

FLIGHT SUMMARY REPORT

Flight Number: 90-017

Date: 13 October 1989

Julian Date: 286

Aircraft #: 706

Sensor Package: Wild-Heerbrug RC-10
Large Area Collectors (LAC)

Purpose of Flight: 90P229
Zolensky, NASA-JSC

Area(s) Covered: Southwestern U.S.

SENSOR DATA

Accession #: 03964 -----

Sensor ID #: 034 100

Sensor Type: RC-10 LAC

Focal Length: 12" -----
304.66 mm

Film Type: Aerial Color -----
SO-242

Filtration: None -----

Spectral Band: 400-700 nm -----

f Stop: 4 -----

Shutter Speed: 1/200 -----

of Frames: 56 -----

% Overlap: 60 -----

Quality: Excellent -----

Remarks: Non-imaging Impact
Sampler

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

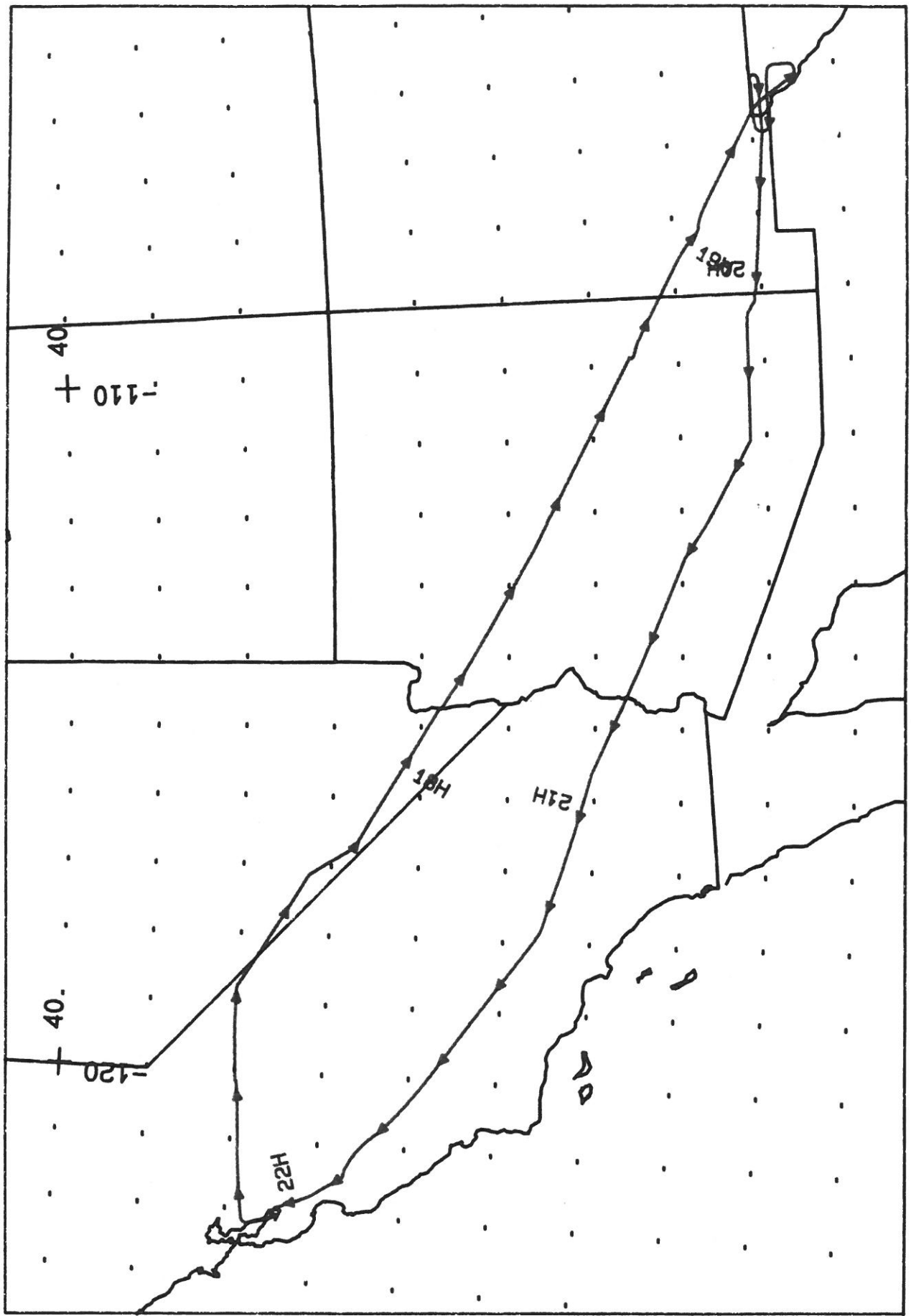
- * Iris II Panoramic camera
 - 4.5 x 34.7 inch film format
 - 24 inch focal length lens
 - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

