National Aeronautics and Space Administration

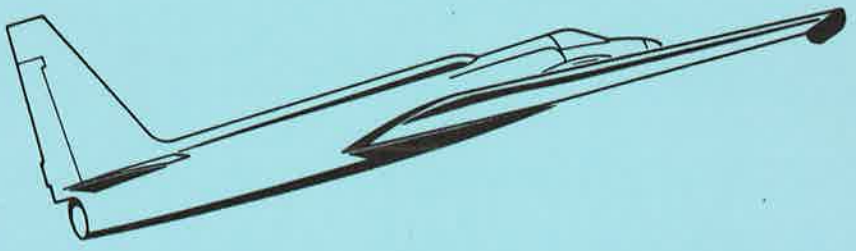
Earth Resources Aircraft Project

Flight Summary Report

Flight No. 74-109

Date 27 June 1974

FSR- 491



Airborne Science Office

Ames Research Center, Moffett Field, California

NASA/ARC Earth Resources Aircraft Project

FLIGHT SUMMARY REPORT

FSR: 491

Flight No: 74-109

Date: 27 June 1974

Aircraft No: 4

Julian Date: 178

Sensor Package: A-4 Configuration
Aerosol Particulate Sampler (APS)

Purpose of Flight: 74-OF-0142 Support
Requestor: Bibles, Bureau of Land Management
74-SR-0047 Support (APS)

Area(s) Covered: Northeastern California/Northwestern Nevada
(BLM Susanville District)

SENSOR DATA

Accession No:	01835	---
Sensor ID No:	035	024
Sensor Type:	RC-10	Aerosol Particulate Sampler (APS)
Lens Focal Length:	6"	---
Film Type:	Aerochrome Infrared, 2443	---
Spectral Band:	510-900nm	---
f Stop:	8	---
Shutter Speed:	1/300	---
No. of Frames:	139	---
% Overlap	60	---
Quality	Good	---
Remarks	Color correction filters left off	Non-imaging sensor

FLIGHT SUMMARY

74-109

This flight supports Flight Request 74-OF-0142 (Bibles, BLM) under the CY 1974 Earth Observations Aircraft Program (EOAP) plan. The flight covers the Bureau of Land Management, Susanville, California District (see Track Map).

