

DECLASSIFIED
DAIM-FAR-RR # 19-*mm* DATE: 17 June 1987

CH-47 Units



DEPARTMENT OF THE ARMY
HEADQUARTERS 1ST AVIATION BRIGADE
APO SAN FRANCISCO 96384

AVBAGC-P

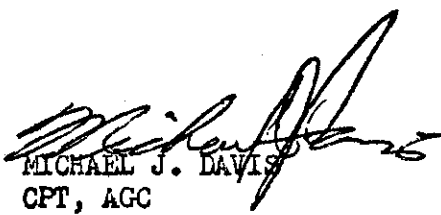
2 OCT 1970

SUBJECT: Heavy Helicopter Lift Requirements

Commanding General
United States Army Vietnam
ATTN: AVHAV
APO San Francisco 96375

1. Reference: USARV message 280658 Sep 70, subject as above (C).
2. This Headquarters does not have a heavy lift helicopter support requirement for the period indicated in Reference 1.

FOR THE COMMANDER:


MICHAEL J. DAVIS
CPT, AGC
Asst AG

A.

Talking Points:

1. XXIV Corps may not require any more HL support.
2. II FFV may not require anymore HL since they are re-evaluating their requirements.
3. Of CH-54 missions in MRI, 60% of those flown could have been flown by CH-47.
4. Of CH-54 missions in MRIII, 78% of those flown could have been flown by CH-47.
5. Sixty (60%) percent of stated requirements of 600 monthly hours in MRI = 360 hours. 600 hours minus 360 hours = 240 hours. The CLSC rates of 47 hours per month X 6 A/C asg in MRI = 282 hours which will provide adequate coverage.
6. Seventy-eight percent (78%) of stated requirements of 270 monthly hours in MRIII = 210 hours. 270 hours minus 210 hours = 60 hours. The CLSC rates of 47 hours per month X 3 A/C asg in MRIII = 141 hours.

273RD HHC PERFORMANCE AUG - SEP 1970

<u>Type Loads</u>	<u>Number</u>	
155 Howitzer	64*	64
2 1/2 Ton Truck	86*	86
Case 450 Dozer	105*	105
D4 Dozer	14	
D5 Dozer	49	
Tank Kit	3*	3
Backhoe	26*	26
Mobile Cranes	2	
APC	13	
Road Grader Section	9*	9
Front Loader	4	
Bridge Sections	6	
TOC	3	
Radar Tower	1	
CONEX	10*	10
Class III	3*	3
Class IV	17*	17
Class V	11*	11
	<u>426</u>	<u>334</u>

*Missions that could have been performed by the CH-47.

The above figure of 334 represents loads in MR III that were carried by the CH-54 that could have been carried by the CH-47. Seventy-eight (78%) percent of all loads could have been carried by the CH-47.

478TH HHC (-) PERFORMANCE July - Sep 1970

<u>TYPE LOAD</u>	<u>NUMBER</u>	
2 1/2 Ton Trucks	35	
Dozers	61	
Graders	12	
Backhoe	16	
155MM Howitzer	127	
MISS	85*	85
Class V	246*	246
Class IV	46*	46
Aircraft	15	
5 Ton Trask	2	
3/4 Ton Truck	4*	4
1/4 Ton Truck	2*	2
105mm Howitzer	12*	12
	<u>663</u>	<u>395</u>

*Missions that could have been performed by the CH-47.

The above figure of 395 represents loads that were carried in MR I by the CH-54 that could have been carried by the CH-47. Sixty percent (60%) of all loads could have been carried by the CH-47.