CAMERA FLIGHT LINE DATA
 FLIGHT NO. 90-017

Accession No. 03964

Sensor #
 034

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	4820-4823	19:01:39	19:02:35	65000/19800	Clear; Silver City, New Mexico
C - D	4824-4832	19:18:51	19:21:54	"	Clear; El Paso, Texas
E - F	4833-4843	19:28:10	19:31:59	"	Clear; El Paso, Texas
G - H	4844-4854	19:34:42	19:38:36	"	Clear; El Paso, Texas
I - J	4855-4865	19:41:43	19:45:40	"	Clear; El Paso, Texas
K - L	4866-4871	20:16:31	20:18:27	"	Clear; Tucson, Arizona
M - N	4872-4875	20:20:33	20:20:46	"	Clear

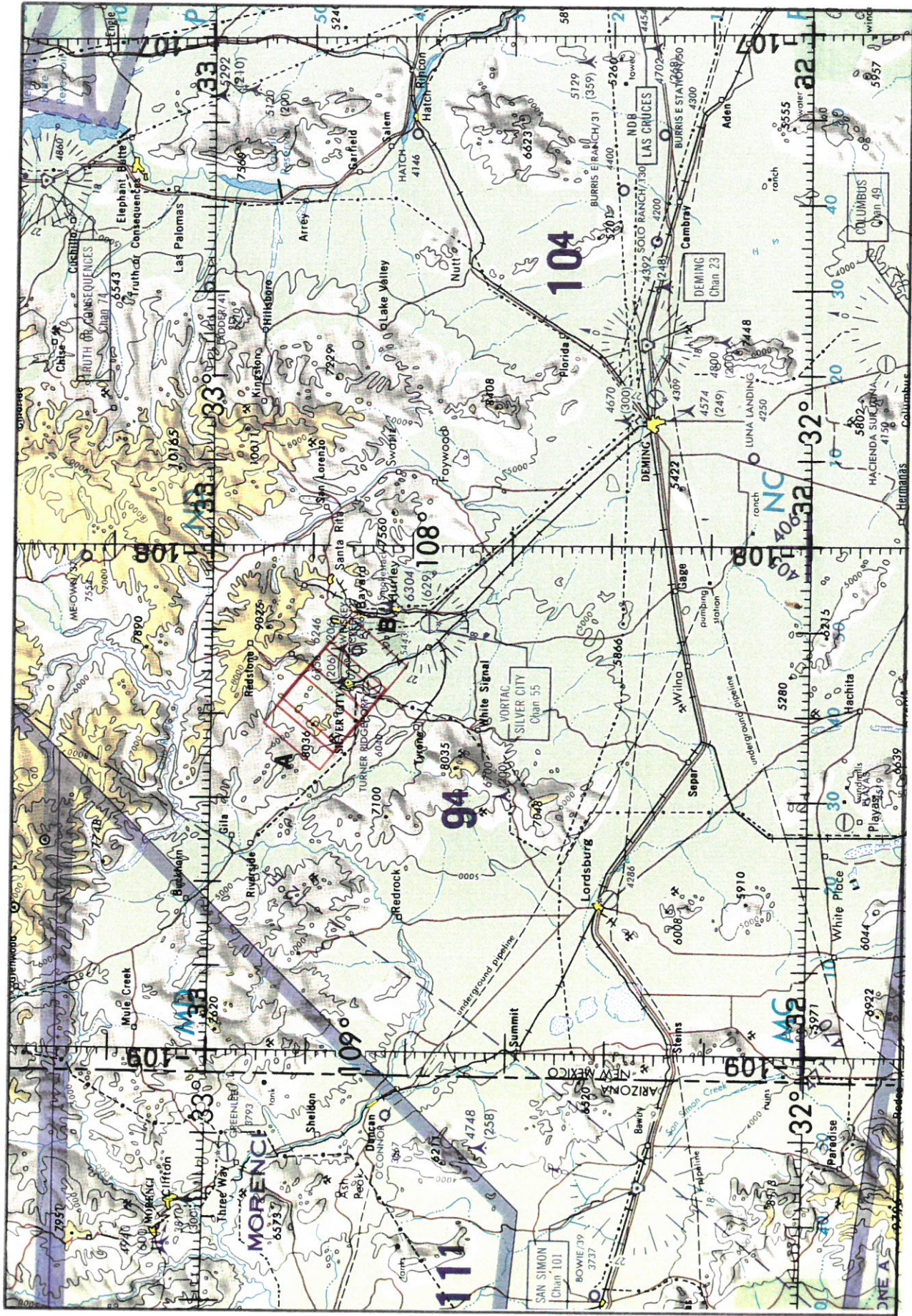


FLIGHT 90-017

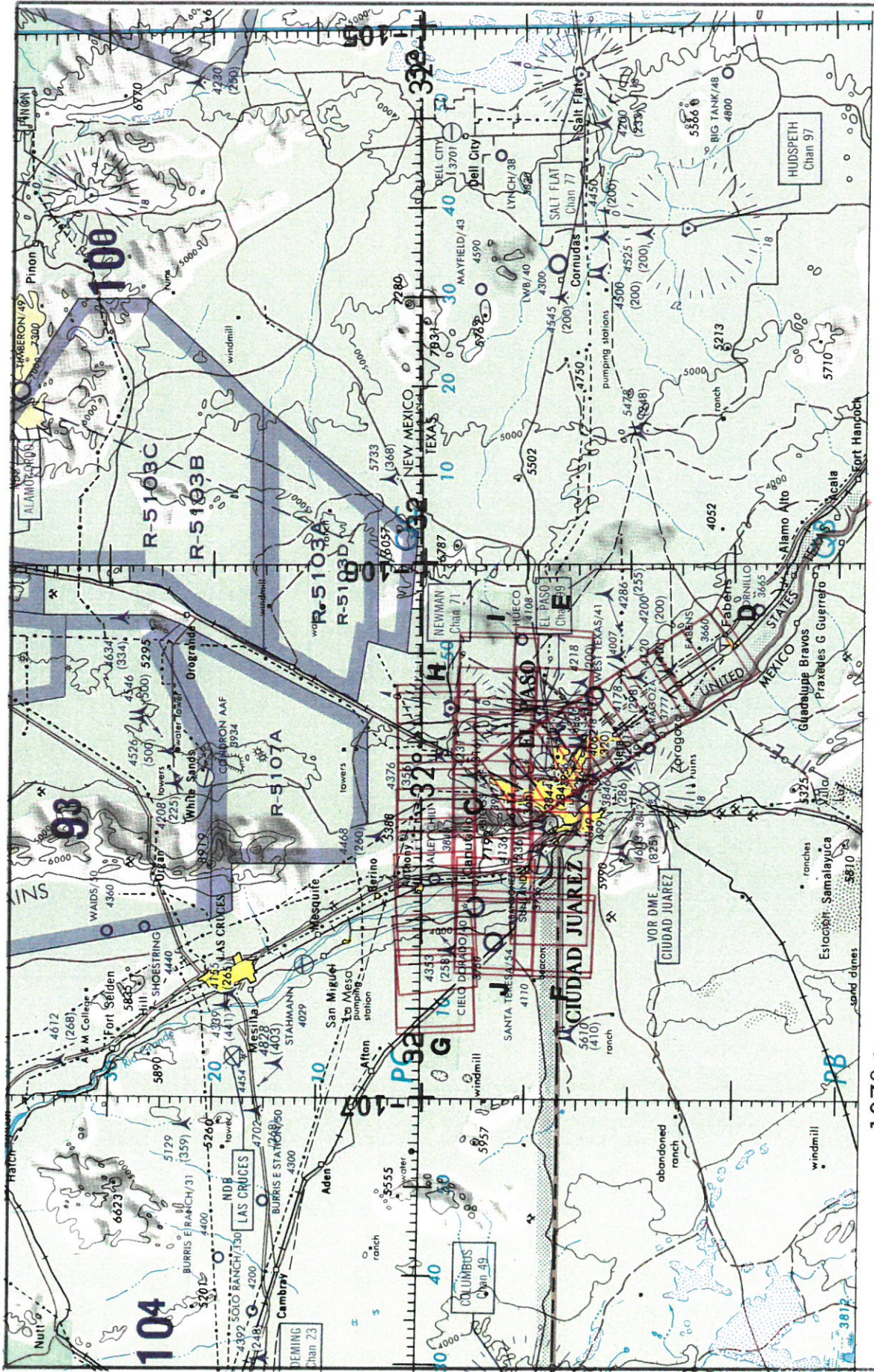
13 October 1989

A/C 706

RC-10 / LAC



