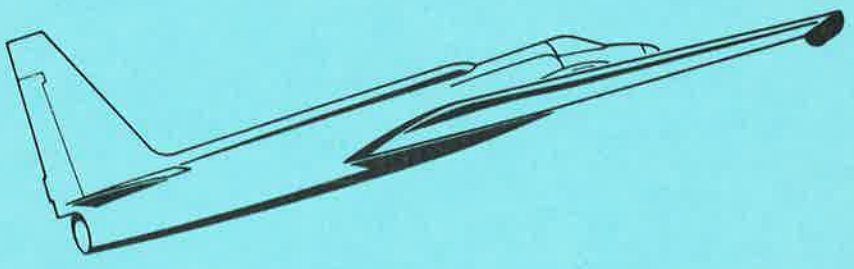
Airborne Instrumentation Research Project

Flight Summary Report

Flight No. 79-076

Date 14 June 1979

FSR- 1282



NASA
National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, California 94035

Airborne Missions and Applications Division

FLIGHT SUMMARY REPORT

Flight No: 79-076

Date: 14 June 1979

FSR No: 1282

Julian Date: 165

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

Aircraft No: 4

Purpose of Flight: #0666R Support
Requestor: Lumb/Bauer
#0047 Support
Requestor: Ferry

Area(s) Covered: Central California

SENSOR DATA

Accession No:	02770	02771	---
Sensor ID No:	031	033	024
Sensor Type:	RC-10	RC-10	APS
Focal Length:	6" 153.05mm	6" 153.17mm	---
Film Type:	High Definition Aerochrome Infrared, SO-127	Panatomic-X, 3400	---
Filtration:	CC .10B + 2.2AV	Wratten 12 + 2.2AV	---
Spectral Band:	510-900nm	510-700nm	---
f Stop:	4.0	5.6	---
Shutter Speed:	1/175	1/225	---
No. of Frames:	210	210	---
% Overlap:	60	60	---
Quality:	Excellent	Excellent	---
Remarks:	---	---	Non-imaging sensor

FLIGHT SUMMARY

79-076

This flight was flown in support of Flight Requests #0666R (Lumb/Bauer, NASA/ARC) and #0047 (Ferry, NASA/ARC) under the FY 1979 Airborne Instrumentation Research Program (AIRP) plan. Photography was acquired over agricultural regions of central California (see Track Map). Aerosol Particulate Sampler (APS) data was collected throughout the flight but is not indicated on the track map.

