FLIGHT SUMMARY REPORT

Flight Number: 94-028

Calendar/Julian Date: 17 January 1994 • 17

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

Area(s) Covered: Los Angeles Post Earthquake Assessment

Investigator(s): Functional Sensor Flight

Aircraft #: 709

SENSOR DATA

Accession #:	04683	04684
Sensor ID #:	034	038
Sensor Type:	RC-10	HR-732
Focal Length:	12" 304.66 mm	24" 609 mm
Film Type:	Aerial Color SO-242	Aerial Color SO-242
Filtration:	None	None
Spectral Band:	400-700 nm	400-700 nm
f Stop:	4	8
Shutter Speed:	1/150	1/75
# of Frames:	54	109
% Overlap:	60	60
Quality:	Fair	Good
Remarks:	Camera clock offset 1.3 seconds from navigation data	Camera clock offset 2.3 seconds from navigation data

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 camera system(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-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

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. 94-028

Accession # 04683

Sensor # 034

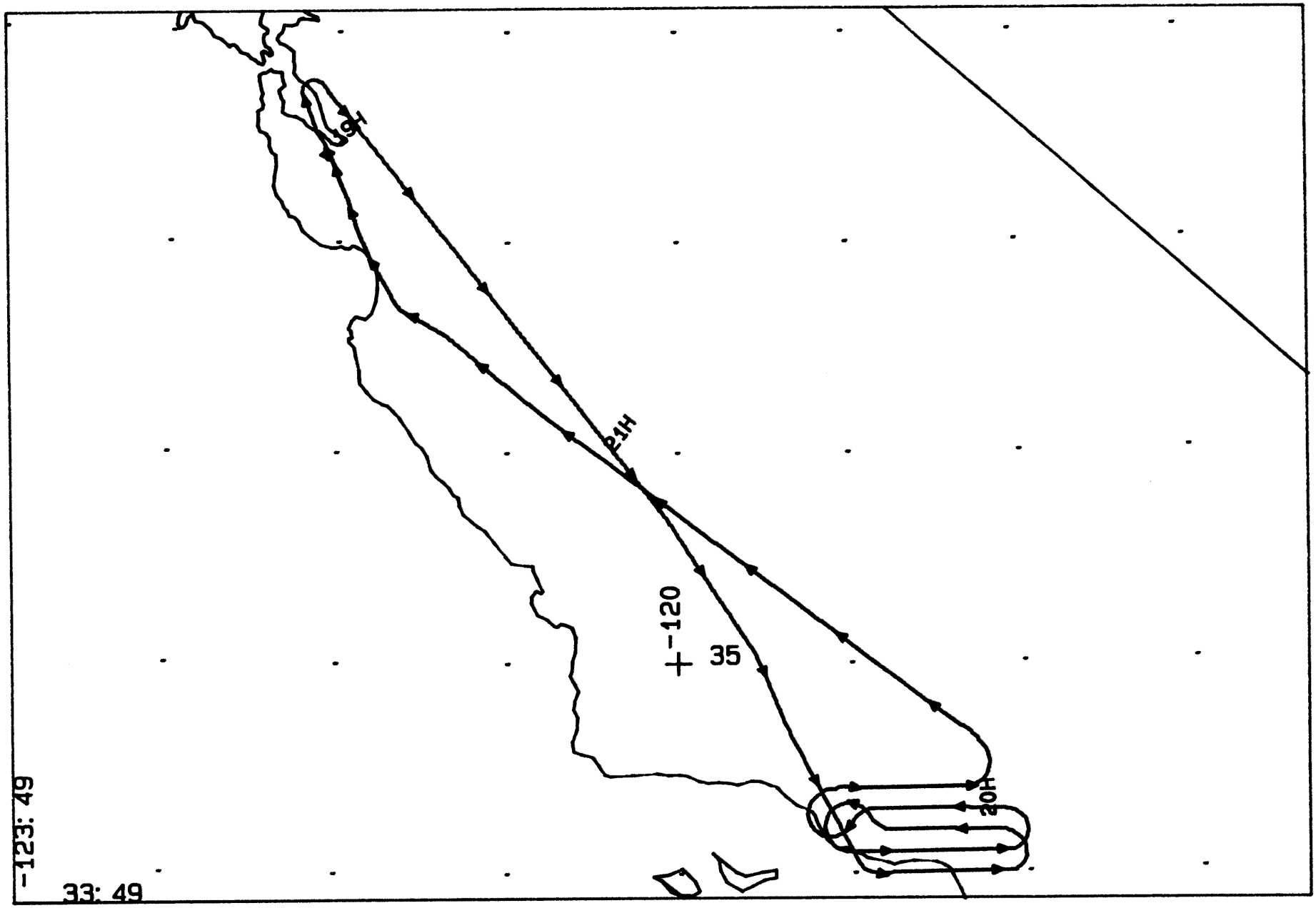
Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	6986-6994	19:52:22	19:56:16	65000/19800	10-80% strato-cumulus (frames 6986-6991)
C - D	6996-7004	20:00:03	20:03:57	"	Clear
E - F	7005-7018	20:10:11	20:16:31	"	Minor-30% strato-cumulus (frames 7005-7013)
G - H	7019-7029	20:20:13	20:25:06	"	Clear
I - J	7030-7041	20:31:00	20:36:20	"	Clear

