DCN: 8213

MERIDIAN AIRPORT AUTHORITY

Fax

Library Routing Slip 2005 BRAC Commission Materials
Title of Item: KC-135 PERFORMANCE DATA
Installation or Community: KEY FIELD ANG, MS
Source: COMMUNITY
Certified Material? ____ yes X no
Analyst / Provider: TIM MACGREGOR Date Received: 17 AUG 05

To: Tim MacGregor **Date:** 8/17/05

Company: **Pages:** 18

Fax # 703-699-2735

From: Langford Knight + Tom Williams

☐ Urgent ☐ For Review ☐ Please Reply ☐ Hard Copy to Follow

• **Comments:** Tim –

We have tried emailing, but there is some problem with our email. Here is our memo and chart with backup info.

Tom Williams

IF YOU DO NOT RECEIVE ALL PAGES, CALL (601) 482-0364, EXT. 10

POST OFFICE BOX 4351 ✈ 2811 AIRPORT BOULEVARD SOUTH ✈ MERIDIAN, MISSISSIPPI 39304
PHONE (601) 482-0364 ✈ FAX (601) 482-5899 ✈ E-MAIL info@meridianairport.com

Tim,

Attached are the comparison table and supporting data you requested. This provides an objective comparison of capabilities with 70 and 90 degree F temperatures.

Takeoff gross weight was determined by temperature, runway available and field elevation using KC-135R FSAS Takeoff and Landing Data Software.

We realize, as you stated in your email, that this is one aspect for evaluating a base, and will be considered alongside other important issues:
>proximity to receivers/training airspace
>facilities/expansion capability/cost to robust
>KC-135R simulator on site
>encroachment issues and costs
>lack of follow-on mission for Key Field enclave (BHM has Intel mission with 400 jobs coming)

We stand ready to provide any additional information you may request.

I'm sending this from the unit for convenience sake, please respond to twilliams@meridianairport.com or llkknight@aol.com

Thanks,

Langford Knight
Tom Williams

TAKEOFF CONDITIONS:
Pressure Altitude = Field Elevation
No Wind
Static Takeoff
TRT Power
30° Flaps
Max Mode

	BIRMINGHAM	MERIDIAN	KNOXVILLE
MAX T.O. WEIGHT / FUEL @ 70° F	322K / 202K	306K / 186K	290K / 170K
@ 90° F	316K / 196K	301K / 181K	283K / 163K
FLY TO INCIRLIK W/ 50K LBS CARGO[1]	Land w/ 32.3K	19.7K	13.4K
FLY TO INCIRLIK EMPTY[1]	Land w/ 82.3K	69.7K	63.4K
DISTANCE TO ORBIT POINT with 50K OFFLOAD[1]	2128 NM	1814 NM	1504 NM

Best Range Cruise @ 35000'
Best Endurance Orbit @ 25000'
4 Hour Orbit
No wind

[1] Takeoff @ 70° F

FSAS Normal Takeoff Inputs

WT/BAL

GLD	2g
GW	301 klbs
CG	28% mac

DEGRAD	0%
APAI	☐

T/O AIR DATA 2/7

OAT	32°C	PA	300 ft
WDS	0°	WDG	0°
VELS	0 kts	VELG	0 kts
INVR°		INVR PA	
HYD	32°C	WARMUP	☐

T/O RUNWAY DATA 1/7

Name	KMEI 01		
RHD	10°	RA	9804 ft
GR	0%	VAR GR	☐
RCR	Dry	RSC	0 in/10
OD		OH	

T/O DATA 3/7

HW BENEFIT	☐	Mode	Normal
FF	30°	CLB	MAX
VROTINC	0 klas		
AC	☐	AI	☐

T/O N1 4/7

Thrust Selection	TRT

FSAS Normal Takeoff Outputs

Miscellaneous

	Planned(Dry)	
MSG (part 1)	T/O CAUT CR	
MSG (part 2)	ITICAL	
AVG T/O GR	0.00	%
HOT BRAKE SPD	93	klas

T/O N1 4/7

TRT	91.7	%
MCL	---	%
MIN	---	%
MINDF	---	
CLB GR	5.4	%
T/O N1	91.7	%

T/O DATA 5/7

CFL	9795	ft
CGCAUT		
XW LIM	33	kts
UOD	---	ft
DHT	---	ft
GWM	301050	lbs
GWMDF	R	
S/T	2.2NU	

T/O SPEED 6/7

S1	133	klas
VR	133	klas
VROT	173	klas
VROTDF		
VCO	183	klas
SD	3	klas
VMCA	137	klas
VCEF	133	klas
VNEF	117	klas
VMCG	111	klas
VMCGCAUT		
VMB	151	klas