CH-54 HEAVY LIFT HOURS FLOWN JUL-SEP 70/STATED REQUIREMENTS

	<u>Hours/Month Required</u>	<u>A/C Available</u>	<u>CLSC Rates</u>	<u>A/C</u>	<u>Hours</u>
I FFV	42	0	47	1	42
II FFV(9)	270	3	141	3	129
XXIV(20)	600	6	282	7	318
	<u>912</u>	<u>9</u>	<u>423</u>	<u>11</u>	<u>489</u>

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19 - *Ann* DATE: 17 June 1987

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MDR

280658

SEP 70

AVHAY-CPT FILE *19* LTC AIRMAN/6786/LTC NADBAU /5435/REL AUTH COL TORGERSON/4238

1
NO

OO PP CC

CGUSARV LBN RVN

CG IFFV NHA

Today Start 30 CG IFFV LBN (COURIER)

10 days CG XXIV CORPS DNG

~~CG 1ST AVN BDE LBN (COURIER)~~

Today maybe *yes* CG 1ST AVN BDE LBN (COURIER)

NO CG 34TH GEN SPT GP TSN

INFO: COMUSMACV

DA/ACSPOR-AV/DCSLOG-DAL-ASC

CINCUSARPAC

CG USAMC

CG AVSCOM ST LOUIS MO

CG DMAC CTO

CG USABAAR FT RUCKER ALA

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AVHAY

Subj: (U) Heavy Helicopter Lift Requirements

A. MX 161241Z Sep 70 (C)

AVN, G-3, G-4, C/S, DCS(P&C)

Classified by CG. 1st Avn Bde
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE 3 EXECUTIVE ORDER 11652
AUTOMATICALLY DOWNGRADED AT TWO YEAR
INTERVALS
DECLASSIFIED ON 31 DEC 1976

Coord w/63

COL TORGERSON DAO
~~J.N. HENNINGWAY, BG~~ AVHAY, 6501

C. DAN BOWDOIN, CPT, AGO, 4520

Clearing Officer: _____

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

SEP 70

NO

- possible.

GPA

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FACT SHEET

AVHAV-OPT

1 October 1970

SUBJECT: CH-47 Capability to Carry the 155 Howitzer

PURPOSE: To provide the Aviation Officer with statistical data concerning lift capabilities of the CH-47 aircraft.

FACTS:

<u>MR I</u>	<u>MR II</u>	<u>MR III</u>	<u>MR IV</u>
Americal Div	17th Gp	12th Gp	164th Gp
(B) 132d - 15	(C) 179th 7(C-) 16	(C) 213th 6(C-) 16	(C) 147th 12(C-) 15
(B) 178th - 16	(C) 180th 10(C-) 16	(A) 242d 16	(A&B) 271st 3A
	(A) 196th 17	(A) 205th 17	13B
101st A/B	(A) 243d 16		
(C) A 159th 10(C-) 16		1st Cav	
(C) B 159th 4(C-) 16		(A) A 228th 16	
(C) C 159th 8(C-) 16		(A) B 228th 16	
Of the 48 C models 26		(B) C 228th 16	
are regular C and 22 are C(-)			

Not included in these figures are the 34th Gp which have CH-47's in special projects and various types of inprocessing.

<u>34th Gp</u>	1C
	2A
Special Project	9A to VNAF
" "	11C(-) conversion to C models
Inprocessing	6A
" "	2C

The density altitude restrictions in the MR III and MR IV does not impose the same problems as it does in MR I and MR II. The performance capabilities of the CH-47A with the L7C engines and the CH-47B and CH-47C(-) with the same engines will permit lifting a stripped 155 in the III and IV MR; however with the density altitude in the I and II Corps, the unit that has the responsibility will probably have the capability for limited periods only.

XXIV Corps - Input

Density altitudes are normally 2500' at SL. The gun sites are as high as 7000 feet. The 101st Airborne Division was lifting the 155 with the Super C models, but all other units in XXIV Corps were using the CH-54. Now that the Super C is grounded, the 101st has been given priority of the CH-54. 101st A/B Div states that they

AVHAY-OPT

SUBJECT: CH-47 Capability to Carry the 155 Howitzer

are not able to lift the 155 mm and the D5 Dozer with the CH-47(-)(-). Limiting factors listed are:

1. Type of equipment
2. Density altitude
3. Distance involved

The key to the limiting factors again is the density altitude. I believe the bladder and alternate refueling points could compensate for the distance factor.

