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**National Aeronautics and Space Administration**

**Airborne Instrumentation Research Project**

**Flight Summary Report**

**Flight No.** 76-059

**Date** 16 April 1976

**FSR- 816**



**Data Research and Management Branch**

**Applications Division**

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

# FLIGHT SUMMARY REPORT

Flight No: 76-059

Date: 16 April 1976

FSR No: 816

Julian Date: 107

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

Aircraft No: 5

Purpose of Flight: #0303 Support  
Requestor: Estes  
#0047 Support  
Requestor: Ferry

Area(s) Covered: San Joaquin Valley, California

## SENSOR DATA

*Handwritten: 02315*

Accession No:	02315	---
Sensor ID No:	036	024
Sensor Type:	RC-10	APS
Focal Length:	6" 153.19mm	---
Film Type:	High Definition Aerochrome Infrared, S0-127	---
Filtration:	CC .10B + 2.2 AV	---
Spectral Band:	510-900nm	---
f Stop:	4	---
Shutter Speed:	1/200	---
No. of Frames:	59	---
% Overlap:	60	---
Quality:	Good	---
Remarks:	---	Non-imaging sensor

## FLIGHT SUMMARY

76-059

This flight was flown in support of Flight Requests #0303 (Estes, University of California, Santa Barbara) and #0047 (Ferry, NASA/ARC) under the FY 1976 Airborne Instrumentation Research Program (AIRP) plan. The flight provides RC-10 photographic coverage and Aerosol Particulate Sampler (APS) data over the San Joaquin Valley in California (see Track Map).

Minor cumulus cloud cover was experienced on all flight lines (see Flight Line Data) and, since it was building up over the coast range, coverage was suspended in the middle of the third flight line. The balance of the coverage was obtained on 19 April 1976 (Flight 76-060). No camera or processing malfunctions were encountered and the coverage is rated good.

The Aerosol Particulate Sampler 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. 76-059

Check Points	Frame Numbers	Time (GMT— hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A-B	4715-4733	18:24:22	18:41:40	65,000/19800	Minor scattered cumulus, frs. 4726-4733
C-D	4734-4757	18:51:32	19:13:38	"	Minor scattered cumulus, frs. 4734-4750
E-F	4758-4773	19:16:46	19:31:11	"	Minor scattered cumulus, frs. 4769-4773
1-2	---	18:21:--	18:22:--	"	APS #1 opened for 1 minute / IOAT -41°C
2-3	---	18:22:--	19:41:--	"	APS #2 and #3 opened and closed / IOAT -40°C



**APS ONLY**

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