CAMERA FLIGHT LINE DATA
FLIGHT NO. 94-028

Accession # 04684

Sensor # 038

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0019	19:52:25	19:56:45	65000/19800	20-80% strato-cumulus (frames 0001-0010); oblique (frame 0019)
C - D	0020-0037	20:00:05	20:04:12	"	Clear
E - F	0038-0065	20:10:13	20:16:44	"	10-30% strato-cumulus (frames 0038-0043); 10% coastal stratus (frames 0047-0053)
G - H	0066-0086	20:20:15	20:25:05	"	Clear
I - J	0087-0109	20:31:01	20:36:20	"	Clear



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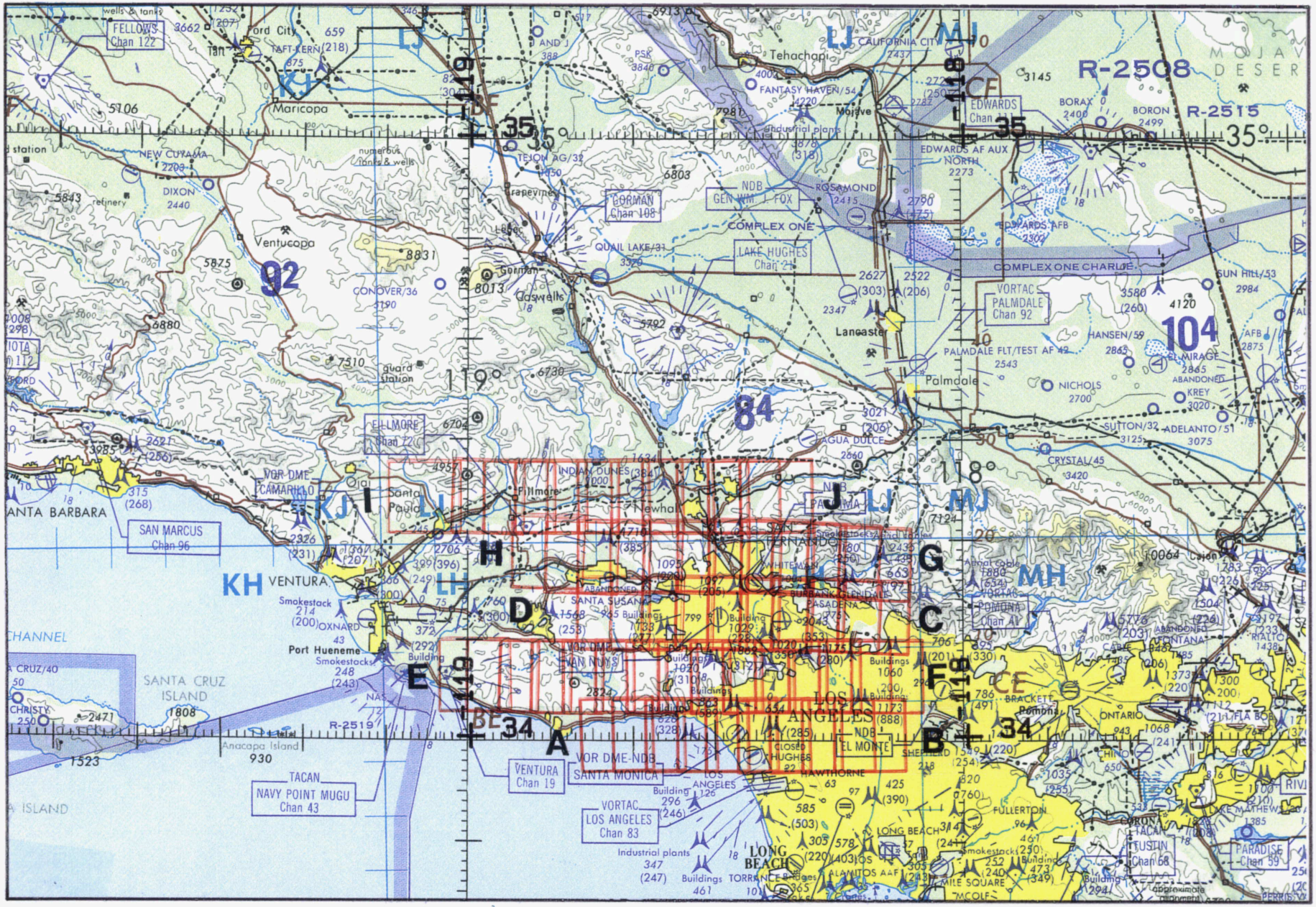
OVERLAY FOR %CNOAM LAMBERT CONFORMAL PROJECTION: SP1 = 33.4 SP2 = 37.1 CM = -120.1 ROTATED BY 0.0