T/O CLB DATA 7/7

R/C	956	ft/min
DHT	---	ft
CLEANUP WT	2000	ft
PR 30	193	klas
PR 20	208	klas

Emergency Landing Data

VA 50°	191	klas
VTH	183	klas
FLARE	2325	ft
GROLL	9822	ft
LDG DIS	12147	ft

FSAS Normal Takeoff Inputs

WT/BAL

GLD	2g
GW	306 klbs
CG	28% mac

DEGRAD	0%
APAI	☐

T/O AIR DATA 2/7

OAT	21°C	PA	300 ft
WDS	0°	WDG	0°
VELS	0 kts	VELG	0 kts
INVR*		INVR PA	
HYD	21°C	WARMUP	☐

T/O RUNWAY DATA 1/7

Name	RWY 01		
RRD	8°	RA	9004 ft
GR	VAR	VAR GR	☒
RCR	Dry	RSC	0 in/10
OD		OH	

T/O DATA 3/7

HW BENEFIT	☐	Mode	Normal
FP	30°	CLB	MAX
VROTINC	0 kias		
AC	☐	AI	☐

VARIABLE GRADE

LENGTH	10004 ft		
00 ELEV	300 ft	18 ELEV	300 ft
LOC/ELEV			
LOC/ELEV			

T/O M1 4/7

Thrust Selection	MCL

FSAS Normal Takeoff Outputs

Miscellaneous

	Planned(Dry)	
MSG (part 1)	T/O CAUT CR	
MSG (part 2)	ITICAL	
AVG T/O GR	0.00	%
HOT BRAKE SPD	95	kias

T/O M1 4/7

TRT	90.4	%
MCL	---	%
MIN	---	%
MINDF	---	
CLB GR	5.3	%
T/O M1	90.4	%

T/O DATA 5/7

CFL	9732	ft
CGCAUT		
XW LIM	33	kts
UOD	---	ft
DHT	---	ft
GWM	306763	lbs
GWMDF	R	
S/T	0.2NU	

T/O SPEED 6/7

S1	133	kias
VR	134	kias
VROT	175	kias
VROTDF		
VCO	185	kias
SD	3	kias
VMCA	137	kias
VCEF	133	kias
VMEF	117	kias
VMCG	112	kias
VMCGCAUT		
VMB	153	kias

T/O CLB DATA 7/7

R/C	968	ft/min
DHT	---	ft
CLEANUP HT	2000	ft
FR 30	195	kias
FR 20	210	kias

Emergency Landing Data

VA 50°	192	kias
VTH	184	kias
FLARE	2254	ft
GROLL	9844	ft
LDG DIS	12098	ft

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/CK:
PILOT:	CO-PILOT:	NAV:	BCOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 12+57
Fuel On Board : 14+34
Fuel Reserve : 01+37
Remarks:

Fuel Load: 186000
Fuel Used: 115915
Acft CG: %
Acft Gross WT: 303500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/R TACAN:

TP# NVAD RADDME REMARKS	TAC VOR	LAT LONG	W/V TRK	DCA	TH	VAR	MC CH	TEMP ALT	IAS MACH	TAS GS	GDST ACDST	TIME ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1 KMEI/A		N 32 19.96					011	+14C			5.0	00+02				2500
KEY FLD		W088 45.11	011	0	011	0.6W	011	297M			5.0	00:02	00:00		303500	183500
.level off		N 33 06.49					283	-54C	N/A	N/A	144.3	00+23				7550
		W091 27.93	283	0	283	1.2E	283	35000M	N/A	N/A	149.3	00:25	00:25		295950	175950
2 LVS/R240014	120X	N 35 35.21					276	-54C	263	447	708.2	01+35				17733
.Inserted	117.30	W105 25.00	282	0	282	9.6E	276	35000M	.78	447	857.5	01:59	01:59		278217	158217
.descent pt		N 36 22.69					260	-54C	253	433	922.1	02+08				21512
		W124 21.46	273	0	273	14.9E	260	35000M	.75	433	779.5	04:07	04:07		256705	136705
3		N 36 20.95					252	-35C	N/A	N/A	34.4	00+05				243
		W125 04.03	267	0	267	15.0E	252	25000M	N/A	N/A	814.0	04:12	04:12		256462	136462
.delay		N 36 20.95					252	-35C	235	343	0.0	04+00				36072
		W125 04.03	267	0	267	15.0E	252	25000M	.57	343	814.0	08:12	08:12		220390	100390
.offload 50000 lbs		N 36 20.95					252	-35C	235	343	0.0	00+00				0
		W125 04.03	267	0	267	15.0E	252	25000M	.57	343	814.0	08:12	08:12		170390	50390
.level off		N 36 22.04					078	-52C	N/A	N/A	20.7	00+03				819
		W124 38.46	093	0	093	15.0E	078	34000M	N/A	N/A	834.6	08:15	08:15		169571	49571
4 LVS/R246016	120X	N 35 36.38					080	-52C	239	403	934.1	02+19				15354
.Inserted	117.30	W105 26.88	093	0	093	9.6E	080	34000M	.70	403	768.8	10:34	10:34		154217	34217
.descent pt		N 32 48.07					098	-52C	231	390	766.3	01+58				12041
		W090 24.67	103	0	103	0.4E	098	34000M	.67	390	534.9	12:32	12:32		142176	22176
5 MEI/R	117X	N 32 22.71					107	+5C	N/A	N/A	85.3	00+15				1091
MERIDIAN	117.00	W088 48.26	107	0	107	0.6W	107	5000M	N/A	N/A	620.2	12:47	12:47		141085	21085
6 KMEI/A		N 32 39.96					137	+14C			3.8	00+10				1000
KEY FLD		W088 45.11	136	0	136	0.6W	137	297M			624.0	12:57	12:57		140085	20085

UTANG FORM 200 (COMPUTER GENERATED) C:\PFPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

No WIND

Best RANGE CRUISE @ FL 350

306 000 GROSS WEIGHT

Best ENDURANCE DELAY

KMEI → DELAY POINT 1804 NM

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BCOM:	TCS:	BCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+46
Fuel On Board : 13+00
Fuel Reserve : 01+14
Remarks:

Fuel Load: 136700
Fuel Used: 116990
Acft CG: %
Acft Gross WT: 304200

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP#	NVAD RADOME REMARKS	TAC VOR	LAT LONG	W/V TRK	DCA	TH	VAR	MC CH	TEMP ALT	IAS MACH	TAS GS	GDST ACDST	TIME ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1	KMEI/A KEY FLD		N 32 19.96 W088 45.11	010	0	010	0.6W	011 011	+14C 297M			5.0 5.0	00+02 00:02	00:00		304200	2500 134200
	.level off		N 33 58.17 W087 04.12	045	270/050 0	045	2.2W	047 047	-50C 33000M	N/A N/A	N/A N/A	125.3 130.3	00+20 00:22	00:22		297263	6937 127263
2	JJH/N334023 .Inserted	523.00	N 43 17.28 W074 40.03	046	270/050 -4	041	14.0W	054 049	-50C 33000M	273 .77	449 483	805.8 936.1	01+40 02:02	02:02		276592	18671 108592
3	YMK/N169037 .Inserted	250.00	N 51 48.36 W055 15.93	056	270/050 -4	053	23.0W	077 073	-50C 33000M	272 .77	447 488	935.3 871.4	01+55 03:57	03:57		258552	20040 88552
4	.Inserted		N 55 56.88 W029 42.03	074	270/050 -2	073	17.1W	096 094	-50C 33000M	270 .76	444 492	935.3 806.8	01+54 05:51	05:51		240015	18537 70015
5	WL/N091023 .Inserted	385.00	N 54 08.83 W002 36.17	097	270/050 1	098	3.9W	107 108	-50C 33000M	267 .75	439 489	935.3 742.1	01+55 07:46	07:46		222572	17443 52572
6	MNR/E170011 .Inserted	G72X 112.50	N 47 09.09 E019 26.17	117	270/050 3	120	3.4E	116 119	-50C 33000M	262 .74	432 476	935.3 677.5	01+58 09:44	09:44		205849	16723 35849
7	LTAG/A INCIRLIK AB		N 37 00.13 E035 25.55	131	270/050 4	135	4.2E	127 131	-50C 33000M	257 .73	424 460	935.3 612.6	02+02 11:46	11:46		189710	16139 19710

UTANG FORM 200 (COMPUTER GENERATED) C:\PFPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

KMEI - LTAG
BEST RANGE
33,000 ALTITUDE
136,700 FUEL
*170,000 OP WT

* ALLOWS FOR 50,000 LB CARGO OR FUEL TO BE OFFLOADED

08/17/05 18:53 FAX 007

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+46
Fuel On Board : 20+15
Fuel Reserve : 08+29
Remarks:

Fuel Load: 186700
Fuel Used: 116990
Acft CG: %
Acft Gross WT: 304200

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP# NVAD RADDME REMARKS	TAC VOR	LAT LONG	W/V TRK	DCA	TH	VAR	MC CH	TEMP ALT	IAS MACH	TAS GS	GDST ACDST	TIME ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1 KMEI/A KEY FLD		N 32 19.96 W088 45.11	010	0	010	0.6W	011 011	+14C 297M			5.0 5.0	00+02 00:02	00:00		304200	2500 184200
.level off		N 33 58.17 W087 04.13	045	270/050 0	045	2.2W	047 047	-50C 33000M	N/A N/A	N/A N/A	125.3 130.3	00+20 00:22	00:22		297263	6937 177263
2 JJH/N334023 .Inserted	523.00	N 43 17.28 W074 40.03	046	270/050 -4	041	14.0W	054 049	-50C 33000M	273 .77	449 483	805.8 936.1	01+40 02:02	02:02		278592	18671 158592
3 YMH/N169037 .Inserted	250.00	N 51 48.36 W055 15.93	056	270/050 -4	053	23.0W	077 073	-50C 33000M	272 .77	447 488	935.3 871.4	01+55 03:57	03:57		258552	20040 138552
4 .Inserted		N 55 56.88 W029 42.03	074	270/050 -2	073	17.1W	096 094	-50C 33000M	270 .76	444 492	935.3 806.8	01+54 05:51	05:51		240015	18537 120015
5 WL/N091023 .Inserted	385.00	N 54 08.83 W002 36.17	097	270/050 1	098	3.9W	107 108	-50C 33000M	267 .75	439 489	935.3 742.1	01+55 07:46	07:46		222572	17443 102572
6 MNR/N170011 .Inserted	072X 112.50	N 47 09.09 E019 26.17	117	270/050 3	120	3.4E	116 119	-50C 33000M	262 .74	432 476	935.3 677.5	01+58 09:44	09:44		205849	16723 85849
7 LTAG/A INCIRLIK AB		N 37 00.13 E035 25.55	131	270/050 4	135	4.2E	127 131	-50C 33000M	257 .73	424 460	935.3 612.8	02+02 11:46	11:46		189710	16139 69710

UTANG FORM 200 (COMPUTER GENERATED) C:\PFPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

KMEI- LTAG
BEST RANGE
33,000 ALTITUDE

186 700 FUEL
120 000 OP WT

EMPTY

FSAS Normal Takeoff Inputs

WT/BAL

GLD	3g
GW	316.8 klbs
CG	28% mac

DEGRAD	0%
APAI	☐

T/O RUNWAY DATA 1/7

Name	KRHW 24		
RHD	240°	PA	11800 ft
GR	0%	VAR GR	☐
RCR	Dry	RSC	0 10/10
DD	0 ft	OH	0 ft

