FILE COPY Part II

Releasable

#61

COMMANDER JCS JOINT
CONTINGENCY TASK GROUP

REPORT ON

THE SON TAY
PRISONER OF WAR
RESCUE OPERATION

PART 2

SECURITY INSTRUCTIONS

1. This report is classified to protect information revealing operational capabilities of US military forces. Information contained herein will be disseminated only to those agencies and personnel whose official duties specifically require access to the report.

2. The information contained in this document is disseminated on a "SPECIAL HANDLING REQUIRED - NOT RELEASABLE TO FOREIGN NATIONALS" basis.

3. This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, USC, Sections 793 and 794. The transmission or revelation of information contained herein, in any manner, to an unauthorized person is prohibited by law.

4. Reproduction of this document in whole or in part without the permission of the Joint Chiefs of Staff, Deputy Director J-3, SACSA, is prohibited.

Declassified

FOREWORD

The complete report on the Son Tay Prisoner of War Rescue Operation is structured in three parts. Part I is a condensed, chronological narrative report on the operation from inception to completion. Part III is a compilation of extensive raw data such as verbatim text of communications recorded during the operation, debriefings, flight plans, charts, and other similar information. Part III exists in only one copy, and the voluminous data must be carefully researched and interpreted to be of value.

Part II includes expanded reports on various facets of the operation which are considered to be of major significance. Part II is designed to provide more extensive information to those individuals or agencies having intelligence or operational requirements for this detailed information.

TABLE OF CONTENTS

AFTER ACTION REPORT

SUPPLEMENTAL INFORMATION

PART II

	PAGE
Security Instructions	i
Foreword	ii
TABLE OF CONTENTS	iii-iv
SUPPLEMENTAL INFORMATION	
SECTION A - PERSONNEL ADMINISTRATION	A-1 thru A-19
SECTION B - CONDUCTG OPERATIONAL PLAN (Attached Separately)	
SECTION C - INTELLIGENCE	
1. General	C-1 thru C-18
2. Special Intelligence Annex (Attached Separately)	
SECTION D - PLANNING (Medical)	D-1 thru D-4
SECTION E - TRAINING	
1. Ground Forces	E-1 thru E-48
2. Air Force Training	E-49 thru E-64
SECTION F - (NOT USED)	
SECTION G - THEATER COORDINATION	G-1 thru G-5
SECTION H - DEPLOYMENT PLANNING (US Army)	H-1 thru H-[illegible]
SECTION I - EMPLOYMENT	
1. US Navy Operations	I-1 thru I-12
2. Task Group Navigation	I-13 thru I-20
3. US Army Operations	I-21 thru I-35
SECTION J - COMMAND AND CONTROL	
1. Tactical Air Control [illegible]	J-1 thru J-3
2. Airborne Radar Platform	J-4 thru J-5

3. Radio-Relay Aircraft J-5 thru J-6

4. Airborne Platform J-6

5. Mission Control Messages J-6 thru J-7

6. Pertinent Activity Report Messages J-7 thru J-8

SECTION K - (NOT USED)

SECTION L - (NOT USED)

SECTION M - SECURITY

1. Planning M-1

2. Training M-2 thru M-4

3. Theater Coordination M-5

4. Deployment M-5 thru M-6

5. Employment M-7

6. Redeployment M-7

7. Post Operational Activities M-7

PART II

SECTION A PERSONNEL AND ADMINISTRATION

1. The following attachments list project personnel by duty functions:

Attachment 1	Feasibility Study Group Convened by SACSA 10 June 1970
Attachment 2	Planning Group Convened by SACSA 8 August 1970
Attachment 3	Administrative Support/Augmentation
Attachment 4	C-130 Aircraft
Attachment 5	HH-3/HH-53 Aircraft
Attachment 6	A-1/UH-1 Aircraft
Attachment 7	Army Support Group
Attachment 8	Army Command Group
Attachment 9	Army Assault Group
Attachment 10	Other Army Support Personnel
Attachment 11	F-105 Aircraft
Attachment 12	F-4 Aircraft
Attachment 13	Maintenance
Attachment 14	Security Police/Munitions

2. Security Instructions. The composite listing of personnel is CONFIDENTIAL. Individual names are UNCLASSIFIED.

FEASIBILITY STUDY GROUP CONVENED BY SACSA 10 JUNE 1970

NAME	RANK	SERVICE	ORGANIZATION
FRISBIE, NORMAN H.	Col	USAF	Hq USAF
NORMAN, WILLIAM C.	COL	USA	SACSA
BRITTON, WARNER A.	Lt Col	USAF	ARRTC
GRIMES, KEITH R.	Lt Col	USAF	Air Univ
MINOR, THOMAS F.	LTC	USA	DCSOPS
ROPKA, LAWRENCE, JR.	Lt Col	USAF	Hq USAF
ANDRAITIS, ARTHUR A.	Maj	USAF	Hq USAF
MORRIS, BOYD F.	MAJ	USA	USAJFKCEN, Ft Bragg, NC
GRABOWSKY, THEODORE A.	LT	USN	CNO
JACOBS, JAMES A.	Capt	USAF	DIA
KNOPS, JOHN H.	Capt	USAF	Hq USAF
BRINSON, JAMES A.	1/LT	USMC	DIA
DAVIS, DONALD M.	SGM	USA	6th SFGA, Ft Bragg, NC
HARLEY, FRANCES L.	GS-8	DA	SACSA
STROSNIDER, BARBARA L.	GS-6	DAF	Hq USAF

Atch 1

PLANNING GROUP CONVENED BY SACSA 8 AUGUST 1970

NAME	RANK	SERVICE	ORGANIZATION
MANOR, LEROY J.	Brig Gen	USAF	USAFSOF
SIMONS, ARTHUR D.	COL	USA	Hq XVIII Abn Corps
FRISBIE, NORMAN H.	Col	USAF	Hq USAF
CAMPBELL, WILLIAM M.	Capt	USN	CNO
HERSHEY, CLAIR R.	Lt Cmdr	USN	CNO
BAILEY, JAMES V.	LTC	USA	Hq DA AC/S COMELEC
CATALDO, JOSEPH R.	LTC	USA	Hq DA SG
GRIMES, KEITH R.	Lt Col	USAF	Air Univ
KRALJEV, BENJAMIN N., JR.	Lt Col	USAF	Hq USAF
PESHKIN, RICHARD A.	Lt Col	USAF	Hq USAF
ROPKA, LAWRENCE JR.	Lt Col	USAF	Hq USAF
SYDNOR, ELLIOTT P.	LTC	USA	USAIS, Ft Benning, GA
WILLETT, HOMER	Lt Col	USAF	Hq USAF
ANDRAITIS, ARTHUR A.	Maj	USAF	Hq USAF
BEYEA, RICHARD S., JR.	Maj	USAF	Hq USAF
MACOMBER, THOMAS E.	Maj	USAF	Hq USAF
MORRIS, BOYD F.	MAJ	USA	USAJFKCEN, Ft Bragg, NC
MORRIS, JAMES H.	MAJ	USA	7th SFGA, Ft Bragg, NC
NEIMAN, MAX E.	MAJ	USA	USAINTC/USAFAC
JACOBS, JAMES A.	Capt	USAF	DIA
KNOPS, JOHN H.	Capt	USAF	Hq USAF
BRINSON, JAMES A.	1/LT	USMC	DIA
DAVIS, DONALD M.	SGM	USA	6th SFGA, Ft Bragg, NC
GANN, WILLIAM S.	MSG	USA	6th SFGA, Ft Bragg, NC
SHERROD, JESSE E.	SFC	USA	6th SFGA, Ft Bragg, NC
HARLEY, FRANCES L.	GS-8	DA	SACSA
STROSNIDER, BARBARA L.	GS-6	DAF	Hq USAF