Maximum Endurance Chart

P-14-34 CH-47B L7B Engine Standard Day G.Wt 32000-34000

2000' D/A 990 lbs fr 20 KM Radius (TAS 81 K/fuel consumption 1980/hr)
 Res 10 mi 330 lbs + 990 = 1320
 Res 20 mi 660 lbs + 990 = 1050
 Res 30 mi 990 lbs + 990 = 1980

P-14-102 CH-47C (-) L7C Engine Standard Day G.Wt 38000-40000

2000' D/A 1080 lbs fr 20 KM Radius (TAS 83 K/fuel consumption 2198/hr)
 Res 10 mi 370 lbs + 1080 = 1450
 Res 20 mi 740 lbs + 1080 = 1820
 Res 30 mi 1100 lbs + 1080 = 2180

Example: Engine L7C CH-47C (-)

Empty Wt	20213	Alternate allowable wt	
Fixed Load	739		
Combat Equip	2242		40000
Fuel	1820 + 20 mi res		25014
Gross Wt	25014	Pay Load	14968 lbs

Payload can be increased by reducing the combat load and consider lifting the D-5 dozer and 155 mm gun on special missions. It may be that an aircraft can be configured for the heavy lift role only.

The attached Performance Capabilities is accurate for planning purposes. (TAB A)

RECOMMENDATIONS: a. CH-47 units that have the capability to perform the heavy lift mission should consider performing this mission on a continuing basis.

b. That the delegation of requiring units to lift 155 be left to the discretion of the commander who can determine density altitude and elevation requirements at the time.

AVHAV-OPT

SUBJECT: CH-47 Capability to Carry the 155 Howitzer

LIST OF TABS:

A - Performance Capabilities

SUBMITTED BY:

Staff Section: Aviation OPT

Project Officer: Shallcross, LTC, 5435

AVHAV-OPT

CH-47 Capability to Carry the 155 Howitzer

1. **PROBLEM:** To determine the capability to lift the 155 mm Howitzer in the various MR.

2. **DISCUSSION:** a. The 213th ASHC Phu Loi is lifting the 155 mm How on a continuing basis using not only the CH-47C but also the CH-47C(-) with the L7C engine. There is no SOP in the unit for lifting the 155 and they do not configure the helicopter to compensate for the extra weight. The only additional precautions taken are to defuel or not refuel when a 155 mission is received. When lifting with the CH-47C model there is no defueling required. The 205 ASHC using CH-47A with the L7C engines is also lifting the 155 mm Howitzer on a routine basis.

b. With the reconfiguring of the CH-47C models with the L7C engine, the payload capability of CH-47C(-)(-) is less than the CH-47C(-) by approximately 165 pounds. There are no handbooks nor guiding publications to follow and the 165 lbs difference is due to the basic weight of the CH-47C being 165 lbs heavier than the CH-47C(-). Pilots will have to subtract that amount from the listed payload in the CH-47C(-).

c. The 147 ASHC lifted the first 155 mm tactically in Vietnam during June 1967, however, that unit stripped the CH-47B models of all the extraneous equipment, armor plate, machine guns and gunner. They flew with a crew of three and initially lifted a refueling bladder into the LZ. The LZ was 22 K from the supported unit and the stripped CH-47 carrying the 155 would refuel in the LZ, fly to the PZ (Bearcat) and return to the LZ and repeat the procedure. The 155 can be stripped from 12,900 lbs to 12,200 lbs without disassembling the major components, i.e., tube, trail, wheels, etc. From time of pickup until the first round was on target was 12 minutes. A note of interest is there was less torque pulled on the 155 load than on the normal 105 mm lifts.

d. The fact that units previously and presently were moving the 155 with CH-47B and C(-) helicopter demonstrates the feasibility of establishing a USARV policy on this; however, there are density altitude problems in the different Military Regions that at times may preclude the use of the CH-47 for this mission. The 213th ASHC also has transported the bulldozer. The method used is the same as the CH-54 technique in that the tracks and tractor are lifted in two separate loads. The capability to lift loads such as the 155 and dozer is dependent on the density altitude regardless of which MR requires the mission.

e. The following is an allocation by MR of the units and types of CH-47 helicopters assigned. The parenthesis indicates series, i.e., (B) = CH-47B.