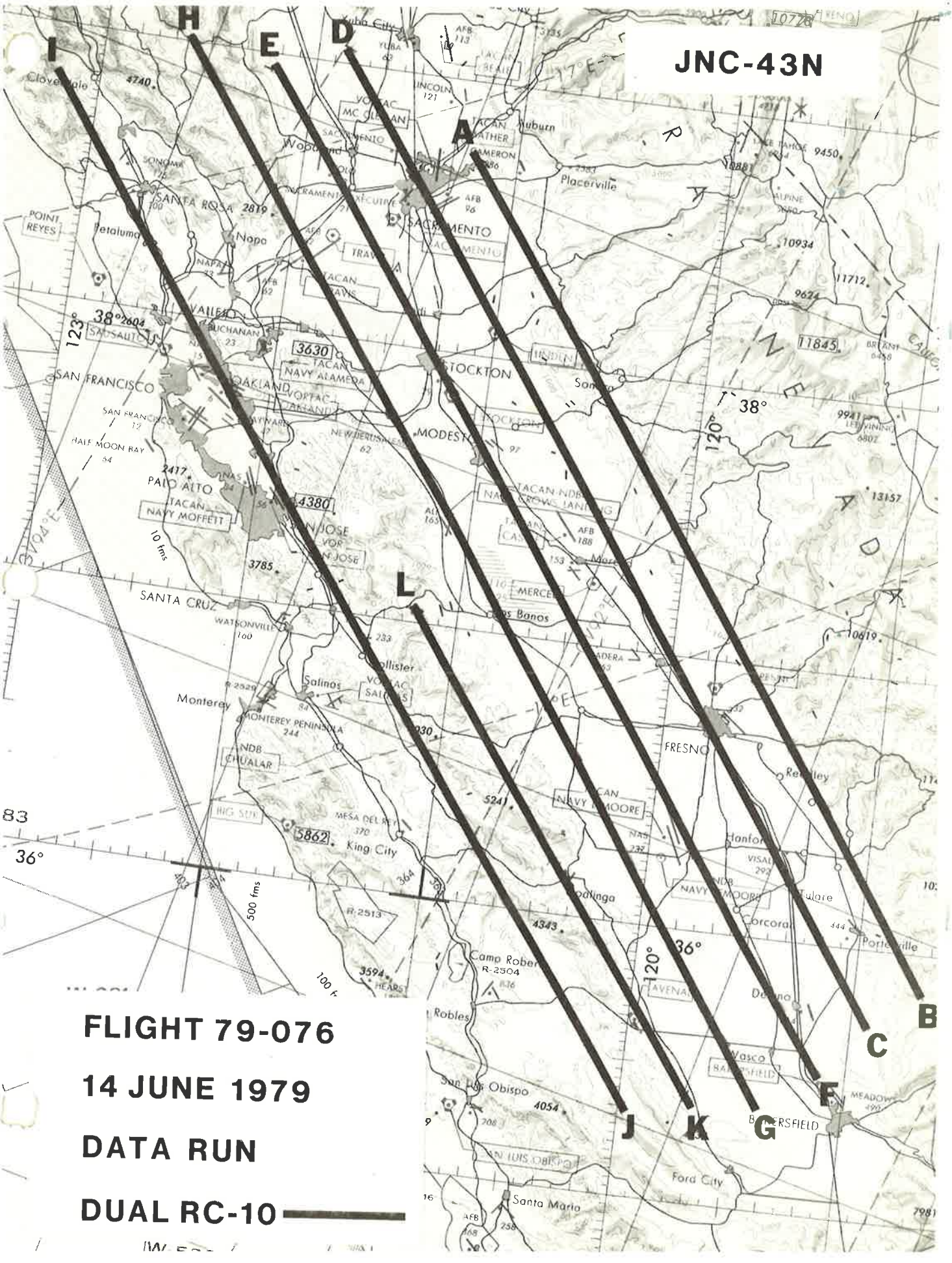
The weather was clear over the entire area. However, some minor smoke was encountered along the first three data lines from agricultural burns and grass fires. The photography is of excellent quality with no camera or processing malfunctions noted.

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. 79-076

	Check Points	Frame Numbers	Time (GMT—hr, min, sec) START	Time (GMT—hr, min, sec) END	Altitude, MSL feet/meters	Cloud Cover/Remarks
RC-10 #031	A-B	6465-6497	17:49:46	18:19:57	65,000/19800	Smoke, frs. 6479-6485
	C-D	6498-6534	18:23:38	18:57:36	"	Smoke, frs. 6532-6534
	E-F	6535-6574	19:01:08	19:38:02	"	Smoke, frs. 6537-6540
	G-H	6575-6615	19:41:05	20:18:58	"	Clear
	I-J	6616-6656	20:25:42	21:04:07	"	"
	K-L	6657-6674	21:07:32	21:23:10	"	"
RC-10 #033	A-B	1044-1076	17:49:15	18:19:31	65,000/19800	Smoke, frs. 1058-1064
	C-D	1077-1113	18:23:12	18:57:12	"	Smoke, frs. 1111-1113
	E-F	1114-1153	19:00:44	19:37:39	"	Smoke, frs. 1116-1119
	G-H	1154-1194	19:40:42	20:18:36	"	Clear
	I-J	1195-1235	20:25:20	21:03:45	"	"
	K-L	1236-1253	21:07:11	21:22:49	"	"
APS	---	---------	17:48:00	21:18:00	65,000/19800	APS #1 exposed near checkpoint "A" and sealed near checkpoint "L"


JNC-43N
I
H
E
D
A
B
C
F
G
J
K
L
FLIGHT 79-076
14 JUNE 1979
DATA RUN
DUAL RC-10