ADMINISTRATIVE SUPPORT/AUGMENTATION

NAME	RANK	SERVICE	ORGANIZATION
HARRIS, JOHN S.	Capt	USN	DIA
RICE, FRANKLIN C.	Col	USAF	NMCC
KENNEDY, JOHN E.	Lt Col	USAF	PDAF
HALLMAN, HARVEY D.	Maj	USAF	USAFSOF
VOGEL, FRANK C.	Maj	USAF	Hq USAF
BATSELL, MICHAEL L.	1/LT	USAF	USAFSOF
BABER, BILLY B.	MSGT	USAF	USAFSOF
DOWNING, LARRY	DM 1	USN	OJCS
GRAVES, STANLEY G.	SSGT	USA	DIA
MARTIN, JOHN J.	SSGT	USAF	USAFSOF
RUSSELL, ELNEITA S.	GS-8	USAF	USAFSOF

C-130 AIRCRAFT

CHERRY 1

NAME	RANK	SERVICE	ORGANIZATION
FRANKLIN, IRL L.	MAJ	USAF	7 SOS
MOSLEY, THOMAS L.	MAJ	USAF	7 SOS
CUSTARD, RANDAL D.	CAPT	USAF	7 SOS
ECKHART, THOMAS K.	CAPT	USAF	7 SOS
GUENON, WILLIAM A., JR.	CAPT	USAF	7 SOS
McKENZIE, JAMES F., JR.	CAPT	USAF	7 SOS
STILES, THOMAS L.	CAPT	USAF	7 SOS
TOLMAN, LESLIE G.	MSG	USAF	7 SOS
KENNEDY, WILLIAM A.	TSG	USAF	7 SOS
LIGHTLE, KENNETH C.	TSG	USAF	7 SOS
SHEPARD, JAMES M.	TSG	USAF	7 SOS
PARKS, EARL D.	SSG	USAF	7 SOS
*RENNER, ROBERT L.	SSG	USAF	7 SOS

CHERRY 2

BLOSCH, ALBERT P.	LTC	USAF	Det 2, 1SOWg
*CLARK, CECIL M.	LTC	USAF	Det 2, 1SOWg
GARGUS, JOHN	MAJ	USAF	Det 2, 1SOWg
PANNILL, HARRY L.	MAJ	USAF	Det 2, 1SOWg
CONNAUGHTON, JOHN M.	CAPT	USAF	Det 2, 1SOWg
*JONES, RONALD L.	CAPT	USAF	Det 2, 1SOWg
KENDER, DAVID M.	CAPT	USAF	Det 2, 1SOWg
MAZUREK, NORMAN C.	CAPT	USAF	Det 2, 1SOWg
STRIPLING, WILLIAM D.	CAPT	USAF	Det 2, 1SOWg
ELLISTON, BILLY J.	TSG	USAF	Det 2, 1SOWg
*POTTS, FAILUS	TSG	USAF	Det 2, 1SOWg

* Alternates who did not fly

NAME	RANK	SERVICE	ORGANIZATION
RIGGS, JIMMIE O.	TSG	USAF	Det 2, 1SOWg
STIERWALT, PAUL E.	TSG	USAF	Det 2, 1SOWg
*BROWN, WILLIAM T.	SSG	USAF	Det 2, 1SOWg
CRINER, DALLAS R.	TSG	USAF	Det 2, 1SOWg
GIBSON, MELVIN B. D.	SSG	USAF	Det 2, 1SOWg

HH-3 AIRCRAFT

BANANA 1

NAME	RANK	SERVICE	ORGANIZATION
ZEHNDER, HERBERT R.	LtCol	USAF	ARRTC
KALEN, HERBERT D.	Maj	USAF	ARRTC
*VAUGHN, DAVID E.	Maj	USAF	37 ARRSq
WRIGHT, LEROY M.	TSGT	USAF	ARRTC

* Alternate who did not fly

HH-53 AIRCRAFT

APPLE 1

BRITTON, WARNER A.	LtCol	USAF	ARRTC
MONTREM, ALFRED C.	Maj	USAF	ARRTC
HARVEY, HAROLD W.	MSGT	USAF	ARRTC
TASKER, MAURICE F.	MSGT	USAF	ARRTC
HOBERG, JON K.	SSGT	USAF	40 ARRSq

APPLE 2

ALLISON, JOHN V.	LtCol	USAF	ARRTC
STRAYER, JAY M.	Maj	USAF	40 ARRSq
LESTER, WILLIAM E.	TSGT	USAF	ARRTC
MONTGOMERY, CHARLIE J.	TSGT	USAF	ARRTC
McCOMB, RANDY S.	SSGT	USAF	40 ARRSq

APPLE 3

DONOHUE, FREDERIC M.	Maj	USAF	ARRTC
WALDRON, THOMAS R.	Capt	USAF	ARRTC
HODGES, ARON P.	SSGT	USAF	ARRTC
ROGERS, JAMES J.	SSGT	USAF	ARRTC
[illegible], ANGUS W., III	SSGT	USAF	ARRTC

APPLE 4

NAME	RANK	SERVICE	ORGANIZATION
BROWN, ROYAL C.	LtCol	USAF	37 ARRSq
DREIBELIS, ROY R.	Maj	USAF	37 ARRSq
WELLINGTON, LAWRENCE	TSGT	USAF	ARRTC
LABARRE, DONALD	SSGT	USAF	ARRTC
FISK, WAYNE L.	SSGT	USAF	40 ARRSq