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SUBJECT: GH-47 Capability to Carry the 155 Howitzer

<u>MR I</u>	<u>MR II</u>	<u>MR III</u>	<u>MR IV</u>
Americal Div	17th Gp	12th Gp	164th Gp
(B) 132d - 15	(C) 179th 7(C-) 16	(C) 213th 6(C-) 16	(C) 147th 12(C-) 15
(B) 178th - 16	(C) 180th 10(C-) 16	(A) 242d 16	(A&B) 271st 3A
	(A) 196th 17	(A) 205th 17	13B
101st A/B	(A) 243d 16		
(C) A 159th 10(C-) 16		1st Cav	
(C) B 159th 4(C-) 16		(A) A 228th 16	
(C) C 159th 8(C-) 16		(A) B 228th 16	
Of the 48 C models 26		(B) C 228th 16	
are regular C and 22			
are C(-)			

Not included in these figures are the 34th Gp which have CH-47's in special projects and various types of inprocessing.

<u>34th Gp</u>	1C
	2A
Special Project	9A to VNAF
" "	11C(-) conversion to C models
Inprocessing	6A
" "	2C

The density altitude restrictions in the MR III and MR IV does not impose the same problems as it does in MR I and MR II. The performance capabilities of the CH-47A with the L7C engines and the CH-47B and CH-47C(-) with the same engines will permit lifting a stripped 155 in the III and IV MR; however with the density altitude in the I and II Corps, the unit that has the responsibility will probably have the capability for limited periods only.

XXIV CORPS - Input

Density altitudes are normally 2500' at SL. The gun sites are as high as 7000 feet. The 101st Airborne Division was lifting the 155 with the Super C models, but all other units in XXIV Corps were using the CH-54. Now that the Super C is grounded, the 101st has been given priority of the CH-54. Additional input from the XXIV will be forwarded as it is received.

Fuel requirements for CH-47 at DA 2000' for a 20 NM radius of action mission.

L7C Engine

200' ** 992 lbs fuel for 20 NM radius mission
 10 mi res - 992 + 330 = 1322 lbs
 20 mi res - 992 + 660 = 1652 lbs
 30 mi res - 992 + 990 = 1982 lbs

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SUBJECT: CH-47 Capability to Carry the 155 Howitzer

L7B Engine

2000' - 750 lbs fuel for 20 NM radius mission
 10 mi res - 750 + 455 = 1205 lbs
 10 mi res - 750 + 910 = 1660 lbs
 10 mi res - 750 + 1365 = 2115 lbs

Example: Engine L7C CH-47C(-)

Empty Wt	20213	
Fixed Load	739	
Combat Equip	2223	
Fuel	1652 + 20 mi res	
Gross Wt	24846 lbs	Alternate allowable wt

	40000
	24846
Pay Load	15154 lbs

Payload can be increased by reducing the combat load and consider lifting the D-5 dozer and 155mm gun on special missions. It may be that an aircraft can be configured for the heavy lift roll only.

The attached Performance Capabilities is accurate for planning purposes.

3. RECOMMENDATIONS: a. CH-47 units that have the capability to perform the heavy lift mission should consider performing this mission on a continuing basis.

b. That the delegation of requiring units to lift 155 be left to the discretion of the lifting commander who can determine density altitude and elevation requirements at the time.

