

FLIGHT SUMMARY REPORT

Flight #: 90-024
Date: 27 November 1989
Sensor Package: Wild-Heerbrug RC-10
IRIS II Panoramic Camera
Area(s) Covered: San Francisco Bay Area

Investigator(s): Brass, NASA-Ames Research Center **Aircraft #:** 709
Flight Request: 90B201C **Julian Date:** 331

SENSOR DATA

Accession #:	03974	03975
Sensor ID #:	076	070
Sensor Type:	RC-10	IRIS
Focal Length:	12" 304.89 mm	24" 609.6 mm
Film Type:	Panatomic-X Aerographic II EK 2412	High Definition Aerochrome IR SO-131
Filtration:	Wratten 12	cc .10C
Spectral Band:	510-700 nm	510-900 nm
f Stop:	4	3.5
Shutter Speed:	1/200	1/175
# of Frames:	150	343
% Overlap:	60	60
Quality:	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. 90-024

Accession No. 03974

Sensor # 076

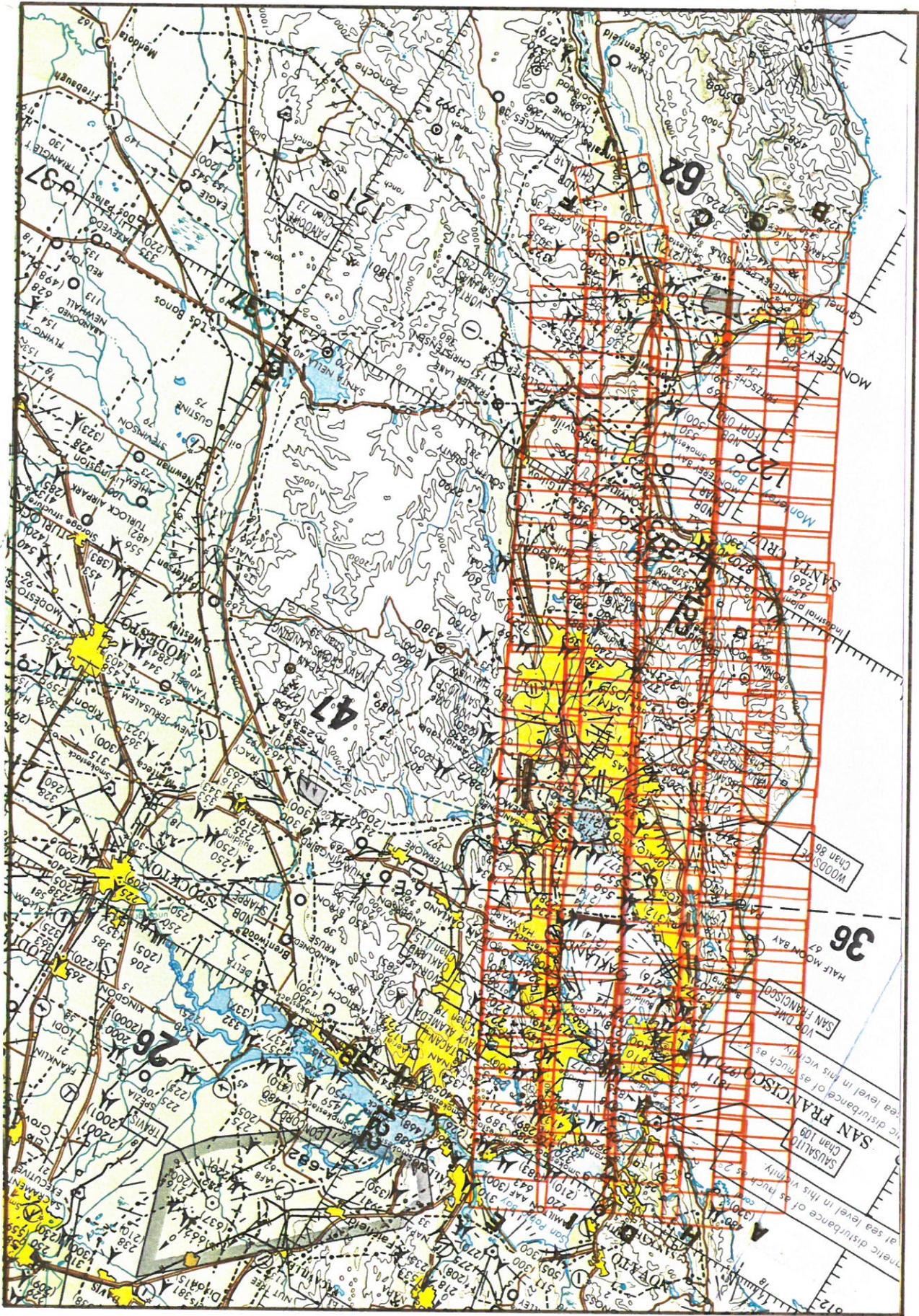
Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	2947-2965	20:35:55	20:49:15	65000/19800	Clear
C - D	2966-3005	20:52:19	21:06:08	"	Clear
E - F	3006-3034	21:09:18	21:22:37	"	Clear
G - H	3035-3065	21:26:41	21:40:28	"	Clear
I - J	3066-3096	21:43:32	21:57:47	"	Clear

CAMERA FLIGHT LINE DATA
FLIGHT NO. 90-024

Accession No. 03975

Sensor # 070

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0002-0114	20:36:04	20:49:08	65000/19800	Clear; film splice, no data (frames 0051-0052); abraided in splicing (frame 0050)
C - D	0115-0234	20:52:15	21:06:08	"	Clear
E - F	0235-0346	21:09:23	21:22:20	"	Clear



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A/C 709

RC-10

Accession # 03974

ONC 6-18