

Flt ID: 010903H 010903H	From: KNCF	To: KNCF
Flt No: 01-35	Blk In: 1754	ATA: 1747
ETD: 1800	Blk Out: 1440	ATD: 1453Z
ETE: 5+0	Blk Time: 3.2	Flt Time: 2.9
Sponsor Org: NASA	Program: KAMP	Purpose: CLOUDS + CLIMATE

AOC Personnel

AC: TAGGART, B	Sys Eng: DELGADO, J ✓
CP: TENNESEN, D ✓	Data Sys: McMillan, S ✓
Nav: NEWMAN, C ✓	Radar:
FE: BAST, G ✓	GPS/BT: CARPENTER, D ✓
FD: SHEPHERD, T ✓	Cld Phys:
Avionics: ROGERS, M ✓	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
BLACK, B ✓	PI	HRD
Dodge, P ✓	RADAR	HRD
CASTELLON, J	SWATH	WALLACE
WALLACE, M	WALLACE	WALLACE
Hudson, J ✓	CN	DR+

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #)

1ST T.O. ABORTED for low power.

DP2 ~ 5° lower than loc3 - just noticed @ 1734

2612
8530

2525
8142

U.S. Dept. of Commerce / NOAA / Aircraft Operations Center

AGCWF2

Fit ID:

01090311

Time Off:

1453Z

Time On:

1747

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1015.7

30.00

1014.2

29.98

Number

Data Disposition / Date / Quality

Fit Lvl Tapes

2

Radar Tapes

1

Cloud Physics Tapes

1

Video Tapes

4

AXBT

0

AXCP

1

AXCTD

Dropsondes

OK - verified with N42 drop log, has case
discrepancy between the two

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

KAMP 2001

Flight #1 010903H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2012.CON

Notes:

Takeoff: 1453Z

Land: 1747Z

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during take off and landing (145001-145400 take off; 174230-175000 landing). No offset was applied.

The RA-159 altimeter was replaced by the RA-232 due to spiking from 165507-165804. A +34 meter offset was applied. The RA-159 was replaced by the RA-232 due to spiking from 170405-170554 with a +22 meter offset applied.

Total temperature #2 was slow responding and generally 0.5-5 degrees cooler than total temperature #1 during the time periods 164250-164850, 165730-165930, 170730-170930.

The J-W liquid water sensor was inoperative from takeoff to approximately 161900. From 161900-175000, it was operating but with an improper zero reference.

During times when aircraft was flying through heavy precipitation, the dew point temperature exceeded the ambient temperature resulting in relative humidities greater than 100%. No adjustments were made.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1015.7 mb	1015.9 mb
Corrected tower pressure	1014.2 mb	1015.2 mb

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm.
It is recommended that these values be used for vertical wind analysis.

Flight Director: Tom Shepherd, (813) 828-3310 ext. 3053

Page 1 of 1

Form 413-50

15 330

TD #1

pitch OK

TT #1

roll #1

INE #1

Spiral ~~175230~~ OK

AZI #1

RA159

→ ✓ 165552, 165706, 165750, 170429, 170456, 170543
 ✓ 165507-165804 +34m ✓ 170405-170554 +22

Hdg OK

PDAF OK

PQFI } OK
2 }

PSF OK

TT1

TT2 ✓ 164250-164850, 165730-165930, 170730-170930
 ✓ Sluggish 0.5-5° cooler

Substitute RA232 for RA159

→ ✓ 145001-145400 TAKE off 0.0 offset
 → ✓ 174230-175000 landing 0.0 offset

J-W T.U. 145001-~161900

✓ ~161900-175000 ~~was~~ improper ⓧ.