LIST OF TABS

A - Performance Capabilities

GEORGE W. SHALLCROSS
 LTC, AR
 Operations Officer

AVHAV-OPT

9 October 1970

MEMORANDUM FOR RECORD

SUBJECT: CH-54 Requirements in MRI and MR II

1. Discussed heavy lift requirements with LTC Pattellos, I FFV Avn Officer. He stated that the requirements in MR II are very low and can be handled on a mission basis. The figure of 42 hours per month is from subordinate unit input and are not necessarily required.
2. Discussed heavy lift requirements with LTC Stapleton, XXIV Corps Avn Officer. He states that a message is coming in from XXIV Corps stating that they request the 478th HHC be brought up to full strength and put OPCON to XXIV Corps.


JIM B. AIKMAN
LTC, CE
Chief, O & T Branch

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OPT

PTTCZYUW RUMUMQA3357 2131220-CCCC--RUMOAVA,

ZNY CCCCC

P 011015Z AUG 71

FM CG USARMY MR 2 NHA

TO RUMOAVA/CG USARV LBN

BT

CONFIDENTIAL B2279

AVFA-AV

SUBJECT: CH-54 HEAVY LIFT NEEDS (U)

A, CG USARV MSG DTD 210916Z JUL 71 (C)

1, (C) REFERENCE ALPHA REQUESTED PROJECTION OF ANTICIPATED CH-54 USAGE REQUIREMENTS IN MR2 AN RE-EXAMINATION OF MISSIONS TO PERMIT MISSION COMPLETION BY ALTERNATE MODES OF MOVEMENT,

2, (C) DURING THE PAST THREE MONTHS, CH-54'S HAVE BEEN REQUIRED FOR TWO MISSIONS: AIRLIFT OF ONE MINI-DOZER IN CONNECTION WITH FIRE SUPPORT BASE CONSTRUCTION, AND AIRLIFT OF ONE 2 1/2 TON TRUCK TO AN ISOLATED BORDER CAMP,

A, MINIDOZERS CAN BE STRIPPED DOWN TO PERMIT LIFT BY CH-47, INCASES INVOLVING LIFT OF THE EQUIPMENT IN CONNECTION WITH A TACTICAL OPERATION, CH-54 PERMITS AIRLIFT WITHOU EXTENSIVE DISMANTLING AND REASSEMBLY,

Classified by CG. 1st Avn Bde
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652
AUTOMATICALLY DOWNGRADED AT TWO YEAR
INTERVALS
DECLASSIFIED ON 31 DEC 1977

PAGE 2 RUMUMQA3357 CONFIDENTIAL

B, IN MOST CASE, CH-47 CAN MEET THE REQUIREMENTS OF ISOLATED

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BORDER CAMPS;

C. OPERATIONS WHICH INVOLVE AIRLIFT OF 155MM ARTILLERY PIECES
NECESSITATE CH-54 CAPABILITY;

3. (C) ANTICIPATED REQUIREMENTS FOR CH-54 OPERATIONS IN MR 2 ARE
INFREQUENT AND INVOLVE ONLY THESE SPECIAL OPERATIONS DESCRIBED
ABOVE, LOSS OR REDUCTION OF CH-54 ASSETS WOULD NOT SUBSTANTIALLY
IMPACT ON OPERATIONS IN MR2.

GP -4

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#3357

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CH-54 USAGE DATA

1. (a) Information received from the 273d HHC breaks down missions flown since arriving in Vietnam as follows:

Ammunition	58.5%
Engineer equipment	14.6%
Artillery	14.8%
Vehicles	1.6%
POL	0.3%
Aircraft recovery	1.2%
Miscellaneous	9.0%

b. A further review of a 60 day period of 273d HHC activities indicates the following specific loads carried:

Type	Max Non-divisible Wt.	Freq
155 How	12,200	64 ✓
2½ ton truck	14,000	86 ✓
Case 450 bulldozer	^{13,070} 10,500	105
D-4 bulldozer	15,800	14 ×
D-5 bulldozer	16,500	49 ×
Tank kit	8,000	3
Back hoe	10,500	26 ✓
Mobile ^{Crane} Crane	N/A	2
APC	16,800	13 ×
Road Grader Section	12,000	9 ✓
Front Loader	12,500	4 ✓
Bridge Section	N/A	6 ✓
Log	N/A	<u>45</u> ✓
		426