APPLE 5

MURPHY, KENNETH D.	Maj	USAF	703 SOSq
McGEORGE, WILLIAM M.	Capt	USAF	40 ARRSq
McLEOD, DAVID F.	TSGT	USAF	ARRTC
GALDE, DANIEL E.	SSGT	USAF	ARRTC
ELDRIDGE, JOHN J.	SSGT	USAF	40 ARRSq

HC-130P AIRCRAFT

LIME 01

KORNITZER, WILLIAM J., JR.	Maj	USAF	ARRTC

A-1 AIRCRAFT

PEACH 1

NAME	RANK	SERVICE	ORGANIZATION
RHEIN, EDWIN J., JR.	MAJ	USAF	1SOWg
WARESH, JOHN C.	MAJ	USAF	56SOWg

PEACH 2

GOCHNAUER, JAMES R.	MAJ	USAF	1SOWg
SENKO, ROBERT M.	CAPT	USAF	56SOWg

PEACH 3

SKEELS, RICHARD S.	MAJ	USAF	1SOWg
PAINE, JAMES C.	LT	USAF	56SOWg

PEACH 4

BUNN, EUSTACE M.	MAJ	USAF	1SOWg
SKELTON, ROBERT H.	CAPT	USAF	56SOWg

PEACH 5

SQUIRES, JOHN C.	MAJ	USAF	1SOWg
SUTTON, WILLIAM R.	CAPT	USAF	56SOWg

UH-1 AIRCRAFT

WILLIAMS, GEORGE W.	1/LT	USA	6 SF Gp
WARD, JOHN J.	CW-2	USA	6 SF Gp
EXLEY, RONALD J.	CW-2	USA	6 SF Gp
KEELE, JACKIE H.	CW-2	USA	6 SF Gp
BOOTS, LARRY C.	SP/6	USA	6 SF Gp
WOOD, ALAN H.	SP/4	USA	82 Abn Div

ARMY SUPPORT GROUP

NAME	RANK	SERVICE	ORGANIZATION
SIMONS, ARTHUR D.	COL	USA	Hq XVIII Abn Corps
NELSON, ERIC J.	CPT	USA	Co B, 7th SFG
ROUSE, GLENN R.	CPT	USA	HHC, 2d Bn USAIMA
WALTHER, UDO H.	CPT	USA	Co D, 6th SFG
BLEACHER, EARL	SFC	USA	2d Bn, USIMA
CARLSON, LEROY N.	SFC	USA	Co C, 7th SFG
JANOVENKO, JOHN	SFC	USA	Co C, 6th SFG
JOPLIN, JACK G.	SFC	USA	HHC, 6th SFG
JURICH, DANIEL	SFC	USA	Co B, 7th SFG
LAWHON, DAVID A. JR	SFC	USA	Co C, 7th SFG
SUAREZ, SALVADOR M.	SFC	USA	Co B, 6th SFG
TAAPKEN, DONALD E.	SFC	USA	Co C, 6th SFGA
VALENTINE, RICHARD W.	SFC	USA	Co B, 7th SFG
MILLER, WALTER L.	SSG	USA	Sig Co, 6th SFG
NELSON, ROBERT L.	SSG	USA	Co B, 6th SFG
NICKERSON, DAVID S.	SSG	USA	Sig Co, 6th SFG
POWELL, THOMAS E.	SSG	USA	Co D, 7th SFG
RODRIQUEZ, JOHN E.	SSG	USA	Co C, 6th SFG
KEEL, GARY D.	SGT	USA	Co C, 6th SFG
MEDENSKI, KEITH R.	SGT	USA	Co B, 6th SFG
ROE, FRANKLIN D.	SGT	USA	Co B, 6th SFG
THOMAS, MARSHALL A.	SGT	USA	Co D, 6th SFG

ARMY COMMAND GROUP (SECURITY)

NAME	RANK	SERVICE	ORGANIZATION
SYDNOR, ELLIOTT P.	LTC	USA	USAIS, Det #1
CATALDO, JOSEPH R.	LTC	USA	Surgeon General, Hq DA
TURNER, DANIEL D.	CPT	USA	Co A, 6th SFG
MC CLAM, JAMES W.	CPT	USA	Co A, 6th SFG
LUPYAK, JOSEPH W.	MSG	USA	Co D, 7th SFG
SPENCER, HERMAN	MSG	USA	Co C, 7th SFG
ADDERLY, TYRONE J.	SFC	USA	Co A, 6th SFG
BLACKARD, DONALD D.	SFC	USA	Co B, 7th SFG
DOSS, FREDDIE D.	SFC	USA	HHC, 6th SFG
HILL, JERRY W.	SFC	USA	2d Bn, USIMA
HOWELL, MARION S.	SFC	USA	Co A, 6th SFG
MARTIN, BILLY R.	SFC	USA	Co A, 6th SFG
MASTEN, CHARLES A. JR	SFC	USA	Co D, 6th SFG
MC GUIRE, GREGORY T.	SFC	USA	Co A, 6th SFG
MURRAY, JOSEPH M.	SFC	USA	Co A, 6th SFG
QUEZADA, NOE	SFC	USA	Co D, 7th SFG
STRAHAN, RONNIE	SFC	USA	Co B, 6th SFG
BUCKLER, TERRY L.	SGT	USA	Co D, 7th SFG
POOLE, PAUL F.	SSG	USA	Co B, 6th SFG
YOUNG, LAWRENCE	SSG	USA	2d Bn, USIMA

ARMY ASSAULT GROUP

NAME	RANK	SERVICE	ORGANIZATION
MEADOWS, RICHARD J.	CPT	USA	Det #1, USAIS
JAEGER, THOMAS W.	CPT	USA	Co A, 7th SFG
MC KINNEY, DAN H.	CPT	USA	Co D, 7th SFG
PETRIE, GEORGE W.	1LT	USA	Co D, 6th SFG
KEMMER, THOMAS J.	MSG	USA	Co B, 6th SFG
MOORE, BILLY K.	MSG	USA	Co C, 6th SFG
KITILESON, GALEN C.	MSG	USA	Co B, 6th SFG
DODGE, ANTHONY	SFC	USA	2d Bn, USIMA
ROBBINS, LORENZO O.	SFC	USA	Co B, 6th SFG
TAPLEY, WILLIAM L.	SFC	USA	Co C, 6th SFG
WINGROVE, DONALD R.	SFC	USA	Co D, 6th SFG
ERICKSON, CHARLES G.	SSG	USA	Co B, 7th SFG
MC MULLIN, KENNETH E.	SSG	USA	HHC, 6th SFG
ST CLAIR, PATRICK	SGT	USA	Co C, 6th SFG

