

**National Aeronautics and Space Administration**

G  
70.4  
F58

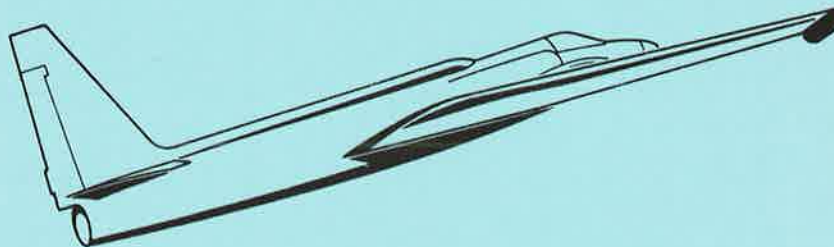
**Airborne Instrumentation Research Project**

**Flight Summary Report**

**Flight No.** 76-067

**Date** 14 May 1976

**FSR- 823**



**Data Management and Research Branch**

**Applications Division**

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

# FLIGHT SUMMARY REPORT

Flight No: 76-067

Date: 14 May 1976

FSR No: 823

Julian Date: 135

Sensor Package: Dual RC-10/Aerosol Particulate Sampler

Aircraft No: 4

Purpose of Flight: #0488 Support  
Requestors: Adams/Deerwester  
#0047 Support  
Requestor: Ferry

Area(s) Covered: Southern San Joaquin Valley, California

## SENSOR DATA

Accession No:	02317	02318	---
Sensor ID No:	034	026	024
Sensor Type:	RC-10	RC-10	APS
Focal Length:	12" 304.66mm	12" 304.99mm	---
Film Type:	High Definition Aerochrome IR, SO-127	Panatomic-X, 3400	---
Filtration:	CC .10C + .10M	WRATTEN 12	---
Spectral Band:	510-900nm	510-700nm	---
f Stop:	5.6	8.0	---
Shutter Speed:	1/375	1/375	---
No. of Frames:	119	120	---
% Overlap:	60	60	---
Quality:	Good	Excellent	---
Remarks:	Underexposed	---	Non-imaging sensor

## FLIGHT SUMMARY

76-067

This flight was flown in support of Flight Requests #0488 (Adams/Deerwester, NASA/ARC) and #0047 (Ferry, NASA/ARC) under the FY 1976 Airborne Instrumentation Research Program (AIRP) plan. The flight obtained dual RC-10 (12" focal length) data over the southern San Joaquin Valley region in California. Aerosol Particulate Sampler (APS) data was collected on ascent over the Diablo Mountain Range (see Track Map).