TAB B

2. A CH-47B, utilizing a crew of three, reducing combat equipment carried (guns, ammo, Hyd Fluid, C rations, etc.) can conduct a 20 NM radius mission with 20 minute fuel reserve carrying the following maximum payload:

Sea Level/Standard day -- 16,000 to 16,500 lbs

2000'/95° conditions -- 12,400 to 13,000 lbs

b. Informal coordination with two ASHC units located in III MR indicate lifting of the 155 Howitzer by CH-47's is accomplished on a routine basis.

c. Comparing the lift capability outlined in para 2 above against the specific loads indicated in para 1b, indicates ^{the} CH-47 could have performed the majority of the missions, with the ~~exception of D-4, D-5 bulldozer and AIC lifts.~~

d. The CH-54's in III MR are used to perform many medium lift missions. The most effective means to preclude recurrence is by command emphasis.

DEPARTMENT OF THE ARMY
273d AVIATION COMPANY (Hvy H&L)
222d AVIATION BATTALION (COMBAT)
APO San Francisco 96384

1 October 1970

SUBJECT: Loads for August-September 1970

The following loads were carried by this unit during the period 1 August - 30 September 1970.

155 Howitzers-----	64
2 1/2 Ton Trucks-----	86 ?
Case 450 Bulldozers-----	105
D-4 Bulldozers-----	14
D-5 Bulldozers-----	49
Tank Kit-----	3
Backhoe-----	26
Mobile Cranes-----	2
A-Cav/APC-----	13
Road Grader Sections-----	9
Front Loader-----	4
Bridge Sections-----	6
TOC-----	3
Radar Tower-----	1
Conex-----	10
Class III-----	3
Class IV-----	17
Class V-----	11

George S. Gagnon
GEORGE S. GAGNON
CW4, AV
Operations Officer

*MTOE 01-259G
USARPAC 1/70
NIC: NDSNAA

SPACES REQUIRED FOR A C6(-)

MODIFICATION TABLE OF
ORGANIZATION AND EQUIPMENT
NO. 01-259G PAC 1.70

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D. C., 1 February 1970

AVIATION HEAVY HELICOPTER COMPANY

Designation: 273d Aviation Company (Heavy Helicopter)
355th Aviation Company (Heavy Helicopter)
478th Aviation Company (Heavy Helicopter)

Section		Page
I. General:		
	Organization	1
	Equipment	1
II. Organization (Personnel):		
	Distribution	2
	Recapitulation	2
	Remarks	2
III. Equipment:		
	Distribution	2
	Recapitulation	NA
	Remarks	

SECTION I

GENERAL

ORGANIZATION

No change.

EQUIPMENT

No change.

*This MTOE effective on date announced in command general orders. This MTOE supersedes MTOE 01-259G, PAC 1/69, dated 20 February 1969.

DECLASSIFIED

DAIM-FAR-RR. #

19-*enn*

DATE:

17 June 1987

WD8NAA

DESCRIPTION	GRADE	MOS	PA	ST	WORTH	LESS	SIS	PT
01 CO-FC								
02 FIRST SGT	E8	67Z5Q	NC	1	0			
03 MOTOR SGT	E6	63C4Q	NC	1	0			
06 FIRST COOK	E5	94B2Q		2	0			
07 COMPANY CLERK	E5	71H2Q		1	0			
09 POWERMAN	E4	52B3Q		3	0			
11 WVEH MECH	E4	63E2Q		3	0			
12 WATCHER OPER	E3	63B2Q		2	0			
14 POWERMAN HLPR	E3	52A1Q		0	0			
17 EXECUTIVE OFF	03	01983	NO	1	0			
18 PROPERTY BOOK OFF	W0	761A0		1	0			
19 SR VEH PRMN	E5	63C2Q		1	0			
20 REPAIR PARTS CLERK	E4	76T2Q		1	0			
21 RECORDS CLERK	E4	71B2Q		1	0			
22 SUPPLY CLERK	E3	76A1Q		1	0			
23 SR POWERMAN	E5	52B3Q		1	0			
				29	0			
04 FLIGHT OP SEC								
05 OPERATOR PRMN	E5	26D2Q		0	0			
06 SR AIR TRAFFIC CON OP	E5	93H2Q		0	0			
07 REPAIR TRAFFIC CON OP	E4	93H2Q		0	0			
08 LTC OPER HLPR	E3	93H2Q		0	0			
09 FLIGHT OP ASST	E3	71P2Q		2	0			
				7	0			
06 NAVY HELICOPT								
07 HELICOPTER PILOT	W0	662DQ		12	0			
08 FLIGHT ENGR	E6	67X2F		9	0			
				36	0			
01 BATT BATT HQ								
02 PLATOON CH	03	64821	IC	1	0			
03 ACFT MAINT TECH	W0	671CQ		2	0			
04 PLATOON SGT	E7	67Z5Q		1	0			
05 TECHNICAL INSP	E6	67X3Q		4	0			
06 AVIONICS EQ MECH	E4	35K2Q		0	0			
07 REPAIR REPORTS CLK	E4	71T2Q		0	0			
08 REPAIR PARTS CLK	E4	76T2Q		1	0			
09 REPAIR PARTS SR	E4	76P2Q		1	0			
10 SUPPLY CLERK	E3	76A1Q		0	0			

- 12

DECLASSIFIED

DAIM-FAR-RR #

19-*enn* DATE: 17 June 1987

PERSONNEL		GRADE		NOB		BR		STRENGTH LEVELS		REMARKS	
1	2	3	4	5	6	7	8	9	10	11	12
01	HELI REPAIR FRMN	E7	67Z50	NC	1	0					
					14	0					
01	MAINT SUPV	E6	67X40	NC	3	0					
02	SP HELI RPMN	E5	67X20		18	0					
03	HELI RPMN	E4	67X20		18	0					
					45	0					
02	ALLIED SHOP SEC										
01	ACFT MAINT TECH	WO	671C0		1	0					
02	MAINT SUPV	E7	67X40	NC	1	0					
03	AVIONICS FLIGHT TON EQ	E5	35N20		2	0					
04	MACHINIST	E5	44E20		1	0					
05	SR AIRFRAME RPMN	E5	68G20		2	0					
06	SR AVIONICS MECH	E5	35K20		2	0					
07	SR ACFT FLEC	E5	68F20		1	0					
08	SR ACFT TURBINE ENG	E5	68B20		2	0					
09	SR ACFT HYD RPMN	E5	68H20		1	0					
10	SR ACFT POWERTRAIN	E5	68D20		1	0					
11	SR ACFT ROTOR RPMN	E5	68E20		1	0					
12	ACFT FLEC	E4	68F20		2	0					
13	AIRFRAME RPMN	E4	68G20		2	0					
14	AVIONICS MECH	E4	35K20		2	0					
15	ACFT TURBINE ENG RPMN	E4	68B20		2	0					
16	REPORTS CLERK	E4	71T20		1	0					
17	SR ACFT RPMN	E4	68H20		2	0					
18	SR ACFT SUPERMAN SR	E4	68D20		1	0					
19	SR ACFT RPMN	E4	68E20		1	0					
20	SR ACFT REPAIR APPR	E3	68A10		1	0					
					29	0					
01	ACFT SUPPLY										
01	REPAIR PARTS SUPV	E5	76T40	NC	1	0					
02	REPAIR PARTS ST	E5	76T20		2	0					
03	REPAIR PARTS ST	E4	76T20		4	0					
04	REPAIR PARTS ST	E4	76U20		1	0					
					8	0					
RECAPITULATION											
OFFICERS					17	0					
WARRANT OFFICERS					17	0					
ENLISTED					153	0					
AGGREGATE					187	0					
					- 21						
					160						