FLIGHT SUMMARY REPORT

Flight Number: 98-131

Calendar/Julian Date: 22 September 1998 • 265

Sensor Package: Wild Heerbrugg RC-10
Hycon HR-732

Area(s) Covered: Los Padres National Forest

Investigator(s): Functional Sensor Flight **Aircraft #:** 809

SENSOR DATA

Accession #:	05309	05310
Sensor ID #:	076	020
Sensor Type:	RC-10	HR-732
Focal Length:	12” 304.89 mm	24” 609 mm
Film Type:	Aerochrome IR SO-134	Panatomic X Aerographic II, EK 2412
Filtration:	Wratten 12	Wratten 12
Spectral Band:	510-900 nm	510-700 nm
f Stop:	11	18
Shutter Speed:	1/275	1/250
# of Frames:	15	25
% Overlap:	60	60
Quality:	Excellent	Good
Remarks:	Add 4 seconds for correct UTC	Add 5 seconds for correct UTC

Airborne Science and Applications Program

The Airborne Science Program at NASA's Dryden Flight Research Center, Edwards, California, operates two ER-2 high altitude aircraft in support of NASA earth science research. 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

Data Availability

The U.S. Geological Survey's EROS Data Center at Sioux Falls, South Dakota serves as the archive and product distribution facility for Airborne Science Program aircraft acquired photographic and digital imagery. The photographic archive consists of photography acquired by the program from 1971 to April 1996. 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).

As of April 1996 the EROS Data Center no longer receives an archive copy of newly acquired Airborne Science Program photography. Original photography is archived with the Airborne Sensor Facility at Ames Research Center. A user copy of the photography is provided to the principal investigators for each flight. Principal investigators are cited on the first page of their respective flight summary reports. For information regarding photography acquired from April 1996 to the present contact the Airborne Sensor Facility as follows:

Flight Documentation and Data Archive Searches

The following is the web site for flight documentation as published by the Airborne Sensor Facility at NASA Ames Research Center: http://asapdata.arc.nasa.gov/er-2fsr.html

Additional information regarding flight documentation to include data archive searches, data availability, sensor parameters, and areas of coverage may be obtained from the following: Airborne Sensor Facility, MS 240-6, NASA Ames Research Center, Moffett Field, CA 94035-1000, Telephone: 650.604.6252 (FAX 4987).

CAMERA FLIGHT LINE DATA
FLIGHT NO. 98-131

Accession # 05309

Sensor # 076

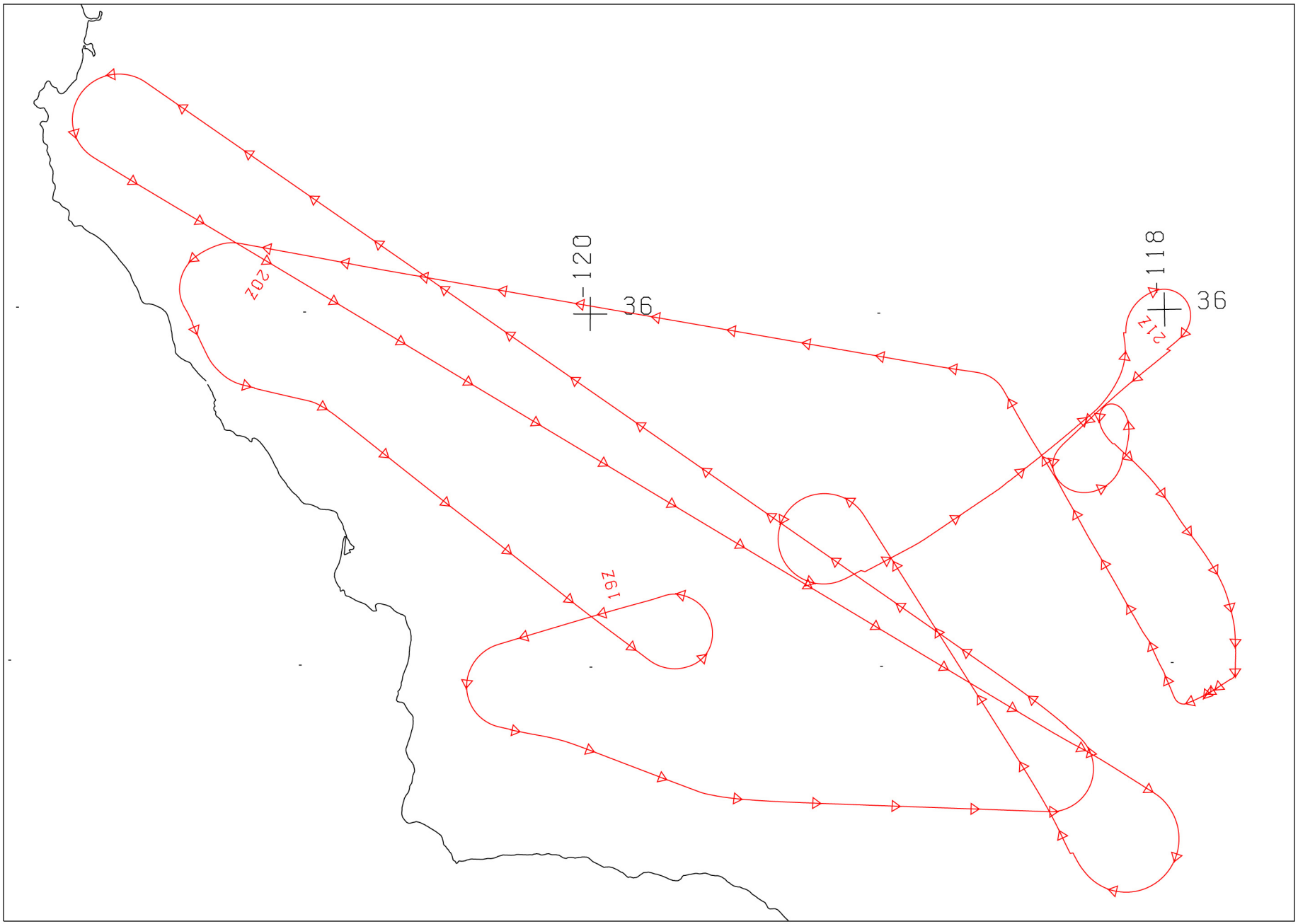
Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0079-0079	18:41:02	18:41:02	65900/20086	90% cumulus
C - D	0080-0086	18:49:50	18:52:16	65386/19930	50-60% cumulus
E - F	0087-0093	19:00:17	19:02:43	63729/19425	40-90% cumulus

