

FLIGHT SUMMARY REPORT

Flight Number: 96-038
Calendar/Julian Date: 09 November 1995 • 313
Sensor Package: IRIS II Panoramic Camera
Area(s) Covered: Central California

Investigator(s): Functional Sensor

Aircraft #: 708

SENSOR DATA

Accession #: 05040
Sensor ID #: 070
Sensor Type: IRIS
Focal Length: 24"
609.6 mm
Film Type: High Definition
Aerochrome IR
SO-131
Filtration: cc.20B
Spectral Band: 510-900 nm
f Stop: 3.5
Shutter Speed: 1/173
of Frames: 137
% Overlap: 60
Quality: 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. The following provides a description of the digital multispectral sensor(s) and camera(s) used for data collection during this flight.

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-Heerbrugg 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

The U.S. Geological Survey's EROS Data Center at Sioux Falls, South Dakota serves as the archive and product distribution facility for NASA-Ames aircraft acquired photographic and digital imagery. For information regarding photography and digital data (including areas of coverage, products, and product costs) contact EROS Data Center, Customer Services, Sioux Falls, South Dakota 57198 (Telephone: 605-594-6151).

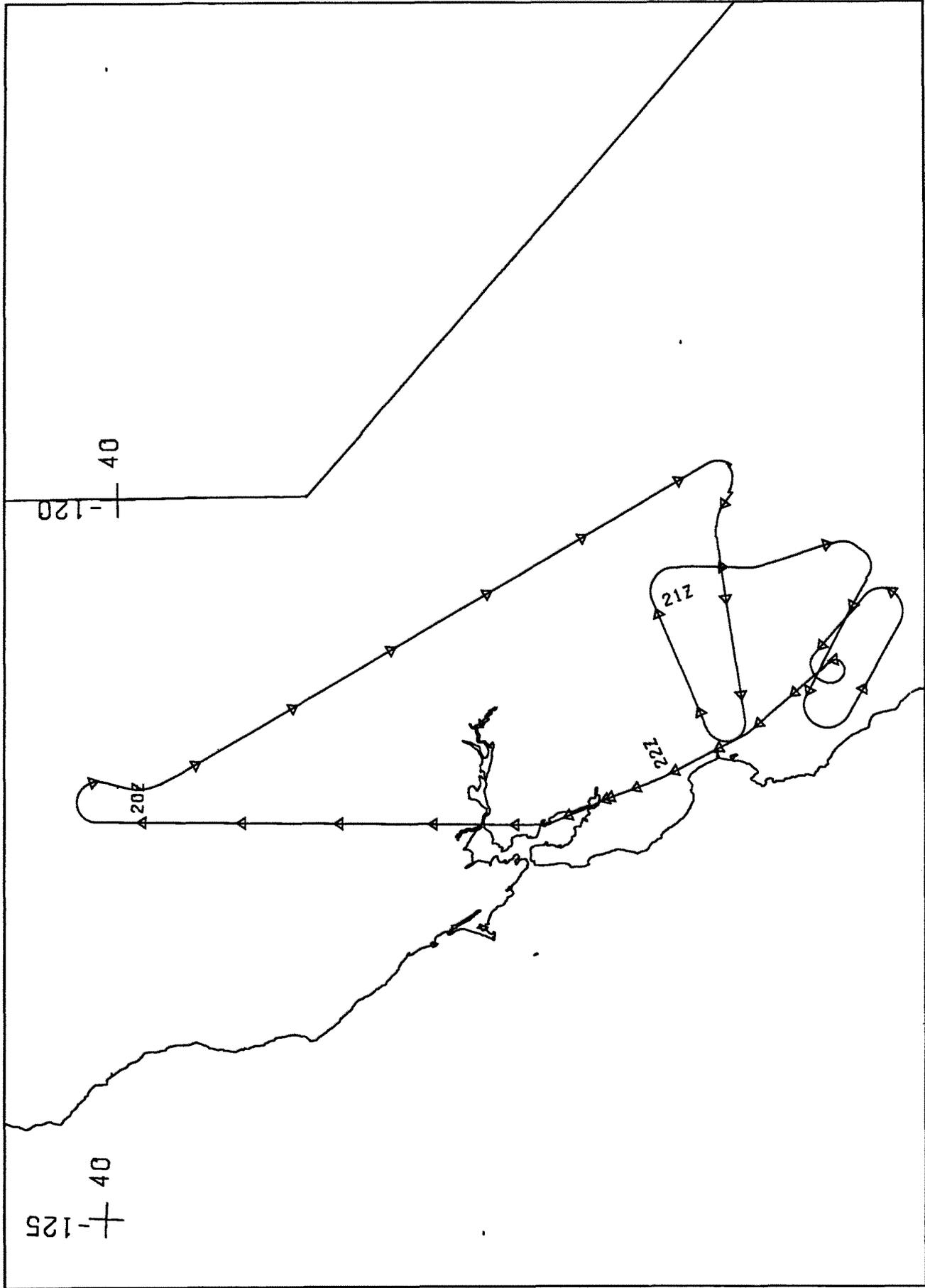
Additional information regarding ER-2 acquired photographic and digital data is available through the Aircraft Data Facility at Ames Research Center. For specific information regarding flight documentation, sensor parameters, and areas of coverage contact the Aircraft Data Facility, NASA-Ames Research Center, Mail Stop 240-6, Moffett Field, California 94035-1000 (Telephone: 415-604-6252).