RENAV (OVER)

1)	153000	0.2	0.1	25 25.7	81 28.0	✓
	160000	0.5	0.2	25 41.3	82 27.8	✓
	163000	0.3	0.6	26 4.9	84 51.7	✓
	170000	0.2	-0.1	26 41.8	84 43.9	✓
5)	173000	1.0	0.3	27 39.9	83 30.5	✓
	175000	1.0	1.1	27 51.5	82 30.5	✓

BASE OPERATIONS USE

TYPE FLT PLAN	TRUE AIRSPEED	POINT OF DEPARTURE	PROPOSED DEPARTURE TIME (Z)	ALTITUDE	ROUTE OF FLIGHT		TO	ETE
1	290	KMCF	1500Z	100	MCF RSW	CARNU (R) D 3+30		
MCF 2	190	16	9+10	1440	MCF	220 37.3K	KMCF	5+00
119.65	0645		1452	7000				#1 / #2
			1747	LAND				Δ LAT 4.9 4.2
				CHACK	INS 1	INS 2		Δ LONG 6+1.0 4.6
		1723	27 31	8	2731.0	2731.6		ΔT 5.0 5.0
			84 05.9		8405.7	8406.4		
					15 22	16015		RG5 2 1
					V			RE 7 1 1

REMARKS
THUNDERSTORM RESEARCH at CARNU

RANK AND HONOR CODE

FUEL ON BD 8+00	ALTN AIRFIELD KPIE	ETE TO ALTN 0+10	NOTAMS bk	WEATHER bk	WT AND BALANCE On File	AIRCRAFT SERIAL NUMBER, UNIT, AND HOME STATION N42RF, NOAA, KMCF
SIGNATURE OF APPROVAL AUTHORITY B. Taggart	CREW/PASSENGER LIST		SEE PSGR MANIFEST		ACTUAL DEP TIME (Z)	BASE OPERATIONS USE
DUTY	NAME AND INITIALS				RANK	SSN
PILOT IN COMMAND	B. TAGGART				LCDR	848-48-4384
Remainder crew list on file at NOAA duty office, 8-3310, KMCF						

MISSION DATA									
'N' NUMBER		MISSION:							
N42RF		KAMP							
TASK NO.		78P3A42PTM		HOURS		3.2		TASK NO.	
TASK NO.				HOURS				HOURS	
DATE		FLIGHT NUMBER		FROM		TO		OUT	
913101		01-35		KMCF		KMCF		1440 1452 1747 1754	
ADDITIONAL CREW CODES								FLIGHT	
PI - PRINCIPLE INVESTIGATOR								BLOCK	
SC - SCIENTIST								2.9 3.2	
NM - NEWS MEDIA									
VP - VIP									
AA - ADDITIONAL AIRCREW									
CARRY FORWARD FLIGHT TIME TOTAL TO BLOCK 8 OF FLIGHT STATUS DOCUMENT									
TOTAL								2.9 3.2	

FLIGHT CREW DATA												
CREW POS.	FLIGHT CREW LAST NAME, INT.	FLIGHT HOURS				LANDINGS		INST. HOURS			APPROACHES	
		PIC	SC	IP	NIGHT	DAY	NT	ACT	HOOD	SEM	PREC	NP
AC	TAGGART, B	3.2										
P	TENNESEN, D	0.5	2.7			1		1.5			1	
P												
FE	BAST, G	3.2										
FE												
NAV	NEWMAN, C	3.2										
NAV												
RO/PH	ROGERS, M	3.2										
MECH												
FD	SHEPHERD, T											
FD												
IFT	McMILLAN, S											
IFT	DELGADO, J											
IFT	CARPENTER, D											
IFT												

REMARKS:		Weather Briefing		Location	
12 S.O.B.				MCF	
KAMP FLIGHT w/ NASA				Date: 8/3/01	
in close proximity or through cumulonimbus or thunderstorm				Time: 0900	
Yes Run 4 MCF		AC SIGNATURE: [Signature]			
WEIGHT & BALANCE		All listed crew members have been briefed and understand the correct			
ON FILE		AC SIGNATURE: [Signature]			
ATTACHED		HAZARDOUS WEATHER		YES ☒ NO ☐	
		AC SIGNATURE: [Signature]			
		HAZARDOUS WEATHER		APPROVED ☒ DISAPPROVED ☐	
		CHIEF FLIGHT OPS SIGNATURE: [Signature]			
		MISSION DATA AND FLIGHT CREW MANIFEST DOCUMENT			

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