CAMERA FLIGHT LINE DATA
FLIGHT NO. 98-131

Accession # 05310

Sensor # 020

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0003	18:40:36	18:41:05	65867/20076	90% cumulus
C - D	0004-0014	18:49:56	18:52:22	65336/19914	50-60% cumulus
E - F	0015-0025	19:00:23	19:02:49	63727/19424	30-90% cumulus



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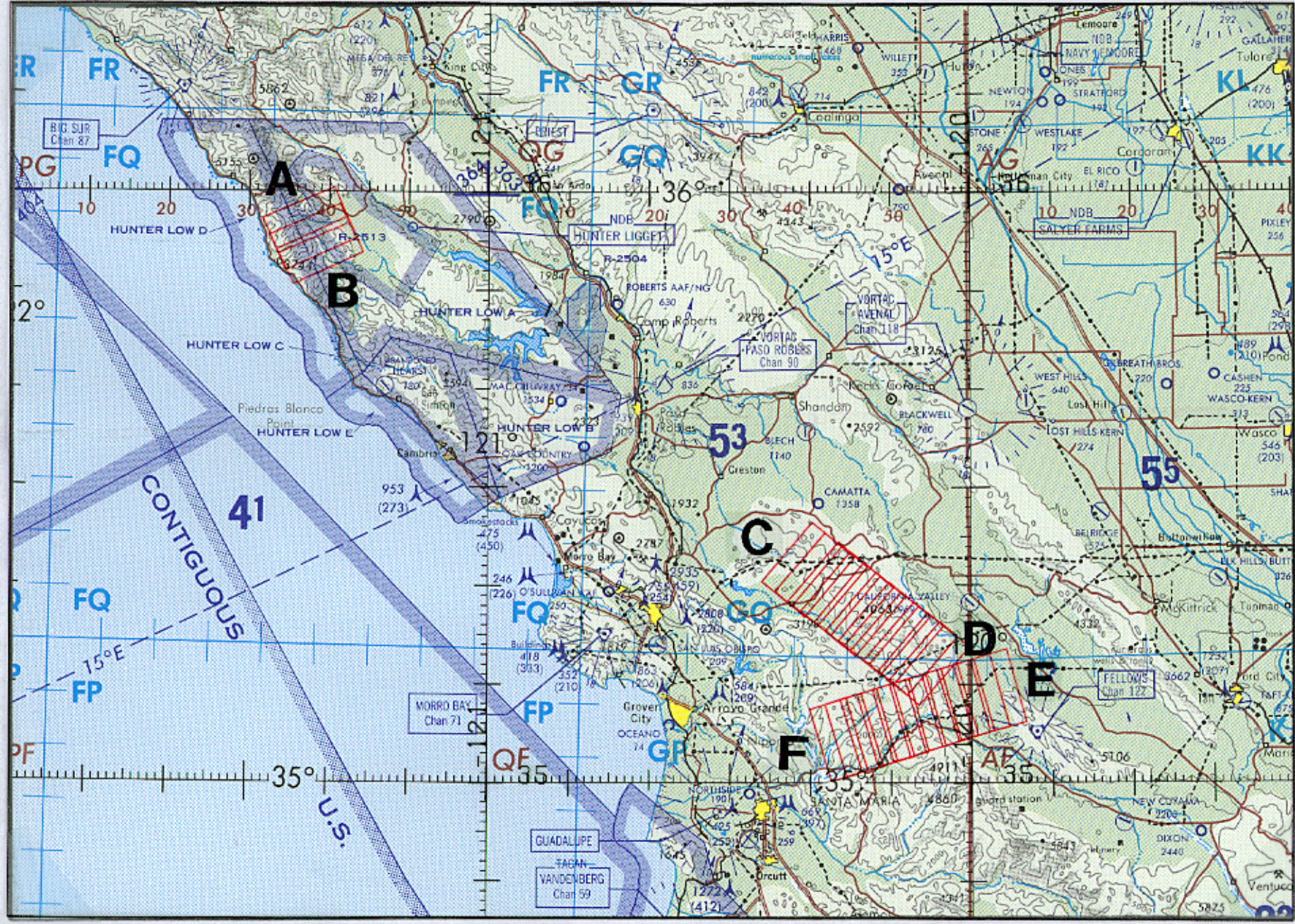

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