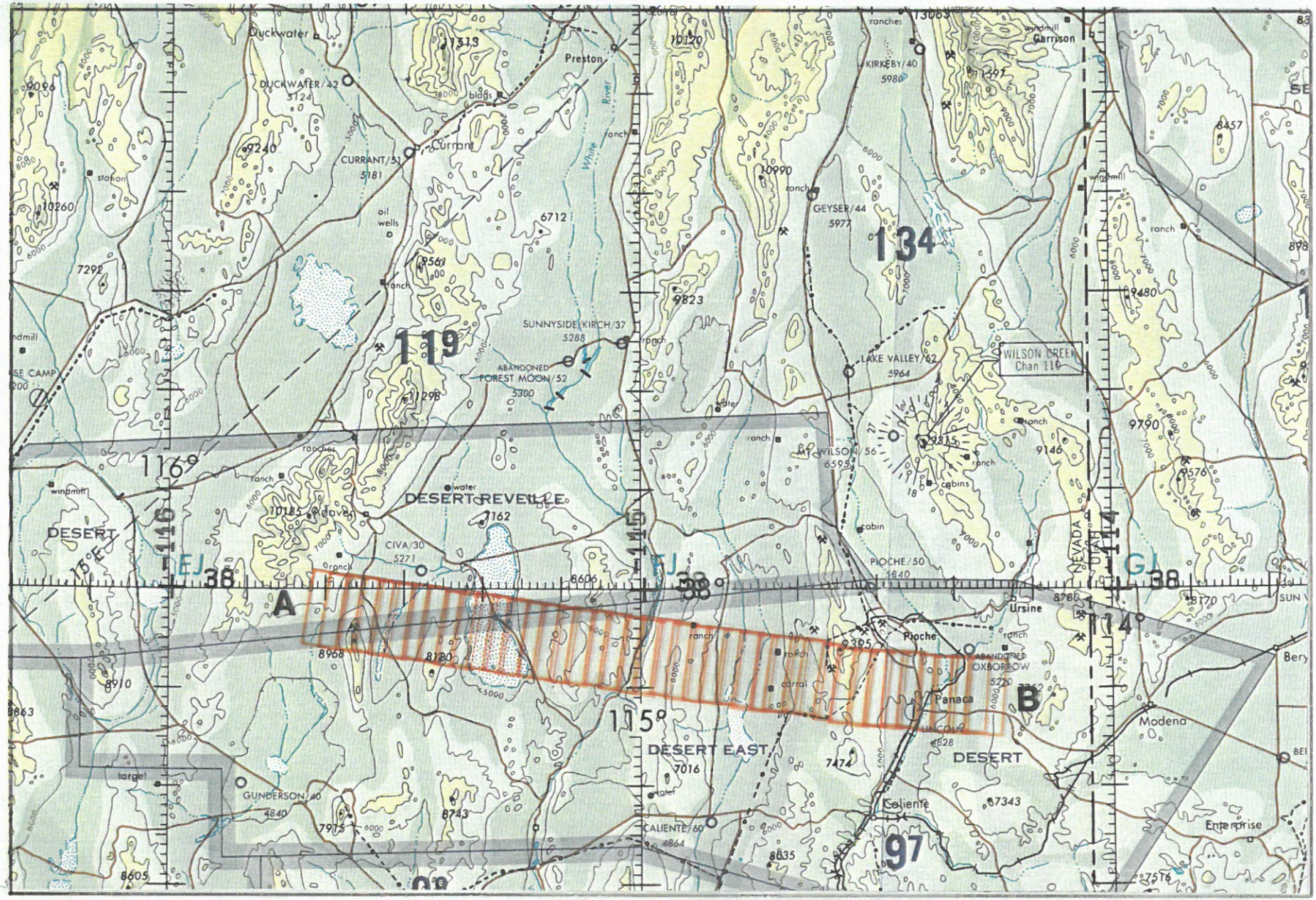
Check Points	Frame Numbers	Time (GMT-hr, min, sec) START	Time (GMT-hr, min, sec) END	Altitude, MSL feet/meters	Cloud Cover/Remarks
A - B	0975-0995	16:26:58	16:35:51	65000/19800	10-20% minor cumulus (frames 0981-0984, 0989-0992)
A - B	0001-0041	16:25:17	16:35:00	65000/19800	10-40% cumulus (frames 0015-0019, 0030-0035)
A - B	0001-0041	16:25:08	16:34:51	65000/19800	10-40% cumulus (frames 0015-0019, 0030-0035)
	NOTE: Times on film are local standard time -- should be 16xxxx rather than 8xxxx				



FLIGHT 90-068 30 March 1990 A/C 709 Ferry of Aircraft to Patrick AFB, Florida



FLIGHT 90-068 30 March 1990 RC-10 Accession # 04011 ONC G-18



FLIGHT 90-068 30 March 1990 HR-732 Accession # 04012 & 04013 ONC G-18