OTHER ARMY SUPPORT PERSONNEL

NAME	RANK	SERVICE	ORGANIZATION
ROBINSON, BILL L.	LTC	USA	Co D, 6th SFG
KILBURN, GERALD	LTC	USA	HHC, JFKCMA
SMITH, RANDLE L.	CPT	USA	HHC, JFKCMA
PYLANT, MINOR B	SGM	USA	Co A, 6th SFG
BLACK, JESSE A.	MSG	USA	Co A, 7th SFG
BRITT, EDGAR C.	MSG	USA	Co A, 6th SFG
RAUSCHER, BERNARD L.	MSG	USA	Co D, 6th SFG
ABRAMSKI, FRANKLIN B.	SFC	USA	Co B, 7th SFG
BASS, JAMES A.	SFC	USA	HHC, 6th SFG
BATREZ, ARCHIE JR.	SFC	USA	Co D, 6th SFG
DODD, ROBERT L.	SFC	USA	Co A, 7th SFG
ERWIN, CHARLES M.	SFC	USA	Co D, 6th SFG
GREEN, JAMES A.	SFC	USA	Co A, 6th SFG
HANSLEY, BOBBY R.	SFC	USA	Co B, 7th SFG
HENDERSON, ROSWELL D.	SFC	USA	Co D, 7th SFG
HUBBL, FREDERICK L.	SFC	USA	Co B, 7th SFG
HUGHES, BRUCE M.	SFC	USA	Co D, 7th SFG
[illegible]OUPMAN, JOHN R.	SFC	USA	Co B, 7th SFG
POUNDER, ERNEST R.	SFC	USA	Co A, 7th SFG
TOLSON, AARON L. JR.	SFC	USA	Co D, 6th SFG
TURNER, BURLEY W.	SFC	USA	Co D, 7th SFG
VINES, GRADY C.	SFC	USA	Co C, 7th SFG
ADAMS, ELMER D.	SSG	USA	Co D, 6th SFG
GROSS, ROGGER D.	SSG	USA	HHC, 7th SFG
STRICKLAND, LARRY G.	SSG	USA	Co A, 6th SFG
WILSON, DAVID L.	SSG	USA	Co C, 6th SFG
[illegible]LEY, BRIAN J.	SGT	USA	Co B, 6th SFG
GREEN, MICHAEL G.	SGT	USA	Co C, 6th SFG

OTHER ARMY SUPPORT PERSONNEL

NAME	RANK	SERVICE	ORGANIZATION
HOBBY, ROBERT R.	SGT	USA	Sig Co, 6th SFG
LIPPERT, JOHN J.	SGT	USA	Co D, 7th SFG
OLSON, ARLIN L.	SGT	USA	Co D, 6th SFG
DEZURIK, WILLARD F.	SP5	USA	Co D, 6th SFG
ELLIOTT, LAWRENCE C.	SP5	USA	HHC, 6th SFG
GRIFFIN, GARY R.	SP5	USA	Co D, 6th SFG
CASEY, CHRISTOPHER	SP4	USA	Co B, 6th SFG
CLOSEN, FRANK J.	SP4	USA	Co B, 6th SFG

