

Airborne Instrumentation Research Project

Flight Summary Report

Flight No. 84-130

Date 14 July 1984

FSR- 1942



NASA

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, California 94035

Airborne Missions and Applications Division

FLIGHT SUMMARY REPORT

Flight No: 84-130

Date: 14 July 1984

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Julian Date: 196

Sensor Package: Itek Iris II Panoramic Camera
Aerosol Particulate Sampler (APS)

Aircraft No: 706

Purpose of Flight: #0903 Support
Requestor: Weber
#0983 Support
Requestor: Clanton

Area(s) Covered: Pennsylvania

SENSOR DATA

Accession No:	03366	---
Sensor ID No:	070	024
Sensor Type:	Iris II (90°)	APS
Focal Length:	24" 609.6mm	---
Film Type:	High Definition Aerochrome Infrared SO-131	---
Filtration:	CC.30B	---
Spectral Band:	510-900nm	---
f Stop:	3.5	---
Shutter Speed:	1/125	---
No. of Frames:	---	---
% Overlap:	60	---
Quality:	Good	---
Remarks:	---	Non-imaging Sensor

FLIGHT SUMMARY

84-130

This flight was flown in support of Flight Requests #0903 (Weber, USFS) and #0983 (Clanton, NASA/JSC) under the FY 1984 Airborne Instrumentation Research Program (AIRP) plan. Itek Iris II Panoramic photography was acquired over portions of Pennsylvania in support of a gypsy moth defoliation detection program. Additionally, aerosol particulate sampling was conducted throughout the flight above 60,000 feet.

Iris photography coverage was acquired over the following flightlines:

Longitude	Latitude		Latitude
076°40'W	39°20'N	to	38°15'N
077°03'W	38°15'N	to	39°20'N
077°25'W	39°20'N	to	38°00'N
077°49'W	38°00'N	to	41°00'N
078°10'W	41°00'N	to	38°00'N
078°32'W	38°00'N	to	39°50'N

Film processing was accomplished at EPA-EPIC facilities in Warrenton, Virginia in order to expedite delivery to Forest Service personnel.

Aerosol Particulate sampling was acquired for 3 hours and 10 minutes from 1357z to 1707z above 60,000 feet.

Aerosol Particulate Sampler

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.