FLIGHT 90-017 13 October 1989 A/C 706 RC-10 / SO-242 Accession # 03964 ONC 6-19



EJ10

106°

107° P

LOCATION: CIJADT

FLIGHT 90-017

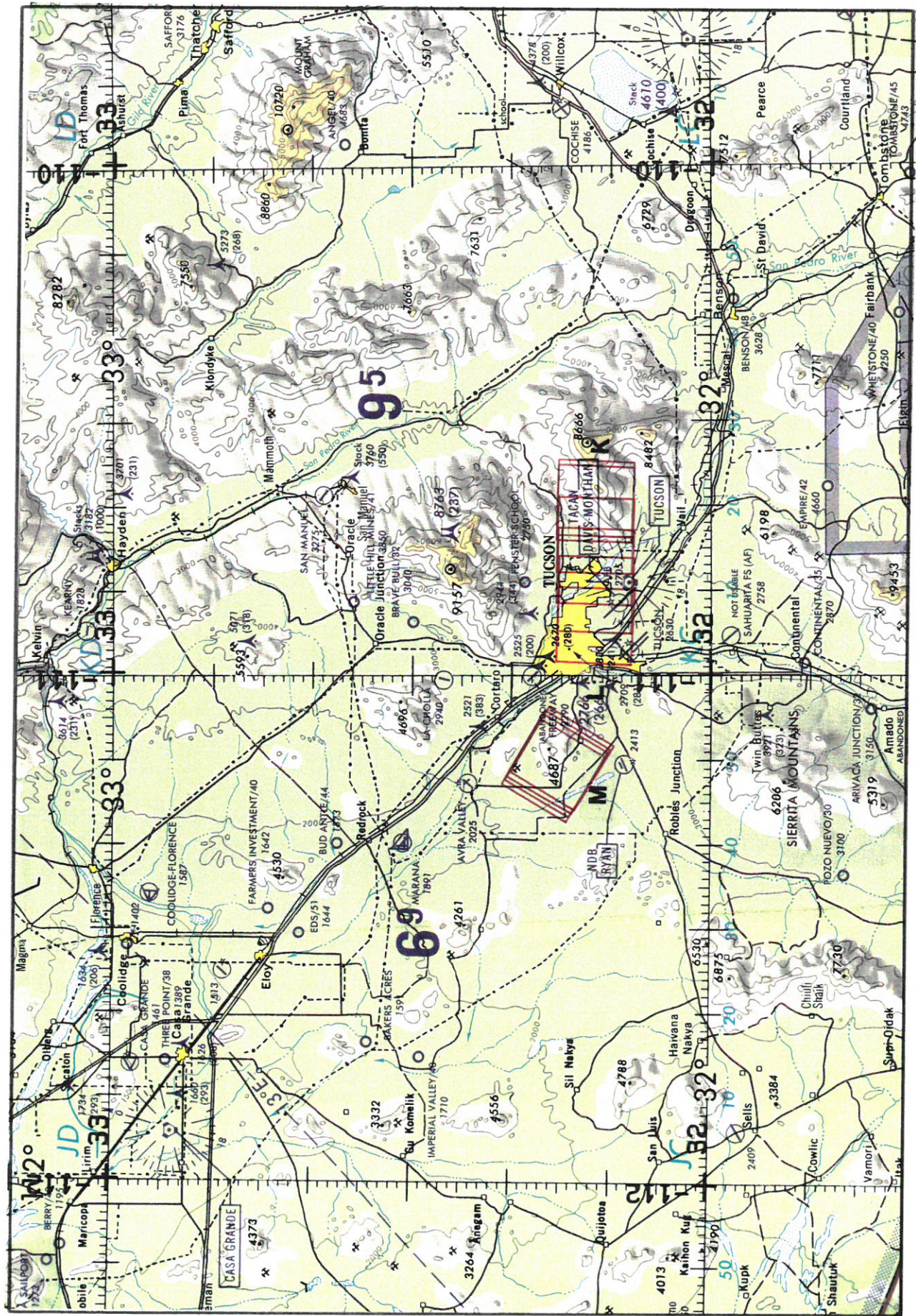
13 October 1969

A/C 706

RC-10 / SO-242

Accession # 03964

ONC 6-19



FLIGHT 90-017 13 October 1989 A/C 706 RC-10 / SO-242 Accession # 03964 ONC 6-19