F-105 AIRCRAFT

FIREBIRD 1

NAME	RANK	SERVICE	ORGANIZATION
KRONEBUSCH, ROBERT J.	LTCOL	USAF	388 TFW
FORRESTER, JOHN (NMI)	MAJ	USAF	388 TFW

FIREBIRD 2

REISENWITZ, ROBERT J.	MAJ	USAF	388 TFW
McADOO, RAYMOND C.	MAJ	USAF	388 TFW

FIREBIRD 3

STARKEY, WILLIAM J.	MAJ	USAF	388 TFW
FANSLER, EVERETT D.	MAJ	USAF	388 TFW

FIREBIRD 4

DENTON, MURRAY B.	MAJ	USAF	388 TFW
OBER, RUSSELL T.	CAPT	USAF	388 TFW

FIREBIRD 5

KILGUS, DONALD W.	MAJ	USAF	388 TFW
LOWRY, CLARENCE T.	CAPT	USAF	388 TFW

F-4 AIRCRAFT

FALCON 1

NAME	RANK	SERVICE	ORGANIZATION
GARDNER, KENNETH L.	MAJ	USAF	13 TFS
HENRY, LARRY L.	CAPT	USAF	13 TFS

FALCON 2

LANDIN, JOHN D., JR.	CAPT	USAF	13 TFS
McKIBBEN, GEORGE E.	CAPT	USAF	13 TFS

FALCON 3

McCURDY, STUART B.	CAPT	USAF	555 TFS
COATS, GEORGE E.	MAJ	USAF	555 TFS

FALCON 4

GOLAS, MICHAEL T.	CAPT	USAF	555 TFS
LEE, HUBBARD W.	MAJ	USAF	555 TFS

FALCON 5

WRIGHT, RUSSELL G.	CAPT	USAF	13 TFS
MALANEY, JAMES C.	MAJ	USAF	13 TFS

FALCON 11

BAIRD, ORVILLE B.	MAJ	USAF	555 TFS
PALADINO, CARL (NMI)	CAPT	USAF	555 TFS

FALCON 12

BROWN, DOUGLAS P.	CAPT	USAF	555 TFS
SMITH, CHARLES E.	CAPT	USAF	555 TFS

FALCON 13

CANTWELL, JOHN L.	CAPT	USAF	13 TFS
HENRY, LARRY L.	CAPT	USAF	13 TFS

FALCON 14

HINTZE, RONALD M.	CAPT	USAF	13 TFS
PRESTON, JOSEPH R.	CAPT	USAF	13 TFS

FALCON 15

PETTYJOHN, JIMMY C.	MAJ	USAF	555 TFS
WAGNER, THOMAS A.	1/LT	USAF	555 TFS

MAINTENANCE

NAME	RANK	SERVICE	ORGANIZATION
FAGGARD, LIONEL E.	CAPT	USAF	AFLC
CARROLL, GERARD M.	CAPT	USAF	Det 2, 1SOWg
HOGAN, THOMAS E.	MSGT	USAF	1198 OE&T Sq
BROOKOVER, DAVID L.	TSGT	USAF	1198 OE&T Sq
CASEY, RONALD H.	TSGT	USAF	1198 OE&T Sq
CRISP, GERALD	TSGT	USAF	Det 2, 1SOWg
DUFF, CHARLES W.	TSGT	USAF	1198 OE&T Sq
FREDRICK, BILLY R.	TSGT	USAF	Det 2, 1SOWg
MOSELEY, TOMMY C.	TSGT	USAF	1198 OE&T Sq
WHITTIER, BRADLEY A.	TSGT	USAF	1198 OE&T Sq
YATES, RICHARD W.	TSGT	USAF	1198 OE&T Sq
BUTLER, GEORGE T.	SSGT	USAF	1198 OE&T Sq
CHALKLEY, RAYMOND L.	SSGT	USAF	1198 OE&T Sq
KENDALL, GEORGE R.	SSGT	USAF	1198 OE&T Sq
SKIDMORE, DONALD R.	SSGT	USAF	1198 OE&T Sq
CLEELAND, ROBERT W.	SGT	USAF	Det 2, 1SOWg
DALTON, DALE E.	SGT	USAF	Det 2, 1SOWg
DIERKING, DAVID N.	SGT	USAF	Det 2, 1SOWg
ROTHMAN, ELLIOT L.	SGT	USAF	Det 2, 1SOWg
RUUD, KENNETH A.	SGT	USAF	Det 2, 1SOWg
WERNER, ROBERT D.	SGT	USAF	Det 2, 1SOWg
BACON, RICHARD A.	A1C	USAF	Det 2, 1SOWg
GOODSON, STEPHEN P.	A1C	USAF	Det 2, 1SOWg
HOLDER, JAMES R.	A1C	USAF	Det 2, 1SOWg
MELCHER, JERRY D.	A1C	USAF	1198 OE&T Sq
FULLER, WALTER R.	CIV		Texas Instr
HESSE, GARRY L.	CIV		Hallicrafters
HILDRETH, HUBERT J.	GS-13	CIV	AFLC
PYLE, GENE L.	CIV		Texas Instr

SECURITY POLICE

NAME	RANK	SERVICE	ORGANIZATION
BELL, WILBERT	SSG	USAF	464 SP Sq
BERG, STEVEN L.	A1C	USAF	464 SP Sq
CROUCH, STANLEY W.	AMN	USAF	464 SP Sq
JERNIGAN, JOSEPH T., JR.	AMN	USAF	464 SP Sq
RATCLIFF, CLARANCE A.	SGT	USAF	464 SP Sq

MUNITIONS

ROSE, GILES C.	TSG	USAF	1SOWg
MOWDER, WILLIAM H.	SGT	USAF	1SOWg
GOSS, TEDDIE R.	TSG	USAF	1SOWg

PART II

SECTION B - CONDUCTING OPERATIONAL PLAN. (Attached Separately)

PART II

SECTION C - INTELLIGENCE

1. General.

a. Photo Intelligence. The photo intelligence effort during these phases consisted of coordinating the reconnaissance, photo interpretation, target material production, and aircrew/ground forces briefing. To accomplish this, the JCTG had two photo intelligence personnel assigned, and utilized the services of selected Defense Intelligence Agency (DIA) Photo Interpreters, the National Photographic Interpretation Center (NPIC), DIA Photographic Laboratory, and Central Intelligence Agency (CIA). One of the JCTG Interpreters stayed in Washington, D.C. during the training phase to effect coordination with the various Washington area agencies, assist in interpretation, product production and to ensure reconnaissance collection. The other interpreter deployed to the training site at Eglin AFB to accomplish photo interpretation at the site and to support the combat elements with detailed briefings and development of target materials. Key personnel in the various Washington area agencies were cleared for the project, and this greatly facilitated obtaining the necessary support.

(1) Reconnaissance. Considerable effort, both low altitude drone and high altitude SR-71 aircraft, was expended to obtain aerial photography of the objective, surrounding area and the infiltration/exfiltration route. Since both of these assets are national in nature, tasking was accomplished through DIA. Both the Ap Lo and Son Tay POW Camps were entered as national requirements and a priority drone coverage effort from Strategic Air Command (SAC) against these and other objectives was requested. In late September 1970, a series of seven drone tracks were drawn up by JCTG personnel and passed to SAC through the Joint Chiefs of Staff (JCS) channels in an attempt to increase the probability of obtaining the desired coverage. This effort was terminated on 28 October 1970 drone missions

had been scheduled, with of these penetrating the target area and successfully recovered. These provided excellent coverage

were cancelled or lost due to weather, operational or maintenance problems, and were lost to enemy action. An SR-71 effort was initiated during the latter part of the drone effort.

Initially, a reconnaissance package covering the proposed JCTG route through to the objective area and major threat areas was passed to SAC through the JCS. In late October 1970, an additional package of tracks, comprising missions, was developed for coverage/surveillance of all objectives and the JCTG infiltration/exfiltration route. This package, which like the first did not identify any specific installations, but requested large scale area coverage of a 10NM wide swath along each reconnaissance flight path on specific dates between 10 and 21 November 1970. The package was forwarded to SAC through JCS channels and subsequent discussions between a JCTG photo intelligence officer and SAC Reconnaissance Center personnel resulted in date and weather adjustments, except for missions scheduled for 20 and 21 November 70. These were to be flown regardless of weather unless delays were requested by COMJCTG. SAC was requested to fly the 20 and 21 November 1970 missions earlier than normal and reduce film handling/transportation times to ensure arrival of the film at Yokota AB, Japan, prior to 1700L on 20 November 1970. Further, SAC was requested to limit the reconnaissance coverage to that specifically requested by the JCTG, thus keeping the film processing/duplicating time within specific constraints. The 9th Strategic Reconnaissance Wing at Kadena AB flew SR-71 missions from Kadena specifically in support of the operation between 2 November and 21 November 1970. One mission on 18 November 1970 was forced by mechanical difficulties to recover in Thailand and as a result, the film did not reach Yokota AB, Japan, in time for interpretation prior to the operation.

Weather greatly hampered the collection effort throughout the September/October time period; however, all objectives were covered either by large or small scale photography. Good quality large scale coverage of the objective was not obtained during this period due to poor weather. The surrounding area and portions of the route were covered; however, it was not until the missions of 6 and 13 November 1970 that photography of the complete route from the NVN/Laotian border to the objective was obtained. Missions of 20 and 21 November 1970 were flown as requested. By reducing the sensor downloading time from over 2 hours to 45 minutes, and by using a KC-135 aircraft for film delivery to Yokota AB, the 9SRW fully met the JCTG imposed time constraints. Some difficulty was experienced in coordinating the JCTG reconnaissance requirements with the SAC Reconnaissance Center at Offutt AFB as none of the SAC personnel were cleared for this operation. It is recommended that in the future, if SAC Reconnaissance assets are used, one officer in the SAC Reconnaissance Center Intelligence Requirements Office be briefed on the operation. This office is responsible for flight line and camera action planning and a more intimate knowledge of the requirements would aid considerably in obtaining the desired coverage.