19: 00: 20 TO 21: 34: 50 UT SCALE = 1: 2.84E+06 TIME TICS EVERY 5.00 MINUTES



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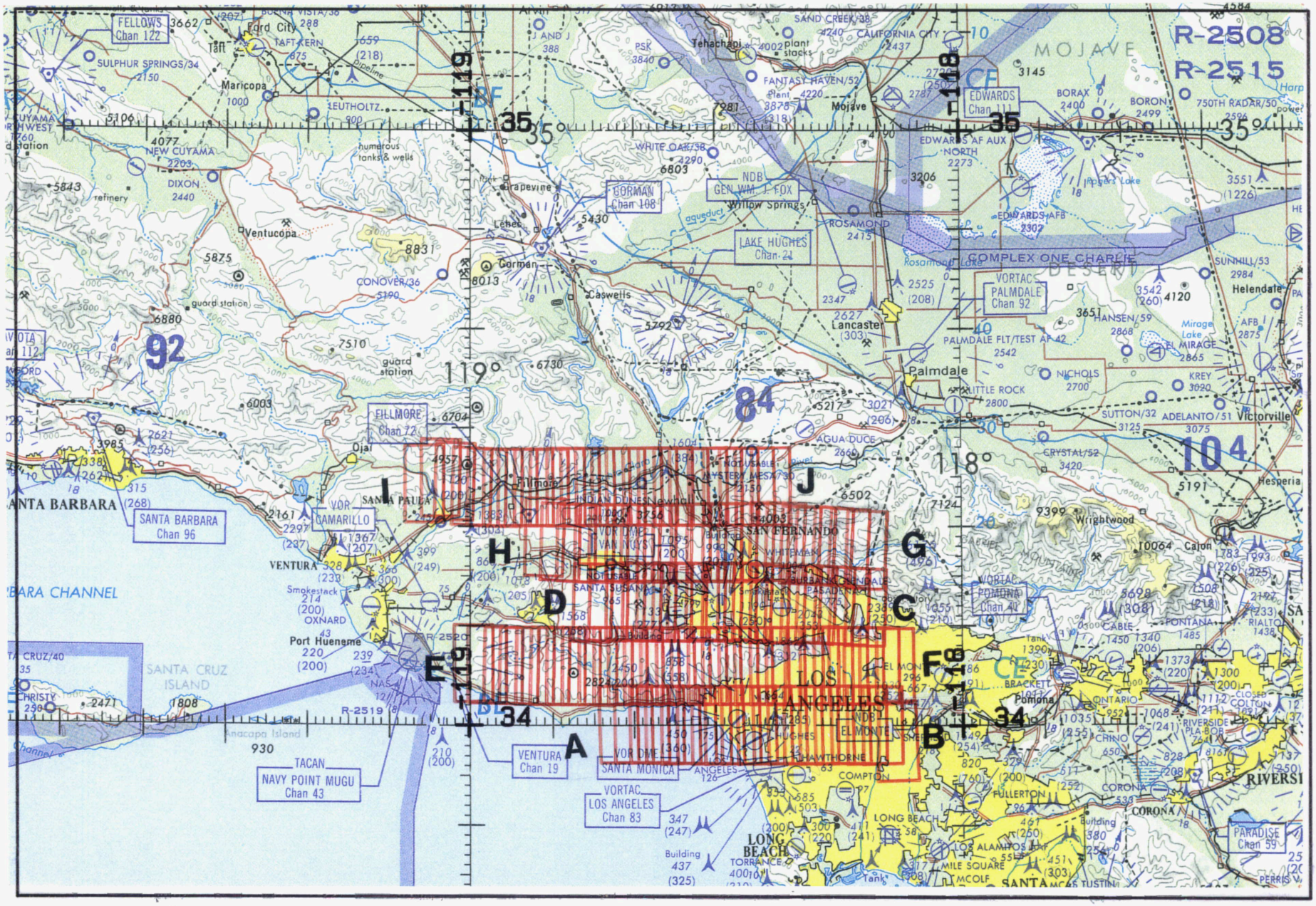

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