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FLIGHT SUMMARY REPORT

Flight Number: 96-036
Calendar/Julian Date: 07 November 1995 • 311
Sensor Package: IRIS II Panoramic Camera
Area(s) Covered: Central Valley, CA

Investigator(s): Functional Sensor

Aircraft #: 708

SENSOR DATA

Accession #: 05039
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: 133
% Overlap: 60
Quality: Good
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. 96-036**

Accession # 05039

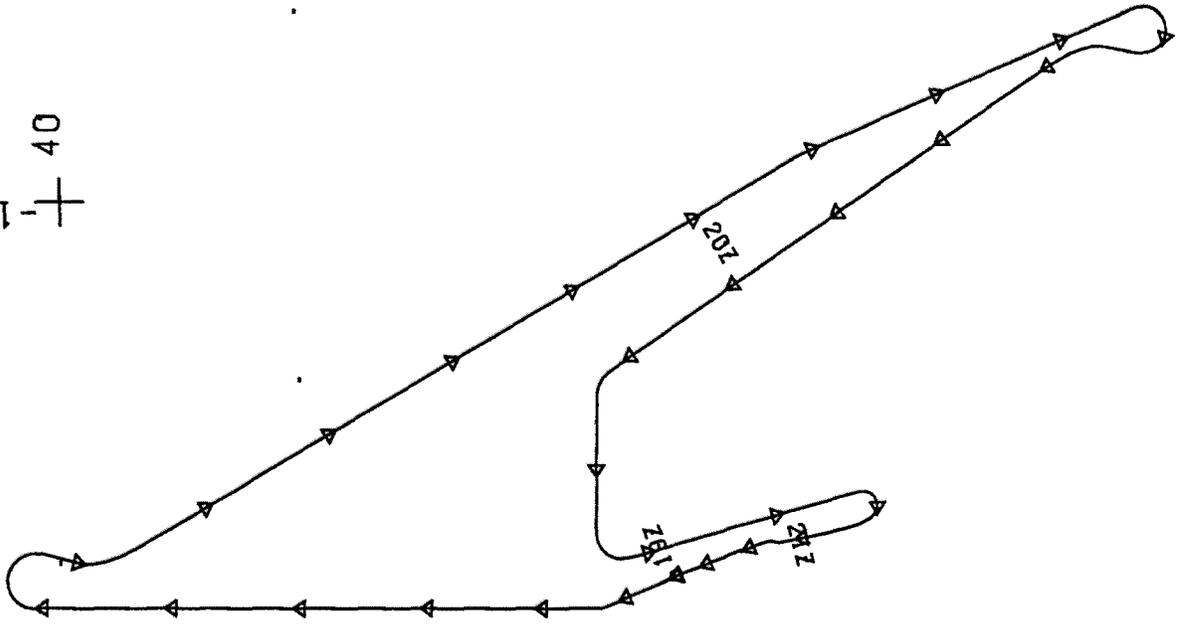
Sensor # 070

| Check Points | Frame Numbers | Time (GMT-hr, min, sec) | | Altitude, MSL feet/meters | Cloud Cover/Remarks |
|--------------|---------------|-------------------------|----------|------------------------------|--|
| | | START | END | | |
| A - B | 0001-0031 | 19 37 21 | 19 41 37 | 66065/20137 | Clear, light strike (frames 0005 and 0031) |
| C - D | 0032-0058 | 19 58 48 | 20 02 30 | 65856/20073 | Clear, light strike (frames 0036 and 0058) |
| E - F | 0059-0099 | 20 28 53 | 20 34:33 | 65637/20006 | Clear; light strike (frames 0063 and 0099) |
| G - H | 0100-0133 | 20:46 02 | 20 50:42 | 65788/20052 | Clear, light strike (frames 0104 and 0131) |