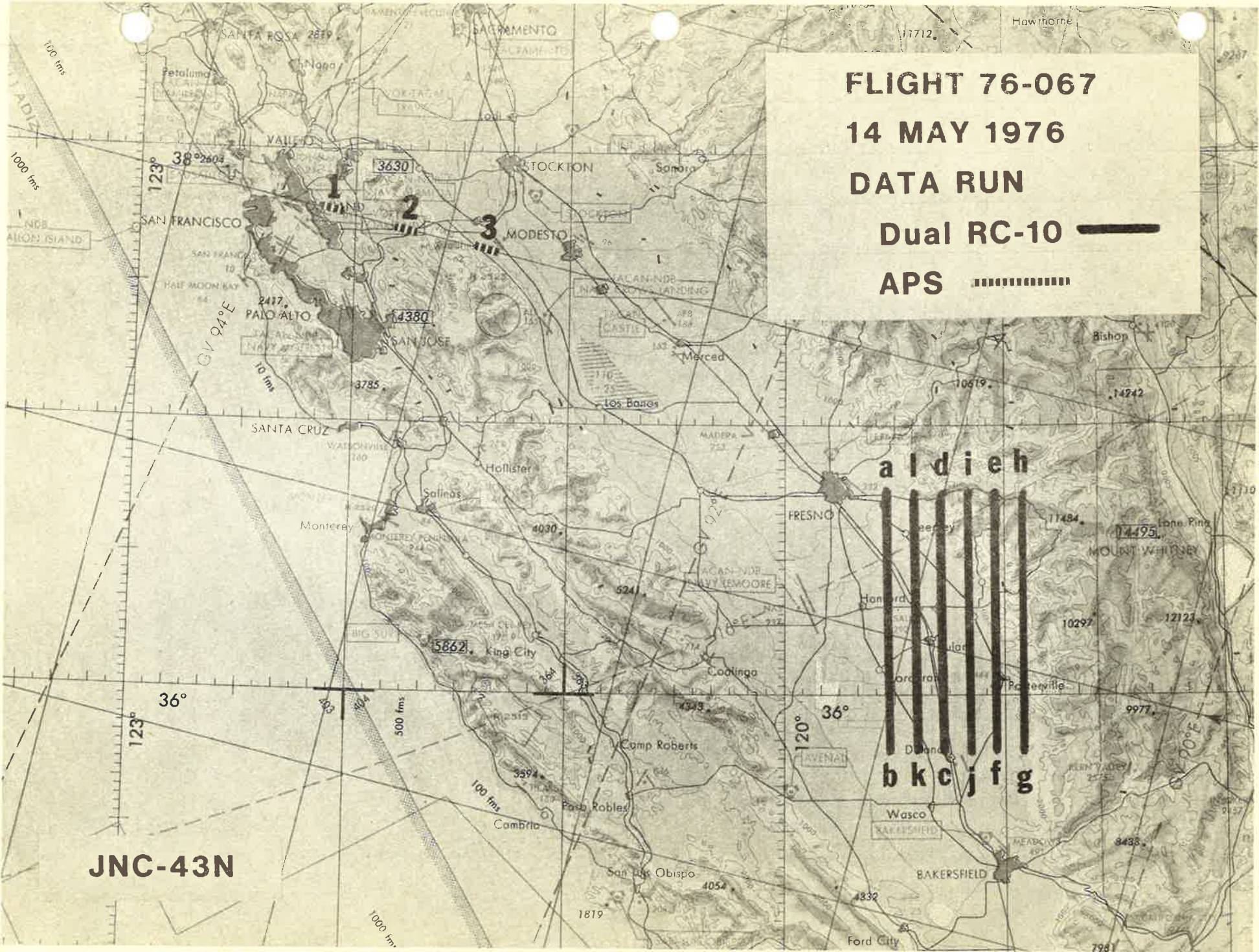
Light cirrus and haze was encountered on all flight lines. The Panatomic-X (3400) film is of excellent quality. The High Definition Aerochrome Infrared (SO-127) film exhibits excellent color balance but is underexposed resulting in a good quality rating. No camera or processing malfunctions were noted.

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. 76-067

Check Points	Frame Numbers	Time (GMT - hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks	
		START	END			
RC-10 # 034	a-b	9576-9594	18:34:16	18:42:56	65,000/19800	Light haze and cirrus
	c-d	9595-9613	18:46:09	18:54:48	"	"
	e-f	9614-9631	18:58:14	19:06:40	"	"
	g-h	9632-9652	19:12:35	19:22:30	"	"
	i-j	9653-9670	19:26:24	19:34:22	"	"
	k-l	9671-9694	19:37:29	19:46:56	"	"
RC-10 # 026	a-b	4055-4074	18:34:16	18:42:56	"	"
	c-d	4075-4093	18:46:09	18:54:48	"	"
	e-f	4094-4111	18:58:14	19:06:40	"	"
	g-h	4112-4132	19:12:35	19:22:30	"	"
	i-j	4133-4150	19:26:24	19:34:22	"	"
	k-l	4151-4174	19:37:29	19:46:56	"	"
APS	1	---	18:06:00	18:07:00	40,000/12200	APS #1 opened and closed; IOAT -40°C
	2	---	18:10:00	18:11:00	50,000/15220	APS #2 opened and closed; IOAT -42°C
	3	---	18:14:00	18:15:00	60,000/18300	APS #3 opened and closed; IOAT -36°C



**FLIGHT 76-067**

**14 MAY 1976**

**DATA RUN**

**Dual RC-10** ———

**APS** .....

**JNC-43N**

**a**ldie**h**

**b**kc**j**fg