(2) Photo Interpretation. The initial interpretation was based on SR-71 and low altitude drone missions prior to June 1970. This initial interpretation revealed that the Son Tay Camp was fairly isolated, active, and fitted the description (from collateral sources) of the camp. The location, identification, and activity status of military facilities in the target area were identified along with civilian activity, crop patterns, road, and trail activity. Subsequent coverage enabled the JCTG and support photo interpreters to further refine and update this data base and to maintain surveillance of the area. These results also enabled the JCTG crews to select their landing zones (LZs) and holding points and to identify the major threat areas.

throughout this period, a definite increase in truck/vehicle activity watershed improvement, industrial, and civilian construction activity was noted throughout the objective area. Toward the latter part of this period, crop harvesting was taking place and this, along with the construction, was considered an additional reason for the increase in truck activity. Some military construction activity was also noted at various military installations; however, none was considered significant or related to the operation. A CIA Photo Intelligence Study completed in August 1970 of the general area substantiated the information developed by the JCTG Interpreters. Numerous detailed photo reports were produced at the training site and in DIA to support both ground and air requirements. Lack of good quality large scale photography hampered further interpretation of the Son Tay POW Camp, although additional information on placement of windows/doors was developed and activity patterns within the camp were followed. There was an apparent decline in track activity within the compound from 6 June through 3 October 1970 at which time the lightest activity was noted. Photography of 2 November 1970 showed a definite increase in activity which was also apparent on 13 November 1970. The decline in activity was attributed to the probability that the US POWs were being kept in their cells for extended periods of time. The 2 November increase was considered the result of letting the prisoners have more freedom outside their cells. Post operation information revealed that the 2 and 13 November 1970 activity was probably associated with planting of row crops.

(3) Target Material Production:

(a) Numerous target materials, briefing aids, and special [illegible] to support the operation were developed and produced from aerial photography by JCTG and DIA photo interpreters. The DIA Photo Lab was utilized for the production of all photographic products. A special work order number was established for this work, and it was tasked on a priority basis.

(b) Large and small scale photo mosaics, using current photography, were produced from the objective area to west of the Black River. Several additional mosaics, using older materials, were made covering other segments of the route. Books containing photographs of the turning points were developed and used by the crews. In addition, a large scale mosaic (covering the Pre-IP to the objective) was made from drone photography for use by the C-130 Forward Looking Infrared (FLIR) Operator. This mosaic was produced at the approximate scale that the FLIR operator would see the ground imaged on his scope. Mosaics of the immediate objective area, with 100 and 200 meter grid squares, were developed for joint use by the ground forces and ground support air units.

(c) Scale models of the objective and bridge to the north were build by the National Photographic Interpretation Center (NPIC). The request had been channeled from the JCTG, through CIA; however, a JCTG photo interpreter was required to coordinate their construction with the NPIC. The models proved to be an extremely useful training aid for both the aircrews and ground forces.

(d) A limited set of identical 1/50,000 objective area maps, containing coded reference points and area intelligence, were made for JCTG use. A code word list for specific actions and items which could be determined from photography was produced for use along with the maps. These words were developed to provide secure classified message or in-the-clear voice transmissions of intelligence. COMJCTG, SACSA, AFIN, DIA and the JCTG photo interpreters each had a copy of the map and code word list. Secure message procedures were established utilizing AFSSO facilities from Yokota AB, Japan, direct to Assistant Chief of Staff for Intelligence, Headquarters United States Air Force (ACS/I) for subsequent passing to SACSA, DIA, or the NMCC (during mission execution).

(4) In-Theater Coordination. A JCTG photo interpreter deployed on 12 November 1970 to the 67 Reconnaissance Technical Squadron (RTS), Yokota AB, Japan, where processing and exploitation of the SR-71 missions is normally accomplished. The 67 RTS Commander and Operations Officer were informed that the JCTG interpreter was on a special mission for the JCS and requested the full support of the squadron. Other personnel involved were informed that a test was being conducted on the responsiveness of the SR-71 to special requirements. The 67 RTS was required to radically change the film processing, interpretation, and computer support procedures to meet the stringent time constraints required by the JCTG. At this time, it was decided to initially process and duplicate all large scale coverages and use only one small scale camera if the programmed track was flown as requested. The 67 RTS photo interpreters were tasked to perform interpretation of coverage outside of the objective area for SAMs, AAA, EW/GCI sites and air order of battle (AOB). The objective and the surrounding area were to be interpreted by the JCTG interpreter. Interpretation results, film and briefing materials developed from missions flown on 6 and 13 November 1970 were handcarried on 17 November 1970 to Takhli RTAFB where aircrews and other JCTG personnel were briefed. Current electronic order of battle (EOB), AOB, and missile order of battle (MOB) were obtained from Seventh Air Force and transmitted via message to Takhli RTAFB on 19 November 1970.

(5) In-Theater Interpretation. Reconnaissance missions flown on 6 and 13 November 1970 provided the first clear, large scale coverage of the route from the Laotian border to the objective. This resulted in the identification and plotting of all civilian and military activity along that segment of the route. Recovery/emergency LZs were located, turning points were verified, and no additional EW, AAA or SAM threat to the force was identified. The objective area appeared normal, all known defensive weapons were at their previously identified locations, and no additional threat to the operation was identified. The results of

this interpretation were transmitted to USAF ACS/I in addition to being handcarried to Takhli RTAFB. A mission flown on 18 November 1970 was forced, by equipment problems, to land in Thailand, and the film did not arrive at Yokota AB until the evening of 20 November 1970. As a result, it was not processed until after the missions flown on 20 and 21 November 1970. Final coverage before the operation was taken on two passes over the objective area late the morning of 20 November 1970. The objective itself was partially covered with clouds and in shadows, while the surrounding area was 60-70 per cent cloud covered. Both flights combined provided 60 per cent clear coverage of the target area. The route from the NVN/Laotian border to the Pre-IP was 100 per cent covered with clouds. A determination was made that the camp was active and that activity was normal throughout the objective area. All known AAA/AW weapons and SAMs in this area were accounted for, all LZs were clear and no indications were noted of either troop or weapon redeployment. No indications were seen of any enemy activity which would adversely affect the mission. All known occupied SAM sites, except VN159, which were within range of Son Tay were covered and reported as operational. The major airfields were covered and no significant changes to the AOB were seen. The pertinent information in coded form was passed to COMJCTG via AUTOVON at 20/1300 November 1970. After further analysis of the area to the east and southeast of the objective was conducted, a message on the results was sent to the NMCC, through USAF ACS/I, at 20/1600Z November 1970. Analysis of the area continued through H-hour, but no changes were noted to the original interpretation.