**CAMERA FLIGHT LINE DATA
FLIGHT NO. 96-038**

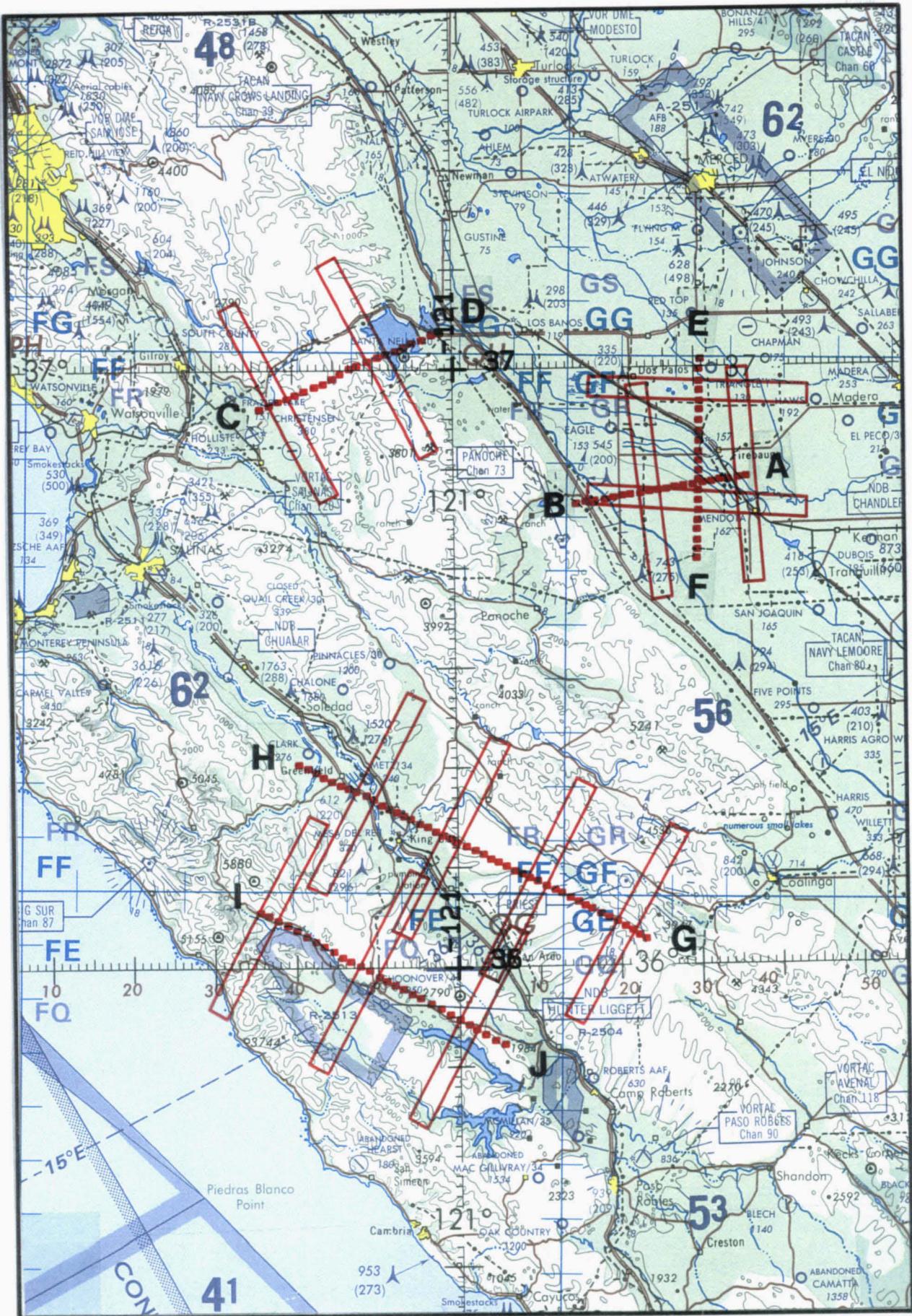
Accession # 05040

Sensor # 070

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0020	20 41 17	20 43 59	65990/20114	Light strike (frames 0001, 0005, 0020), 10% cumulus (frames 0019-0020)
C - D	0021-0041	20 54:06	20 56 57	66124/20155	10-20% cumulus, light strike (frames 0025, 0041)
E - F	0042-0062	21 01 48	21 04:38	66333/20218	Clear, light strike (frames 0046 and 0062)
G - H	0063-0108	21:12 12	21 18 37	66539/20281	Minor-20% cumulus, light strike (frames 0067 and 0108)
I - J	0109-0137	21 22 36	21 26:36	66555/20286	Minor-20% cumulus, light strike (frames 0113 and 0137)



FLIGHT 96-038 9 NOVEMBER 1995 R/C 708 F C F



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IRIS

A/C 708

9 NOVEMBER 1995

FLIGHT 96-038