T/O AIR DATA 2/7

OAT	32°C	PA	644 ft
WDS	0°	WDG	0°
VELS	0 kts	VELG	0 kts
INVR°		INVR PA	
HYD	32°C	WARMUP	☐

T/O DATA 3/7

HW BENEFIT	☐	Mode	Normal
FP	30°	CLB	MAX
VROTINC	0 kias		
AC	☐	AI	☐

T/O N1 4/7

Thrust Selection	TRT

FSAS Normal Takeoff Outputs

Miscellaneous — Planned(Dry)

MSG (part 1)	T/O CAUT CR	
MSG (part 2)	ITICAL	
AVG T/O GR	0.00	%
HOT BRAKE SPD	90	kias

T/O N1 4/7

TNT	91.7	%
MCL	---	%
MIN	---	%
MINDF	---	
CLB GR	4.3	%
T/O N1	91.7	%

T/O DATA 5/7

CFL	11790	ft
COCAUT		
XW LIM	34	kts
UOD	---	ft
DHT	---	ft
GWM	316870	lbs
GWMDF	R	
S/T	2.2NU	

T/O SPEED 6/7

S1	137	kias
VR	137	kias
VROT	180	kias
VROTDF		
VCO	188	kias
SD	3	kias
VMCA	136	kias
VCEF	137	kias
VMEP	124	kias
VMCG	109	kias
VMCOCAUT		
VMB	147	kias

T/O CLB DATA 7/7

R/C	793	ft/min
DHT	---	ft
CLEANUP HT	2000	ft
FR 30	198	kias
FR 20	213	kias

Emergency Landing Data

VA 50%	196	kias
VTH	187	kias
FLARE	2367	ft
GROLL	11251	ft
LDG DIS	13618	ft

FSAS Normal Takeoff Inputs

WT/BAL

GLD	2g
GW	322 klbs
CG	28% mac

DEGRAD	0%
AFRI	☐

T/O RUNWAY DATA 1/7

Name	KBFM 24		
RWD	240"	RA	11000 ft
GR	VAR	VAR GR	☒
RCR	Dry	RSC	0 in/10
OD		OR	

VARIABLE GRADE

LENGTH	12000 ft		
24 ELEV	644 ft	06 ELEV	644 ft
LOC/ELEV			
LOC/ELEV			

T/O AIR DATA 2/7

OAT	21°C	PA	644 ft
WDS	0°	WDG	0°
VELS	0 kts	VELG	0 kts
INVR°		INVR PA	
HYD	21°C	WARMUP	☐

T/O DATA 3/7

HW BENEFIT	☐	Mode	Normal
FP	30°	CLB	MAX
VROTINC	0 kias		
AC	☐	AJ	☐

T/O N1 4/7

Thrust Selection	TRT

FSAS Normal Takeoff Outputs

Miscellaneous — Planned(Dry)

MSG (part 1)	T/O CAUT CR	
MSG (part 2)	ITICAL	
AVG T/O GR	0.00	%
HOT BRAKE SPD	92	kias

T/O N1 4/7

TRT	90.6	%
MCL	---	%
MIN	---	%
MINDF	---	
CLB GR	4.3	%
T/O N1	90.6	%

T/O DATA 5/7

CFL	11648	ft
COCAUT		
XW LIM	34	kts
DOD	---	ft
DRT	---	ft
GWM	322500	lbs
GWMDF	8	
S/T	2.2NU	

T/O SPEED 6/7

S1	136	kias
VR	137	kias
VROT	152	kias
VROTDF		
VCO	189	kias
SD	3	kias
VMCA	137	kias
VCWF	136	kias
VNEF	121	kias
VMCG	111	kias
VMCGCAUT		
VMB	151	kias

T/O CLB DATA 7/7

R/C	819	ft/min
DRT	---	ft
CLEANUP HT	2000	ft
FR 30	199	kias
FR 20	214	kias

Emergency Landing Data

VA 50°	197	kias
VTH	189	kias
FLARE	2296	ft
GROLL	11385	ft
LDG DIS	13681	ft

Created by FSAS Calculator Version Version 1.3a, March 2004, for: KC-135R (P108 BKII without A/R Pod)

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 14+17
Fuel On Board : 15+54
Fuel Reserve : 01+37
Remarks:

Fuel Load: 202000
Fuel Used: 131932
Acft CG: %
Acft Gross WT: 319500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP#	N/AD RADDME REMARKS	TAC VOR	LAT LONG	W/V TRK	DCA	TH	VAR	MC CH	TEMP ALT	IAS MACH	TAS GS	GDST ACDST	TIME ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1	KBHM/A BIRMINGHAM IN		N 33 33.78 W086 45.21	056	0	056	2.2W	058 058	+14C 644M			5.0 5.0	00+02 00:02	00:00		319500	2500 199500
	.level off		N 34 10.73 W089 59.11	277	0	277	0	279 279	-54C 35000M	N/A N/A	N/A N/A	169.0 174.0	00+26 00:28	00:28		310851	8649 190851
2	LVS/R240014 .Inserted	120X 117.30	N 35 35.21 W105 25.00	276	0	276	9.6E	271 271	-54C 35000M	264 .78	449 449	765.6 939.6	01+42 02:11	02:11		290604	20247 170604
3	BTY/R154023 .Inserted	094X 114.70	N 36 25.12 W116 39.97	275	0	275	13.6E	263 263	-35C 35000M	256 .76	457 457	549.6 489.2	01+12 03:23	03:23		276932	13672 156932
	.descent pt		N 36 06.19 W129 08.01	268	0	268	15.2E	253 253	-35C 35000M	254 .75	452 452	604.8 094.0	01+20 04:43	04:43		262722	14210 142722
4			N 36 02.77 W129 50.27	264	0	264	15.2E	249 249	-35C 25000M	N/A N/A	N/A N/A	34.4 2128.4	00+05 04:48	04:48		262479	243 142479
	.delay		N 36 02.77 W129 50.27	264	0	264	15.2E	249 249	-35C 25000M	238 .58	347 347	0.0 2128.4	04+00 08:48	08:48		225559	36920 105559
	.offload 50000 lbs		N 36 02.77 W129 50.27	264	0	264	15.2E	249 249	-35C 25000M	238 .58	347 347	0.0 2128.4	00+00 08:48	08:48		175559	0 55559
	.level off		N 36 04.98 W129 23.55	088	0	088	15.2E	073 073	-52C 34000M	N/A N/A	N/A N/A	21.8 150.2	00+03 08:51	08:51		174710	849 54710
5	BTY/R156023 .Inserted	094X 114.70	N 36 25.61 W116 41.00	088	0	088	13.6E	073 073	-52C 34000M	243 .71	409 409	616.6 766.9	01+30 10:21	10:21		164324	10386 44324
6	LVS/R246016 .Inserted	120X 117.30	N 35 36.38 W105 26.88	095	0	095	9.6E	083 083	-52C 34000M	238 .69	401 401	548.8 315.6	01+22 11:44	11:44		155367	8957 35367
	.descent pt		N 33 57.94 W088 34.14	097	0	097	1.1W	092 092	-52C 34000M	231 .68	391 391	838.9 154.5	02+09 13:52	13:52		142159	13208 22159
7	VUZ/R VULCAN	091X 114.40	N 33 40.21 W086 53.99	102	0	102	2.1W	104 104	+5C 5000M	N/A N/A	N/A N/A	85.3 239.8	00+15 14:07	14:07		141068	1091 21068
8	KBHM/A BIRMINGHAM IN		N 33 33.78 W086 45.23	131	0	131	2.2W	134 134	+14C 644M			9.7 249.5	00+10 14:17	14:17		140068	1000 20068

UTANG FORM 200 (COMPUTER GENERATED) C:\SFPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

No WIND, Best RANGE Cruise @ FL350; Best ENDURANCE Delay; 322000 Gross Weight; KBHM → Delay → 2128 NM

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCO:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+26
Fuel On Board : 14+12
Fuel Reserve : 02+46
Remarks:

Fuel Load: 152000
Fuel Used: 119708
Acft CG: %
Acft Gross WT: 319500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 SCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP#	NVAD RADDME / REMARKS	TAC / VOR	LAT / LONG	W/V TRK	DCA	TH	VAR	MC / CH	TEMP / ALT	IAS / MACH	TAS / GS	GDST / ACDST	TIME / ACTIME	STA	ATA	GROSS WEIGHT	FUEL RMNG
1	KBHM/A		N 33 33.78					058	+14C			5.0	00+02				2500
	BIRMINGHAM IN		W086 45.21	055	0	055	2.2W	058	644M			5.0	00:02	00:00		319500	149500
	.level off		N 35 20.70	270/050				050	-50C	N/A	N/A	142.1	00+23				7738
			W084 42.97	046	0	046	4.3W	050	33000M	N/A	N/A	147.1	00:25	00:25		311762	141762
2	MPV/E227003	045X	N 44 02.18	270/050				057	-50C	274	450	768.0	01+35				18691
	.Inserted	110.80	W072 29.39	047	-4	043	15.5W	053	33000M	.77	485	915.1	02:00	02:00		293071	123071
3	YMH/N122105		N 52 01.78	270/050				079	-50C	273	448	915.0	01+52				20539
	.Inserted	250.00	W053 01.04	058	-3	055	22.9W	076	33000M	.77	490	830.1	03:52	03:52		272532	102532
4			N 55 42.70	270/050				097	-50C	272	446	915.0	01+51				18965
	.Inserted		W027 51.58	076	-2	074	16.1W	095	33000M	.77	494	745.1	05:43	05:43		253567	83567
5	LBA/N176008		N 53 43.81	270/050				107	-50C	269	443	915.0	01+52				17924
	.Inserted	402.50	W001 37.40	098	1	098	3.4W	108	33000M	.76	492	660.0	07:34	07:34		235743	65743
6	T/N200003		N 46 51.67	270/050				116	-50C	266	438	915.0	01+54				17048
	.Inserted	440.00	E019 44.94	117	3	120	3.4E	119	33000M	.75	482	575.0	09:28	09:28		218695	48695
7	LTAG/A		N 37 00.13	270/050				126	-50C	261	431	915.0	01+57				16403
	INCIRLIK AB		E035 25.55	131	4	135	4.2E	131	33000M	.74	467	490.0	11:26	11:26		202292	32292

UTANG FORM 200 (COMPUTER GENERATED) C:\PF99\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

KBHM - LTAG
BEST RANGE
33,000 ALTITUDE
152000 FUEL 306,000 GROSS WT
+170 000 OP WT
+ ALLOWS FOR 50,000 lb CARGO OR FUEL TO BE OFFLOADED

08/17/05 18:53 FAX

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+26
Fuel On Board : 21+23
Fuel Reserve : 09+58
Remarks:

Fuel Load: 202000
Fuel Used: 119708
Acft CG: %
Acft Gross WT: 319500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
ADN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP#	NVAD RADDME / REMARKS	TAC / VOR	LAT / LONG	W/V TRK	DCA	TH	VAR	MC / CH	TEMP / ALT	IAS / MACH	TAS / GS	GDST / ACDST	TIME / ACTIME	ETA	ATA	GROSS WEIGHT	FUEL / RMNG
1	KBHM/A		N 33 33.78					058	+14C			5.0	00+02				2500
	BIRMINGHAM IN		W086 45.21	056	0	056	2.2W	058	644M			5.0	00:02	00:00		319500	199500
	.level off		N 35 20.67		270/050			050	-50C	N/A	N/A	142.1	00+23				7738
			W084 42.95	046	0	046	4.3W	050	33000M	N/A	N/A	147.1	00:25	00:25		311762	191762
2	NPV/E227003	045X	N 44 02.19		270/050			057	-50C	274	450	768.0	01+35				18691
	.Inserted	110.80	W072 29.39	047	-4	043	15.5W	053	33000M	.77	485	915.1	02:00	02:00		293071	173071
3	YMH/N122105		N 52 01.79		270/050			079	-50C	273	448	915.0	03+52				20539
	.Inserted	250.00	W053 01.04	058	-3	055	22.9W	076	33000M	.77	490	830.1	03:52	03:52		272532	152532
4			N 55 42.73		270/050			097	-50C	272	446	915.0	03+51				18965
	.Inserted		W027 51.58	076	-2	074	16.1W	095	33000M	.77	494	745.1	05:43	05:43		253567	133567
5	LBA/N176008		N 53 43.81		270/050			107	-50C	269	443	915.0	02+52				17824
	.Inserted	402.50	W001 37.40	098	1	098	3.4W	108	33000M	.76	492	660.0	07:34	07:34		235743	115743
6	T/N200003		N 46 51.87		270/050			116	-50C	266	438	915.0	01+54				17048
	.Inserted	440.00	E019 44.94	117	3	120	3.4E	119	33000M	.75	482	575.0	09:28	09:28		218695	98695
7	LTAG/A		N 37 00.13		270/050			126	-50C	261	431	915.0	01+57				16403
	INCIRLIK AB		E035 25.55	131	4	135	4.2E	131	33000M	.74	467	490.0	11:26	11:26		202292	82292

UTANG FORM 200 (COMPUTER GENERATED) C:\PSPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

KBHM- LTAG
BEST RANGE
33,000 ALTITUDE
202,000 FUEL 319,500 GROSS WT
120,000 OP WT

EMPTY

FSAS Normal Takeoff Inputs

WT/BAL

GLD	2g
GW	283.1 klbs
CG	28% mac

DEGRAD	0%
AFAI	☐

T/O RUNWAY DATA 1/7

Name	KTYS 05		
HHD	50°	RA	8805 ft
GR	0%	VAR GR	☐
RCR	Dry	RSC	0 in/10
OD		OH	

T/O AIR DATA 2/7

OAT	32°C	PA	981 ft
WDS	0°	WDG	0°
VELS	0 kts	VELG	0 kts
INVR°		INVR PA	
HYD	32°C	WARMUP	☐

T/O DATA 3/7

HW BENEFIT	☐	Mode	Normal
FP	30°	CLB	MAX
VROTINC	0 kias		
AC	☐	AI	☐

T/O N1 4/7

Thrust Selection	TRT

FSAS Normal Takeoff Outputs

Miscellaneous — Planned(Dry)

MSG (part 1)	T/O CAUT CR	
MSG (part 2)	ITICAL	
AVG T/O GR	0.00	%
HOT BRAKE SPD	95	kias

T/O N1 4/7

TRT	91.8	%
MCL	---	%
MTN	---	%
MCNDP	---	
CLB GR	6.0	%
T/O N1	91.8	%

T/O DATA 5/7

CFL	8792	ft
CGCAUT		
XW LIM	32	kts
UOD	---	ft
DHT	---	ft
GWM	283179	lbs
GWMDF	R	
S/T	2.0NU	

T/O SPEED 6/7

S1	131	kias
VR	131	kias
VROT	167	kias
VROTDF		
VCO	177	kias
SD	3	kias
VMCA	135	kias
VCRP	131	kias
VNBF	113	kias
VMCG	109	kias
VMCGCAUT		
VMB	153	kias

T/O CLB DATA 7/7

R/C	1050	ft/min
DHT	---	ft
CLEANUP HT	2000	ft
FR 30	187	kias
FR 20	202	kias

Emergency Landing Data

VA 50°	185	kias
VTH	178	kias
FLARE	2357	ft
GROLL	8896	ft
LDG DIS	11253	ft

FSAS Normal Takeoff Inputs

WT/BAL

CLD	2g
GW	290 klbs
CG	28% mac

DEGRAD	0%
AFAI	☐

T/O AIR DATA 2/7

OAT	21°C	PA	981 ft
WDS	0°	WDG	0°
VELS	0 kts	VELG	0 kts
INVR°		INVR PA	
HYD	23°C	WARMUP	☐

T/O RUNWAY DATA 1/7

Name	KTYS 23		
RHD	230°	RA	8605 ft
OR	VAR	VAR GR	☒
RCR	Dry	RSC	0 in/10
OD		OH	

T/O DATA 3/7

HW BENEFIT	☐	Mode	Normal
FP	30°	CLB	MAX
VROTINC	0 kias		
AC	☐	AI	☐

VARIABLE GRADE

LENGTH	9005 ft		
23 ELEV	981 ft	05 ELEV	981 ft
LOC/ELEV			
LOC/ELEV			

T/O N1 4/7

Thrust Selection	TRT

FSAS Normal Takeoff Outputs

Miscellaneous

	Planned(Dry)	
MSG (part 1)	T/O CAUT CR	
MSG (part 2)	ITICAL	
AVG T/O GR	0.00	%
HOT BRAKE SPD	95	kias

