

National Aeronautics and Space Administration

G
70.4
F58

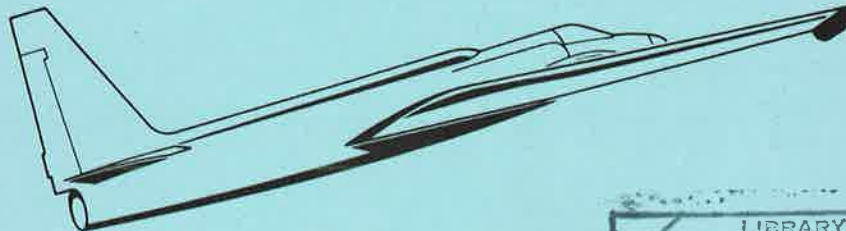
Airborne Instrumentation Research Project

Flight Summary Report

Flight No. 77-097

Date 7 July 1977

FSR- 1014



Data Management and Research Branch

Applications Division

Ames Research Center, Moffett Field, California

FLIGHT SUMMARY REPORT

Flight No: 77-097

Date: 7 July 1977

FSR No: 1014

Julian Date: 188

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

Aircraft No: 4

Purpose of Flight: Aircraft Functional Test Flight
#0047 Support
Requestor: Ferry

Area(s) Covered: San Francisco Bay Region

SENSOR DATA

Accession No:	02516	---
Sensor ID No:	036	024
Sensor Type:	RC-10	APS
Focal Length:	6" 153.19mm	---
Film Type:	Panatomic-X, 3400	---
Filtration:	Wratten 12 + 2.2 AV	---
Spectral Band:	510-700nm	---
f Stop:	8	---
Shutter Speed:	1/200	---
No. of Frames:	11	---
% Overlap:	Variable	---
Quality:	Excellent	Non-imaging sensor
Remarks:		

FLIGHT SUMMARY

77-097

This flight was a functional check flight of the aircraft subsequent to a periodic inspection. During the flight Aerosol Particulate Sampler (APS) data was collected in support of Flight Request #0047 (Ferry, NASA/ARC) under the FY 1978 Airborne Instrumentation Research Program (AIRP) plan. Additionally, RC-10 data was collected at various altitudes over Oakland and Moffett Field, California (see Track Map). Because of the localized nature of the APS data collection, no track map is provided.

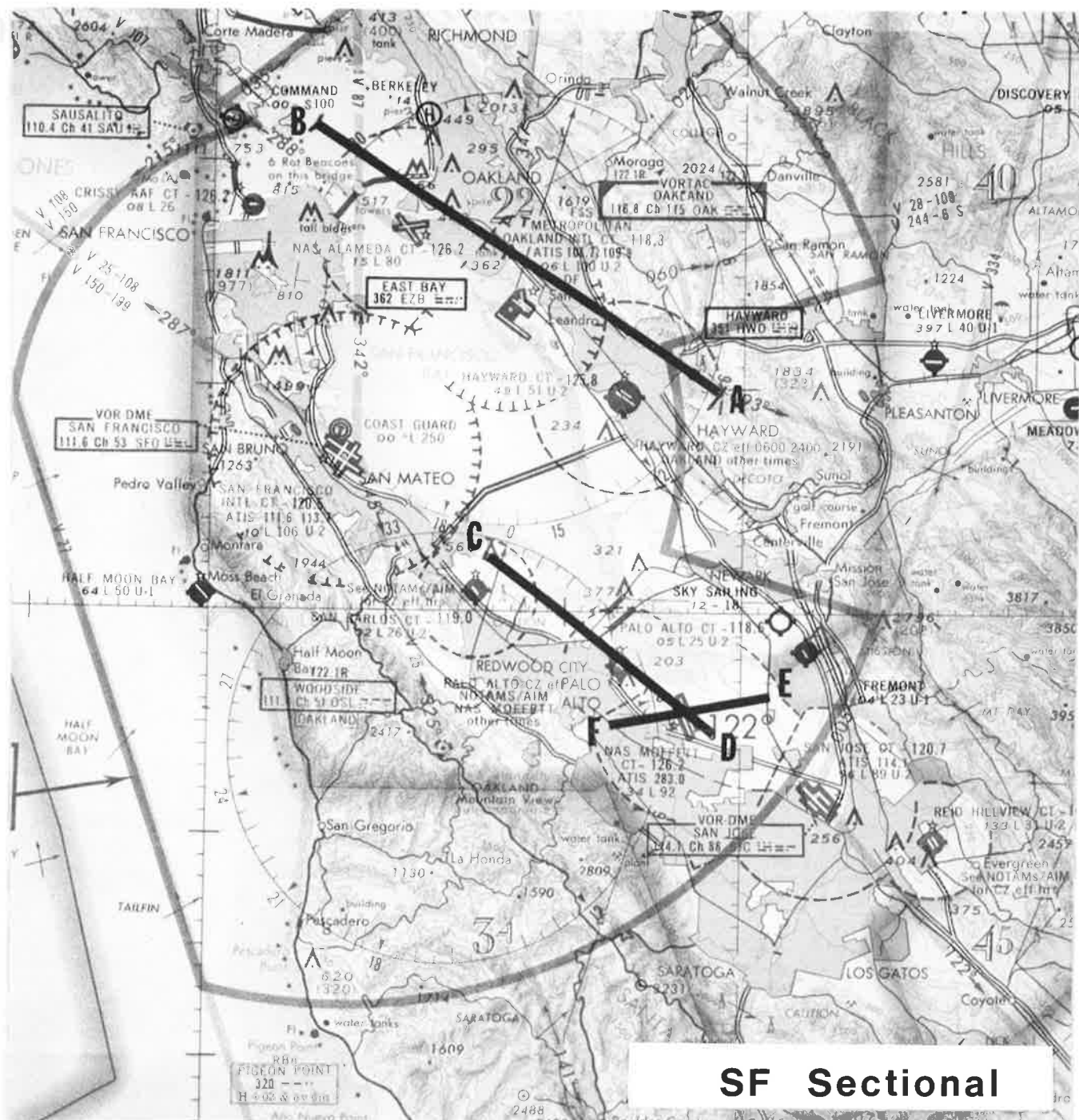
All flight lines were cloud-free except for minor coastal fog west of Oakland. No processing or camera malfunctions were noted and the data is rated excellent.

The APS has been developed and is operated by Dr. Guy Ferry of the NASA-Ames Research Center Atmospheric Experiments Branch. The sampler is a non-imaging sensor designed to gather high altitude dust particles for laboratory research.

FLIGHT LINE DATA

FLIGHT NO. 77-097

Check Points	Frame Numbers	Time (GMT— hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks	
		START	END			
RC-10	A-B	6242-6244	17:56:02	17:56:58	61,000/18600	3 frs. over Oakland; 10% coastal fog, fr. 6244
	C-D	6245-6248	18:03:03	18:03:55	32,000/9750	4 frs. over Moffett Field; stepwedge over-printed, fr. 6248
	E-F	6249-6252	18:10:12	18:10:33	24,000/7300	4 frs. over Moffett Field; stepwedge over-printed, fr. 6251
APS	---	---	17:08:--	17:10:--	50,000/15250	APS #2 exposed for 2 minutes
	---	---	17:15:--	17:16:--	60,000/18300	APS #1 exposed for 1 minute
	---	---	17:44:--	17:46:--	70,000/21300	APS #3 exposed for 2 minutes



FLIGHT 77-097
7 July 1977
Data Run
RC-10