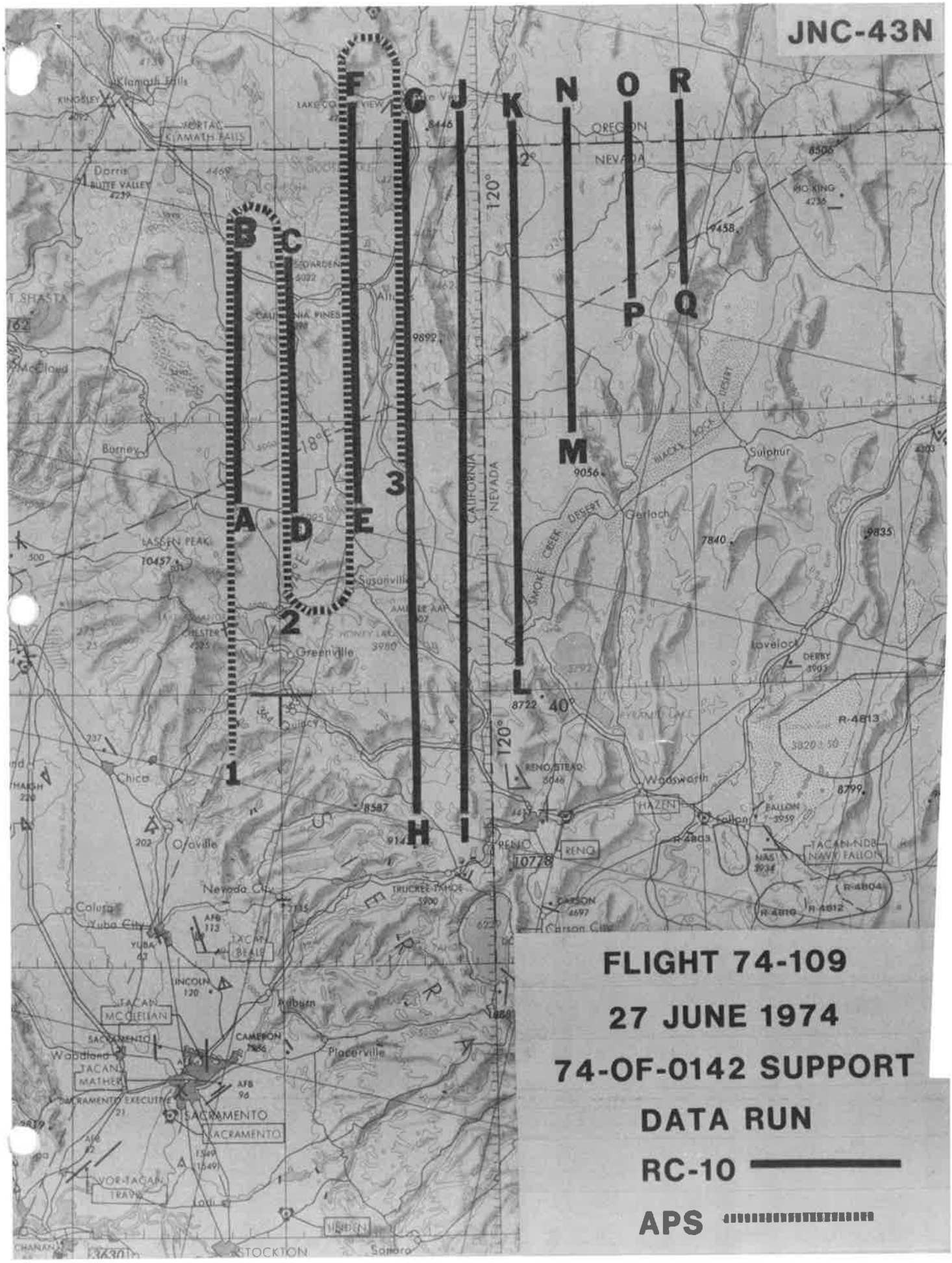
The flight represents the first operational employment of the A-4 Configuration camera system. This camera system consists of an RC-10 camera and a 24-inch focal length HR-732 camera, both in a fixed vertical orientation. Due to a malfunction of the HR-732 camera, only the RC-10 film is accessioned. The RC-10 imagery is of good quality with no malfunctions noted. The entire area was cloud-free.

The Aerosol Particulate Sampler (APS) was also flown on this flight in support of Flight Request 74-SR-0047 (Dr. Guy Ferry, NASA/ARC Planetary Science and Applications Branch) under the CY 1974 Earth Observations Aircraft Program (EOAP) plan. 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. 74-109

	Check Points	Frame Numbers	Time (GMT – hr, min, sec)		Altitude, MSL (feet)	Cloud Cover/Remarks
			START	END		
RC-10	A-B	0592-0599	17:39:46	17:45:38	65,000	Clear
	C-D	0600-0613	17:48:49	17:59:38	"	"
	E-F	0614-0632	18:02:48	18:17:46	"	"
	G-H	0633-0659	18:20:43	18:42:36	"	"
	I-J	0660-0685	18:45:48	19:06:37	"	"
	K-L	0686-0706	19:09:34	19:25:59	"	"
	M-N	0707-0718	19:35:58	19:44:39	"	"
	O-P	0719-0724	19:47:36	19:51:47	"	"
	Q-R	0725-0730	19:55:06	19:59:03	"	"
APS	1-2	---	17:30:00	18:00:00	65,000	APS #1 opened and closed
	2-3	---	18:00:00	18:30:00	65,000	APS #2 opened and closed


JNC-43N
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
1
2
3
120°
2°
40°
18°E
OREGON
NEVADA
CALIFORNIA
Klamath Falls
Dorris
Burney
Greenville
Susanville
Quincy
Chico
Oroville
Nevada City
Yuba City
Marysville
Auburn
Placerville
Woodland
Sacramento
Stockton
Lodi
Reno
Carson City
Fallon
Wadsworth
Lovelock
Gerlach
Sulphur
Truckee
Tahoe
Lassen Peak
Mt. Shasta
McCloud
TACAN
MCCLELLAN
TACAN
MATHER
TACAN
BEALE
TACAN-NDB
NAVY FALLON
VOR-TACAN
TRAVIS
R-4813
R-4803
R-4804
R-4810
R-4812
FLIGHT 74-109
27 JUNE 1974
74-OF-0142 SUPPORT
DATA RUN
RC-10
APS