T/O N1 4/7

TRT	90.8	%
MCL	---	%
MIN	---	%
MINDF	---	
CLB GR	6.0	%
T/O N1	90.8	%

T/O DATA 5/7

CFL	8764	ft
CGCAUT		
XW LIM	30	kts
TOD	---	ft
DHT	---	ft
GWM	290430	lbs
GWMDF	R	
S/T	2.1NU	

T/O SPEED 6/7

S1	130	kias
VR	131	kias
VROT	169	kias
VROTDF		
VCO	180	kias
SD	3	kias
VMCA	136	kias
VCEF	130	kias
VMEF	113	kias
VMCG	111	kias
VMCGCAUT		
VMB	154	kias

T/O CLB DATA 7/7

R/C	1079	ft/min
DHT	---	ft
CLEANUP HT	2000	ft
FR 30	190	kias
FR 20	205	kias

Emergency Landing Data

VA 50°	187	kias
VTH	180	kias
FLARE	2287	ft
GROLL	9000	ft
LDG DIS	11287	ft

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+23
Fuel On Board : 12+59
Fuel Reserve : 01+36
Remarks:

Fuel Load: 170000
Fuel Used: 99987
Acft CG: %
Acft Gross WT: 287500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP#	NVAD RADDME REMARKS	TAC VOR	LAT LONG	W/V TRK	DCA	TH	VAR	MC CH	TEMP ALT	IAS MACH	TAS GS	CDST ACDST	TIME ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1	KTYS/A MC GHEE TYSON		N 35 48.66 W083 59.64	052	0	052	4.7W	056 056	+13C 981M			5.0 5.0	00+02 00:02	00:00		287500	2500 167500
	.level off		N 37 03.12 W086 01.29	301	0	301	3.6W	305 305	-54C 35000M	N/A N/A	N/A N/A	124.4 129.4	00+20 00:22	00:22		280971	6529 160971
2	RBE/N026027 .Inserted	341.00	N 42 57.40 W099 14.26	300	0	300	6.4E	299 299	-54C 35000M	262 .77	446 446	703.5 832.9	01+35 01:56	01:56		264323	16648 144323
	.descent pt		N 48 09.74 W112 26.97	299	0	299	15.3E	288 288	-54C 35000M	261 .77	445 445	637.4 470.3	01+26 03:22	03:22		250101	14222 130101
3	CTB/R237037 CUT BANK	091X 114.40	N 48 23.81 W113 14.00	294	0	294	15.5E	279 279	-35C 25000M	N/A N/A	N/A N/A	34.4 504.7	00+05 03:27	03:27		249858	243 129858
	.delay	091X 114.40	N 48 23.81 W113 14.00	294	0	294	15.5E	279 279	-35C 25000M	232 .56	338 338	0.0 504.7	04+00 07:27	07:27		214750	35108 94750
	.offload 50000 lbs		N 48 23.81 W113 14.00	294	0	294	15.5E	279 279	-35C 25000M	232 .56	338 338	0.0 504.7	00+00 07:27	07:27		164750	0 44750
	.level off		N 48 14.82 W112 43.77	119	0	119	15.2E	104 104	-52C 35000M	N/A N/A	N/A N/A	22.1 526.8	00-03 07:30	07:30		163857	893 43857
4	RBE/N026027 .Inserted	341.00	N 42 57.40 W099 14.26	119	0	119	6.4E	109 109	-52C 35000M	236 .70	407 407	649.7 176.5	01+36 09:06	09:06		153499	10358 33499
	.descent pt		N 36 44.74 W085 22.89	121	0	121	4.0W	120 120	-52C 35000M	230 .69	398 398	739.3 915.8	01+52 10:57	10:57		142123	11376 22123
5	VXV/R VOLUNTEER	111X 116.40	N 35 54.29 W083 53.68	125	0	125	4.8W	129 129	+5C 5000M	N/A N/A	N/A N/A	87.9 003.8	00+15 11:13	11:13		141013	1110 21013
6	KTYS/A MC GHEE TYSON		N 35 48.66 W083 59.64	221	0	221	4.7W	226 226	+13C 981M			7.4 011.2	00+10 11:23	11:23		140013	1000 20013

UTANG FORM 200 (COMPUTER GENERATED) C:\PFPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

NO WIND
BEST RANGE SPEED & ALT
BEST ENDURANCE SPEED

KTYS → Delay Point 1504.7 NM

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+09
Fuel On Board : 11+36
Fuel Reserve : 00+26
Remarks:

