

National Aeronautics and Space Administration

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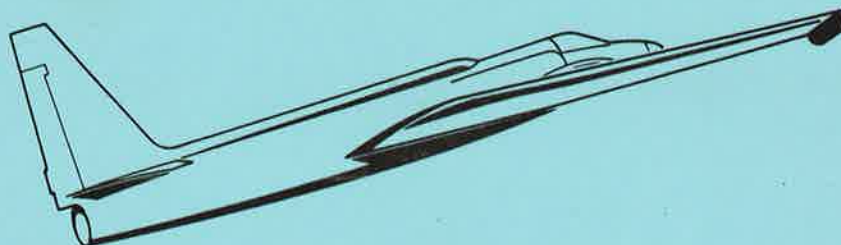
Earth Resources Aircraft Project

Flight Summary Report

Flight No. 75-011

Date 11 February 1975

FSR-585



Airborne Science Office

Ames Research Center, Moffett Field, California

NASA/ARC Earth Resources Aircraft Project

FLIGHT SUMMARY REPORT

FSR: 585

Flight No: 75-011

Date: 11 February 1975

Aircraft No: 5

Julian Date: 042

Sensor Package: A-4 Configuration
Aerosol Particulate Sampler (APS)

Purpose of Flight: 75-0304 Support
Requestor: Bowden, University of California
75-0302 Support
Requestor: Ferry, NASA/ARC

Area(s) Covered: Southern California Coast

SENSOR DATA

	<i>GPSU</i>	<i>9x18</i>	
Accession No:	02004	02005	---
Sensor ID No:	035	009	024
Sensor Type:	RC-10	HR-732	Aerosol Particulate Sampler (APS)
Lens Focal Length:	6"	24"	---
Film Type:	Aerochrome Infrared, 2443	Aerochrome Infrared, 2443	---
Filtration:	WRATTEN 12 + 2.2 AV + CC .10B + CC .05C	WRATTEN 12 + CC .15B	---
Spectral Band:	510-900nm	510-900nm	---
f Stop:	8	9.6	---
Shutter Speed:	1/200	1/250	---
No. of Frames:	43	146	---
% Overlap:	60	60	---
Quality:	Excellent	Excellent	---
Remarks:	---	---	Non-imaging sensor

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FLIGHT SUMMARY

75-011

This flight was flown in support of Flight Requests 75-0304 (Bowden, University of California, Riverside) and 75-0302 (Ferry, NASA/ARC) under the CY 1975 Earth Observations Aircraft Program (EOAP) plan. The flight provides photographic and Aerosol Particulate Sampler (APS) data over the Los Angeles Basin and along the southern California coast (see Track Map).