(6) Post Operation Intelligence Analysis Photo Intelligence. The objective and surrounding area were covered on good quality large scale and small scale SR-71 photography from two flights of 21 November 1970. The coverage taken during the morning of 20 November 1970 showed considerable activity at both the Son Tay Prisoner of War Camp and the military installation located approximately 400 meters to the south. [illegible] section, two main rotor blades, and burned out wreckage of the

HH-3 were visible within the POW compound. Roof damage, evidently caused by debris from the exploding HH-3, was evident on building 5D and 5B within the compound. One guard building (8C) was gutted by fire and the southern guard quarters (7B) showed roof damage from mini-gun fire. Numerous personnel were seen on the N/S road east of the camp and within the camp on both flights. Several 3/4 ton vehicles were also noted on the road. Several personnel and a 3/4 ton vehicle were at the transformer station which had been damaged by the US Ground Forces. Many personnel were noted in and around the military installation south of the POW camp, with a group of about 15-20 at the initial landing site of APPLE 01 (HH-53). Activity appeared normal in the objective area. No evidence of high interest levels could be detected at any of the helicopter holding LZs. Confirmation of Shrike damage to SAM sites could not be determined. A class was being conducted by one of the SAM launchers (missile loaded) at the SAM training facility 2.7 NM south of the objective. The results of the post operation photography were transmitted via coded message to USAF ACS/I at 22/0145Z November 1970. The photography was couriered to Washington arriving on 22 November where further interpretation was accomplished. The results were provided to DIA and SACSA on 23 November 1970.

b. Objective Area Operations:

(1) Assault group personnel entered and searched all the buildings within the walled compound in the Prisoner of War Camp (See Fig C-1). The information they obtained confirmed buildings 5B and 5E as cell blocks while 5A was possibly a group confinement area. The functions of 5C and 5D, previously believed to be POW cells, could not be determined. Though constructed in late 1969, they gave the appearance of probably not having been used. Building three (3) was confirmed as a latrine and number four (4) as a washhouse.

(2) Cell block 5B contained six cells (five estimated at 6' x 8' and one 8' x 10'), each secured by a steel door (with peep slits) and a

metal shuttered window (See Fig C-2). Correlation of the estimated cell size with the known dimensions of the building indicates the cells were slightly larger, probably 8' x 14' for the smaller rooms and 12' x 14' for the larger rooms. The overall size of the building is 55' x 30' and allowing space for hallways on both sides plus roof overhangs, the larger dimensions would better equate to the building size. Some of the cells had cut electric wires hanging from the ceilings. The rooms were bare except for the two being used as living quarters by NVA personnel. There were six bunks in the larger cell and three in the smaller ones. The bunks were all makeshift of wood with a piece of blanket and mosquito net. The only other items in the two cells were some sauce bottles and Vietnamese type shower shoes.

(3) Other characteristics of cell building 5B are as follows:

(a) The inside floors and walls were constructed of concrete. The walls were at least 6" thick.

(b) The outside of 5B was constructed of masonry with a concrete outer cover. The outside doors were constructed of 1/4 inch steel and painted green. The outside windows had iron bars imbedded in the window sash.

(c) The inside cell doors were steel with hasps welded on them. These cell doors had small peep slits in them at eye level. There were also small slots at the base of the doors that were probably used to push bowls of food through. All the doors were encased in a steel door frame.

(d) The inside cell windows had steel shutters on them. Each had a steel hasp welded to them.

(e) All cells had approximately 10' high plaster ceilings.

(f) The cells had about a 6" concrete step leading up to the cell door.

(g) Cells 1-5 had, in the left corners (front and rear), a small 10" platform of concrete with a groove in the center. This was believed to be a bunk support.

(h) There were no signs of any leg or arm shackle anchors.

(4) Building 5E had four cells (two 8' x 20' and two 8' x 8') in addition to a non-secured open room 8' x 20' (See Fig C-3). Each of the larger cells had a raised 6' x 20' concrete platform on one side while the two small cells each had two raised platforms, each 2 1/2' x 8'. Three of the cells were currently being used for storage while the fourth cell and a fifth non-secure room were empty. Correlation of the overall building size with the number of rooms indicates that the rooms are probably slightly larger than estimated. The two smaller cells may have been for maximum security or possibly two POWs. The size of the other rooms indicate that as many as eight POWs could be kept in each of the two cells.

(5) Further characteristics of building 5E are as follows:

(a) Each cell had a 3/8 inch steel door, swinging outward, steel door frame with steel hasps welded to the door.

(b) Each door contained a peep hole at eye level and was secured with a well made padlock.

(c) All windows were barred with 1/4 inch steel screen or 1 to 2 inch squares. The screen was bolted to the outside of the window.

(d) All rooms were constructed of 6 to 8 inch good grade concrete and had 12 foot ceilings.

(e) No evidence of shackles, posts, or restraining devices was noted.

(f) Rooms 1 and 2 each had a 2-1/2 foot wide walkway with a concrete shelf on each side. Each shelf was 2-1/2 feet wide, 8 feet long and 2-1/2 feet above the floor. These rooms were being used for

storage.

(g) Rooms 3 and 4 each had a 2-1/2 foot wide walkway leading to a 3 feet x 3 feet cubicle. This cubicle which was probably a wash area or latrine had a doorway with a 6" step and a drain in the center. To the right of the walkway was a concrete sleeping shelf 2-1/2 feet high, 6' wide and running the length of the room. Room 3 had approximately 100 bags of concrete on the shelf, and room 4 was empty.

(h) Room 5 had a concrete floor, walls, and ceiling. There were no doors and the room was empty.

(6) The possible group confinement building (5A) was constructed of brick or masonry with a cement finish and contained one large room with two raised concrete platforms running almost the full length of the building (See Fig C-4). Each platform, on either side of a 4 foot walkway, was 2-1/2 feet high approximately 6 feet deep and 50 feet long. An open probable wash area or latrine was noted in the northeast corner of the building. The doorway had a thatched straw door with no casement and the windows were barred with six 1/2" steel bars in an upright position. The building appeared old and no evidence of shackles, posts, or, restraining devices was noted. There was no evidence that the building had been recently used.

(7) Both buildings 5C and 5D, which were constructed September - December 1969 and previously considered as cell blocks, were empty and did not have the appearance of being used as cells (See Fig C-4). Each building was constructed of concrete, had no door casement or door, and consisted of one room with barred windows similar to building 5A. Building 5C had recently been refurbished, however, 5D appeared to be in the advanced stages of deterioration and gave the appearance of having never been occupied.

(8) Only those buildings on the southern edge of the administration/[illegible] Area (8A, 8E, 8D, 8F, and 7B) were entered by US Forces (See Fig C-4). As expected, buildings 8D and 7B proved to be guard quarters; 8F

contained livestock and limited living quarters, while 4A and 8F were animal pens. The NVA personnel billeted in building 7A did not have bunks but merely the normal Vietnamese type roll up sleeping mats. They did not appear to be as well equipped as those personnel encountered at the military installation to the south.

c. Air Defense Reaction (Crew Debrief).