Fuel Load: 120000
Fuel Used: 106623
Acft CG: %
Acft Gross WT: 287500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TPW / REMARKS	NVAD RADOME / TAC / VOR	LAT / LONG	W/V TRK	W/V DCA	W/V TH	W/V VAR	MC / CH	TEMP / ALT	IAS / MACH	TAS / GS	GDST / ACDST	TIME / ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1 KTYS/A NC GHEE TYSON		N 35 48.66 W083 59.64	047	0	047	4.7W	052 052	+13C 981M			5.0 5.0	00+02 00:02	00:00		287500	2500 117500
.level off		N 37 10.26 W082 19.71	048	270/050 0	048	6.5W	054 054	-50C 33000M	N/A N/A	N/A N/A	109.6 114.6	00+17 00:19	00:19		281457	6043 111457
2 XQA/N094011 .Inserted	236.00	N 45 33.83 W069 25.46	049	270/050 -4	045	17.7W	061 057	-50C 33000M	272 .77	447 484	768.4 883.0	01+35 01:55	01:55		264591	16866 94591
3 LA/N108221 .Inserted	373.00	N 52 45.29 W049 44.75	060	270/050 -3	057	22.7W	082 079	-50C 33000M	271 .76	445 488	883.0 766.1	01+49 03:43	03:43		246535	18056 76535
4 .Inserted		N 55 41.64 W025 02.01	078	270/050 -1	077	14.8W	098 097	-50C 33000M	268 .76	441 490	883.0 649.1	01+48 05:32	05:32		229655	16880 59655
5 SBY/N288005 .Inserted	330.00	N 53 20.04 E000 02.10	099	270/050 1	100	2.6W	108 109	-50C 33000M	265 .75	435 485	883.0 532.2	01+49 07:21	07:21		213645	16010 43645
6 ZG/N034018 .Inserted	445.00	N 66 32.16 E020 21.53	118	270/050 3	121	3.5E	116 120	-50C 33000M	260 .74	429 472	883.0 415.2	01+52 09:13	09:13		198252	15390 28252
7 LTAG/A INCIRLIK AB		N 37 00.13 E035 25.55	131	270/050 4	135	4.2E	126 131	-50C 33000M	254 .72	419 456	883.0 298.2	01+56 11:09	11:09		183377	14875 13377

UTANG FORM 200 (COMPUTER GENERATED) C:\PEPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

KTYS - LTAG

BEST RANGE

33,000 ALTITUDE

120,000 FUEL 290,000 GROSS WT

*170,000 OP WT

* ALLOWS FOR 50,000 lb CHGE OF FUEL TO BE OFFLOADED

DATE:	SQDN:	WING:	CREW:	A/C TYPE: KC-135R	A/C#:
PILOT:	CO-PILOT:	NAV:	BOOM:	TCS:	RCS:

FLIGHT INFORMATION

Takeoff Time (Z): 00:00
Land Time (Z):
Sched Duration : 11+09
Fuel On Board : 18+51
Fuel Reserve : 07+42
Remarks:

Fuel Load: 170000
Fuel Used: 106623
Acft CG: %
Acft Gross WT: 287500

AIR REFUELING INFORMATION

A/R Track:
Pri. Freq:
Sec. Freq:
APN 69 BCN:
Remarks:

A/R Altitude:
Off/Onload:
REC/TKR Type:
A/A TACAN:

TP# NVAD RADDME REMARKS	TAC VOR	LAT LONG	W/V TRK	DCA	TH	VAR	MC CH	TEMP ALT	IAS MACH	TAS GS	GDST ACDST	TIME ACTIME	ETA	ATA	GROSS WEIGHT	FUEL RMNG
1 KTYS/A MC GHEE TYSON		N 35 48.66 W083 59.64	045	0	045	4.7W	050 050	+13C 981M			5.0 5.0	00+02 00:02	00:00		287500	2500 167500
.level off		N 37 10.35 W082 19.81	048	270/050 0	048	6.5W	054 054	-50C 33000M	N/A N/A	N/A N/A	109.6 114.6	00+17 00:19	00:19		281457	6043 161457
2 XQA/N094011 .Inserted	236.00	N 45 33.83 W069 25.46	049	270/050 -4	045	17.7W	061 057	-50C 33000M	272 .77	447 484	768.4 883.0	01+35 01:55	01:55		264591	16866 144591
3 LA/N108221 .Inserted	373.00	N 52 45.29 W049 44.75	060	270/050 -3	057	22.7W	082 079	-50C 33000M	271 .76	445 488	883.0 766.1	01+49 03:43	03:43		246535	18056 126535
4 .Inserted		N 55 41.64 W025 02.01	078	270/050 -1	077	14.8W	098 097	-50C 33000M	268 .76	441 490	883.0 649.1	01+48 05:32	05:32		223655	16880 109655
5 SBY/N288005 .Inserted	330.00	N 53 20.04 E000 02.10	099	270/050 1	100	2.6W	108 109	-50C 33000M	265 .75	435 485	883.0 532.2	01+49 07:21	07:21		213645	16010 93645
6 ZG/N034018 .Inserted	445.00	N 46 32.16 E020 21.53	118	270/050 3	121	3.5E	116 120	-50C 33000M	260 .74	428 472	883.0 415.2	01+52 09:13	09:13		198252	15393 78252
7 LTAG/A INCIRLIK AB		N 37 00.13 E035 25.55	131	270/050 4	135	4.2E	126 131	-50C 33000M	254 .72	419 456	883.0 298.2	01+56 11:09	11:09		183377	14875 63377

UTANG FORM 200 (COMPUTER GENERATED) C:\PFPS\data\Routes\LTAG.rte DATE CREATED 17 AUG 05

KTYS - LTAG
BEST RANGE
33,000 ALTITUDE
170,000 LB FUEL
120,000 OP WT
EMPTY

290 000 GROSS WT