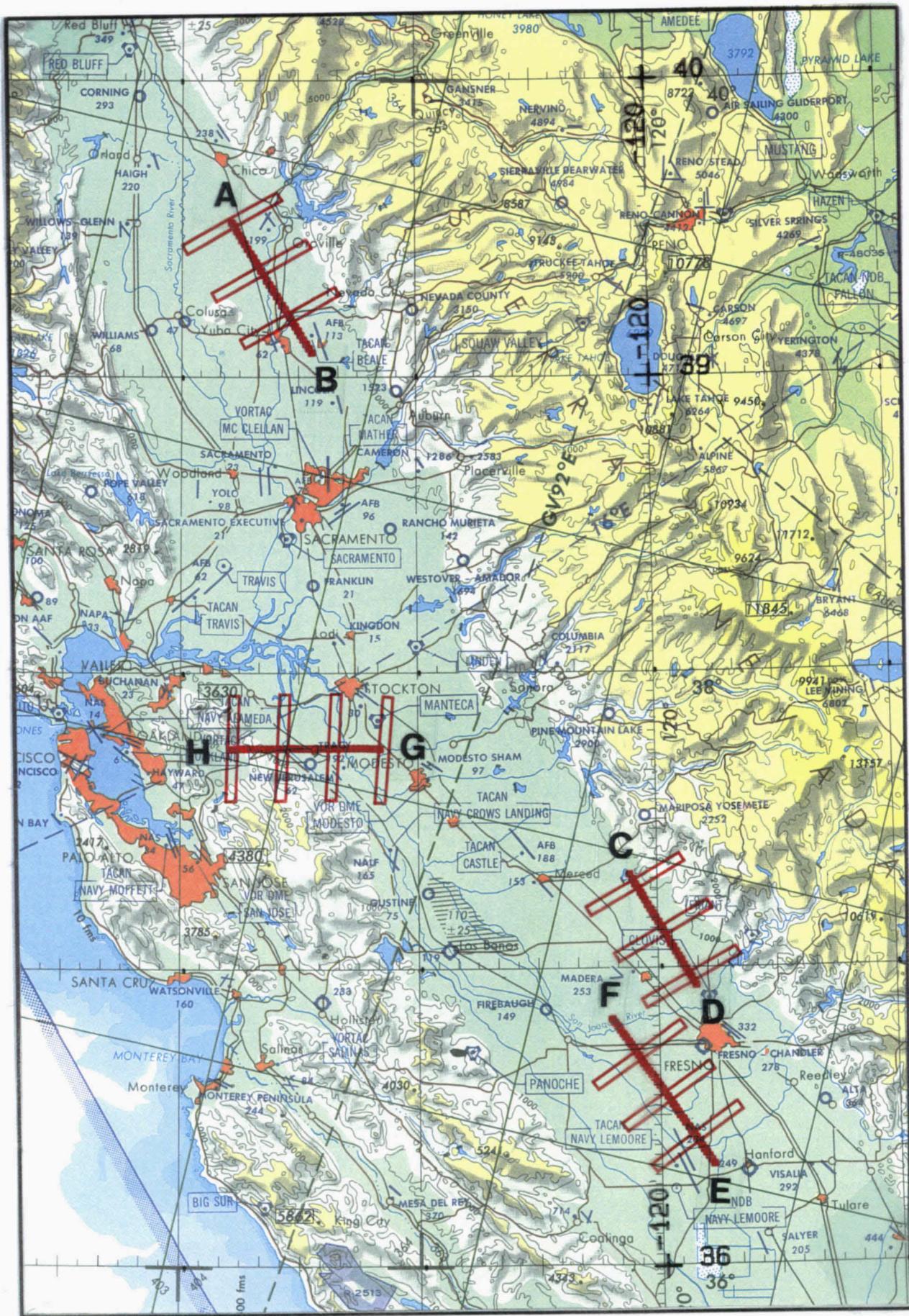
NOTE: PROCESSING ABRASIONS THROUGHOUT DATA. CAMERA CLOCK ADJUSTED ONE HOUR FOR CORRECT GMT.

40
+ -125

40
+ -120



FLIGHT 96-036 7 NOVEMBER 1995 R/C 708 IRIS



IRIS A/C 708 JNC 43 7 NOVEMBER 1995 FLIGHT 96-036