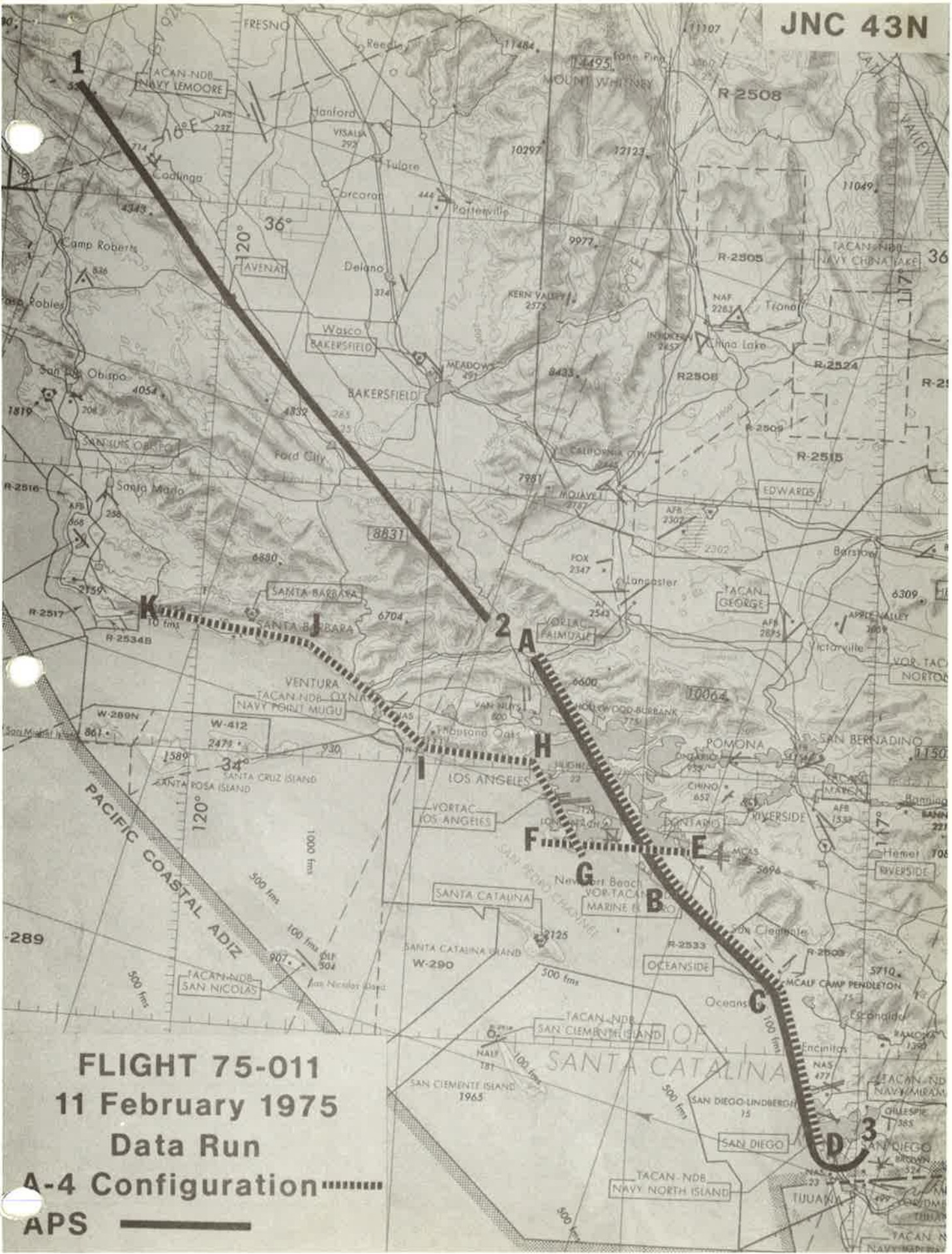
The A-4 Configuration was flown on this flight utilizing Aerochrome Infrared film (2443) in both the HR-732 and RC-10. Minor scattered cumulus cloud cover was experienced on all lines, however, it does not seriously degrade the quality of the data. Additionally, moderate turbulence was experienced north of Santa Monica resulting in smeared images on two frames (see Flight Line Data). The HR-732 camera was inadvertently set for Local Mean Time; to obtain GMT, add eight hours. Times listed in the Flight Line Data are corrected to GMT.

The Aerosol Particulate Sampler (APS) has been developed and is operated by Dr. Guy Ferry of the NASA-Ames Research Center Planetary Science and Applications Branch. The sampler is a non-imaging sensor designed to gather high altitude dust particles for laboratory research. The Track Map and Flight Line Data indicate those segments of the flight during which the sampler was activated.

FLIGHT LINE DATA

FLIGHT NO. 75-011

	Check Points	Frame Numbers	Time (GMT - hr. min. sec)		Altitude, MSL (feet)	Cloud Cover/Remarks
			START	END		
HR732	A-B	0007-0035	19:48:10	19:56:11	65,000	10% minor cumulus, frs. 0021-0035
	B-C	0036-0055	19:56:50	20:01:39	"	10% minor cumulus, frs. 0036-0046
	C-D	0056-0078	20:01:55	20:06:27	"	Clear
	E-F	0079-0087	20:25:39	20:27:38	"	10-20% scattered cumulus
	G-H	0088-0100	20:31:47	20:33:45	"	10-40% scattered cumulus
	H-I	0101-0109	20:34:30	20:36:25	"	10-30% scattered cumulus, frs. 0104-0109
	I-J	0110-0134	20:36:38	20:43:40	"	10-30% scattered cumulus; smear due to turbulence, frs. 0121, 0134
	J-K	0135-0152	20:43:55	20:48:30	"	10-40% scattered cumulus
RC-10	A-B	1281-1288	19:51:51	19:58:43	65,000	10% minor scattered cumulus, frs. 1285-1288
	B-C	1289-1294	19:59:47	20:04:36	"	10% minor scattered cumulus, frs. 1289-1292
	C-D	1295-1300	20:05:09	20:10:57	"	Clear
	E-F	1301-1303	20:28:16	20:30:12	"	10% minor scattered cumulus
	G-H	1304-1307	20:35:03	20:38:18	"	10% minor scattered cumulus
	H-I	1308-1311	20:39:17	20:42:14	"	10% minor scattered cumulus
	I-J	1312-1316	20:43:13	20:47:29	"	10% minor scattered cumulus, frs. 1312-1314
	J-K	1317-1323	20:48:08	20:53:11	"	10% minor scattered cumulus
APS	1-2	---	19:27:--	19:47:--	65,000	APS #1 opened and closed
	A-3	---	19:50:--	20:10:--	65,000	APS #2 opened and closed



FLIGHT 75-011
11 February 1975
Data Run

A-4 Configuration
APS —————

