

**National Aeronautics and Space Administration**

**Earth Resources Aircraft Project**

# **Flight Summary Report**

**Flight No.** 74-206

**Date** 13 December 1974

**FSR- 573**



**Airborne Science Office**

**Ames Research Center, Moffett Field, California**

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# NASA/ARC Earth Resources Aircraft Project

## FLIGHT SUMMARY REPORT

FSR: 573

Flight No: 74-206

Date: 13 December 1974

Aircraft No: 5

Julian Date: 347

Sensor Package: Vinten System A/RC-10  
Aerosol Particulate Sampler (APS)

Purpose of Flight: 74-0F-0200/74-SR-0158 Support  
Requestors: Rowland, USGS/Millard, NASA/ARC  
74-SR-0047 Support (APS)

Area(s) Covered: Coastal Southern California

### SENSOR DATA

Accession No:	01978	01979	01980	01981
Sensor ID No:	002	003	004	003
Sensor Type:	Vinten	Vinten	Vinten	RC-10
Lens Focal Length:	1-3/4"	1-3/4"	1-3/4"	6"
Film Type:	Panatomic-X, 3400	Panatomic-X, 3400	Aerochrome Infrared, 2443	Aerial Color, SO-242
Spectral Band:	400-470nm	480-590nm	510-900nm	400-700nm
f Stop:	2.8	4.0	6.3	4.0
Shutter Speed:	1/250	1/250	1/250	1/125
No. of Frames:	84	84	84	72
% Overlap	60	60	60	60
Quality	Good	Good	Excellent	Excellent
Remarks		Chemical stain, fr. 21		

Aerosol Particulate Sampler (APS), Sensor ID No. 024,  
also flown (non-imaging sensor)

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## FLIGHT SUMMARY

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This flight was flown in support of Flight Requests 74-OF-0200 (Rowland, USGS), 74-SR-0158 (Millard, NASA/ARC) and 74-SR-0047 (Ferry, NASA/ARC) under the CY 1974 Earth Observations Aircraft Program (EOAP) plan. The flight provides data over the Pacific Ocean west of Los Angeles in support of natural oil seepage detection.

All data is rated good to excellent with only minor cirro-stratus cloud cover encountered on one flight line. Only two rolls of black and white film from the Vinten camera system were accessioned; the first camera (001) was not accessioned due to severe overexposure. The color infrared imagery is excellent, however, the SO-242 flown in the RC-10 has processing residue on four frames. The sensor identification was inadvertently not preset properly and, consequently, the data lights have all zeroes in the sensor ID portion of the annotation.

The Aerosol Particulate Sampler (APS) was also flown on this flight in support of Flight Request 74-SR-0047 (Dr. Guy Ferry, NASA/ARC Planetary Science and Applications Branch) under the CY 1974 Earth Observations Aircraft Program (EOAP) plan. 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. 74-206

	Check Points	Frame Numbers	Time (GMT - hr, min, sec)		Altitude, MSL (feet)	Cloud Cover/Remarks
			START	END		
VINTEN	A-B	0001-0027	19:15:03	19:36:48	65,000	Clear; thin cirro-stratus, frs. 0007-0009
	C-D	0028-0054	19:40:40	20:01:57	"	Clear
	E-F	0055-0077	20:05:33	20:23:56	"	Clear; fr. 0059 oblique
	G-H	0078-0084	20:43:49	20:48:00	"	Clear
RC-10	A-B	1467-1489	19:15:09	19:36:21	65,000	Clear; thin cirro-stratus, frs. 1473-1474; processing residue, frs. 1468-1471
	C-D	1490-1512	19:40:50	20:01:58	"	Clear
	E-F	1513-1532	20:05:42	20:24:08	"	Clear
	G-H	1533-1538	20:43:58	20:47:56	"	Clear
APS	1-2	---	19:04:--	19:24:--	65,000	APS #1 opened and closed
	3-4	---	19:30:--	19:50:--	"	APS #2 opened and closed

