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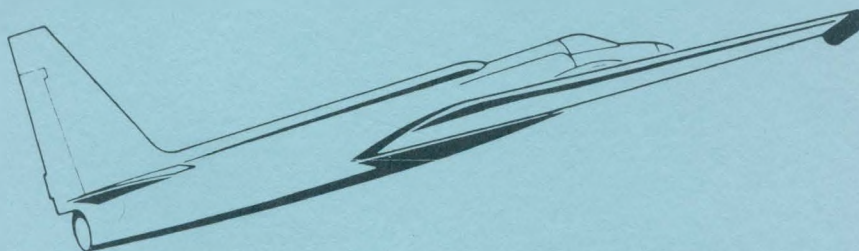
Airborne Instrumentation Research Project

Flight Summary Report

Flight No. 78-131

Date 19 September 1978

FSR- 1189



NASA

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, California 94035

Airborne Missions and Applications Division

FLIGHT SUMMARY REPORT

Flight No: 78-131

Date: 19 September 1978

FSR No: 1189

Julian Date: 262

Sensor Package: Itek Optical Bar Panoramic Camera
Aerosol Particulate Sampler (APS)

Aircraft No: 5

Purpose of Flight: #0753 Support
Requestor: Weber
#0047 Support
Requestor: Ferry

Area(s) Covered: Northern California

SENSOR DATA

Accession No:	02679	---
Sensor ID No:	029	024
Sensor Type:	Optical Bar	APS
Focal Length:	24" 609.6mm	---
Film Type:	High Definition Aerochrome Infrared, SO-131	---
Filtration:	CC .20B	---
Spectral Band:	510-900nm	---
f Stop:	3.5	---
Shutter Speed:	1/300	---
No. of Frames:	1170	---
% Overlap:	60	---
Quality:	Excellent	---
Remarks:	---	Non-imaging sensor

FLIGHT SUMMARY

78-131

This flight was flown in support of Flight Requests #0753 (Weber, USFS) and #0047 (Ferry, NASA/ARC) under the FY 1978 Airborne Instrumentation Research Program (AIRP) plan. Panoramic photography was acquired over northern California (see Track Map). Additionally, Aerosol Particulate Sampler (APS) data was collected during climb and descent. Due to the localized nature of the APS collection, it is not indicated on the track map.

The weather was generally clear throughout the flight except for some occasional scattered cumulus clouds. Minor emulsion flaws were noted on frames 0017 and 0021. 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. 78-131

Optical
Bar

Check Points	Frame Numbers	Time (GMT—hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A-B	0001-0094	17:55:41	18:09:09	65,000/19800	Clear; minor emulsion flaws, frs. 0017-0021
C-D	0095-0194	18:13:34	18:27:52	"	Clear
E-F	0195-0298	18:33:31	18:48:23	"	Clear
G-H	0299-0435	19:04:35	19:24:10	"	Minor scattered cumulus, frs. 0379-0407, 0413-0423
I-J	0436-0614	19:28:35	19:54:07	"	Minor scattered cumulus, frs. 0436-0497; film splice, fr. 0480
K-L	0615-0762	20:05:25	20:26:29	"	Minor scattered cumulus, frs. 0744-0755
M-N	0763-0936	20:31:11	20:55:54	"	Minor scattered cumulus, frs. 0763-0770, 0784-0785
O-P	0937-1113	21:22:54	21:28:02	"	Minor scattered cumulus, frs. 1070-1077, 1093-1101
Q-R	1114-1170	21:32:35	21:40:35	"	Minor scattered cumulus, frs. 1145-1155, 1161-1170
APS	---	17:41:00	17:43:00	50,000/15250	APS #2 exposed and sealed IOAT -40°C
	---	17:48:00	17:49:00	60,000/18300	APS #1 exposed and sealed IOAT -38°C
	---	22:01:00	22:03:00	40,000/12200	APS #3 exposed and sealed IOAT -40°C