(1) Mission Narrative. The central and western NVN Air Defense System operated at near normal night time levels until approximately five minutes after the Assault/Strike Force time over target (TOT) of 20 November 1970 despite the presence of four F-4 and four F-105 aircraft on-station 10 minutes prior to the TOT. The northeastern (Phuc Yen Control) radar sector became more active at 1904Z (15 minutes prior to TOT) apparently in response to the Navy diversion. While the sector was concentrating on the USN diversionary forces, it detected the ingressing MIG CAP and SAM suppression forces on their way to their station orbit. From 1904Z until 1924Z, the NVN Air Defense System was in the process of increasing alert and establishing targets. At approximately 1924Z the SAM/AAA Radar Systems (FireCan/FanSong/Spoonrest) became active. However, the sites along the north through southwest edge of Hanoi showed no evidence of missiles 'hot' at this time. These were the sites which subsequently engaged the F105Gs. By 1931Z, when two F-105Gs fired the first two Shrikes, the hostile environment consisted of two FireCans (AAA) and four FanSongs (SAM). During the next six minutes, the number of FanSong radars active increased to seven, with four south of the Red River and three to the north. By this time, at least four battalions were 'hot' (VN 271, 002, 019 and 159) and began launching their missiles. The primary radar targeting data apparently was supplied to the two SAM regimental headquarters by the Phuc Yen and Ha Dong Flat Face (low altitude, high resolution acquisition) radars. At approximately 1939Z the battalions at VN-002 and VN-019 and probably VN-159 launched two missiles each, with one of VN-019's (or VN-159's) missiles damaging [redacted]. At approximately 1940Z the SAM battalions in the Phuc Yen area [redacted] VN 159 went missiles 'hot' and activated their AAA (57-85mm).

At this time VN-271 launched two missiles, again at the tight race-track orbits of four F-105Gs. During the next two minutes the battalions at VN-019 and VN-234 each launched a single missile, (for a total of eight to ten missiles fired in six minutes, probably all at F-105s). During the next five minutes, (1942Z-1947Z) as the assault helicopters were departing the objective, four missiles were launched at F105Gs (two each from VN-159 and VN-234). One of the missiles from VN-159 damaged F-105G FIREBIRD 05's fuel tanks causing bailout over Laos near Channel 103. At 1948Z as the Strike/Assault Force was completing egress across the Black River, the battalion at VN-271 launched two missiles at an F-105G on its final pass through the target area. By 1955Z the area SAM system began to relax with the F-105 and F-4 forces in the process of completing their final passes and egressing the area. The radar system remained active throughout the egress with at least eight sites tracking the MIG CAP, SAM suppression, helicopters, tankers, and C-130E DF steer forces. At no time during the mission did intelligence resources indicate definite MIG activity.

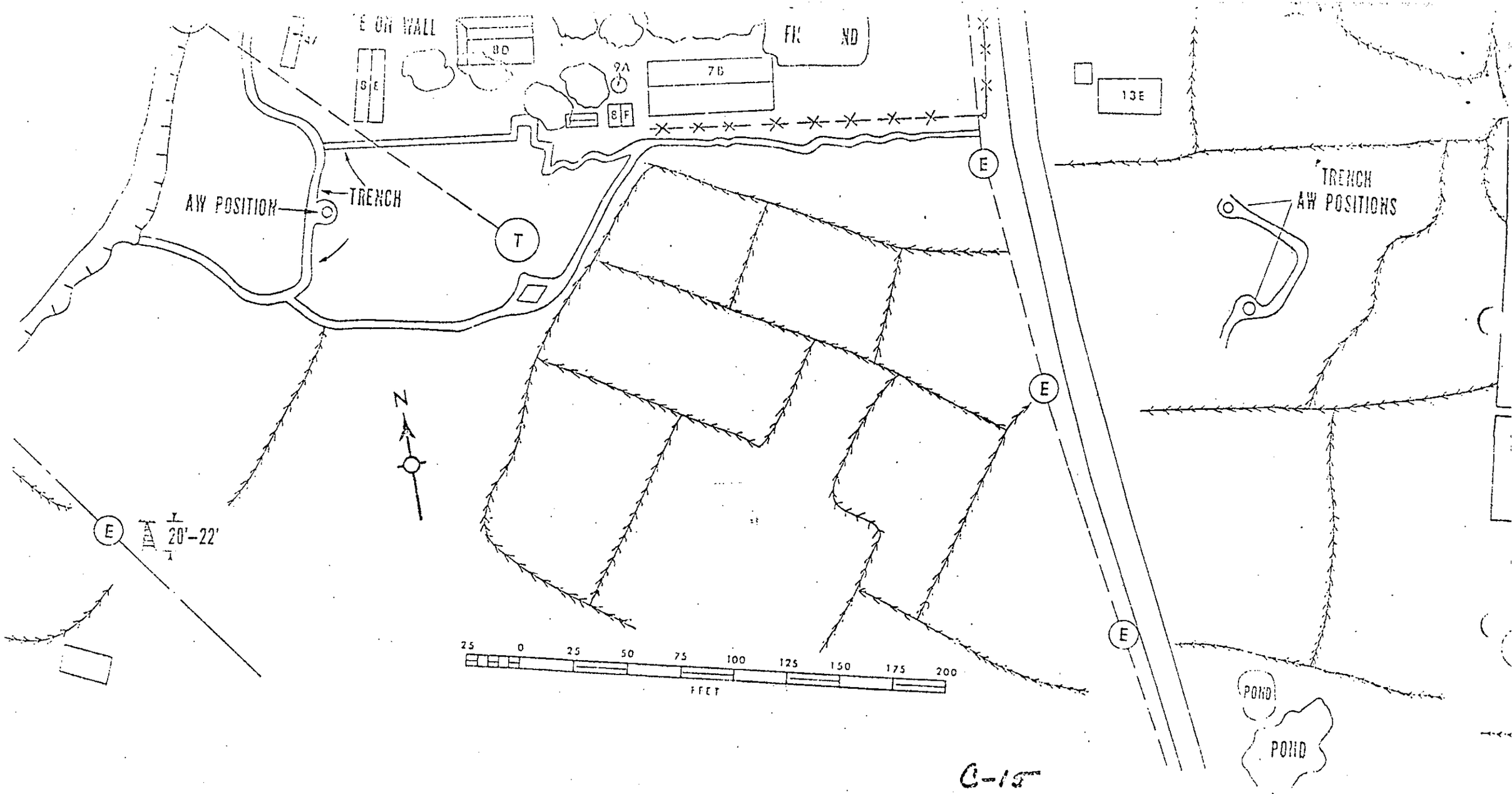
(2) Summary.

(a) Based on reported active radar levels, the NVN radar activity directed against USAF forces took approximately 20 minutes to reach alert status (after initial detection of F-4/F-105s over North Vietnam).

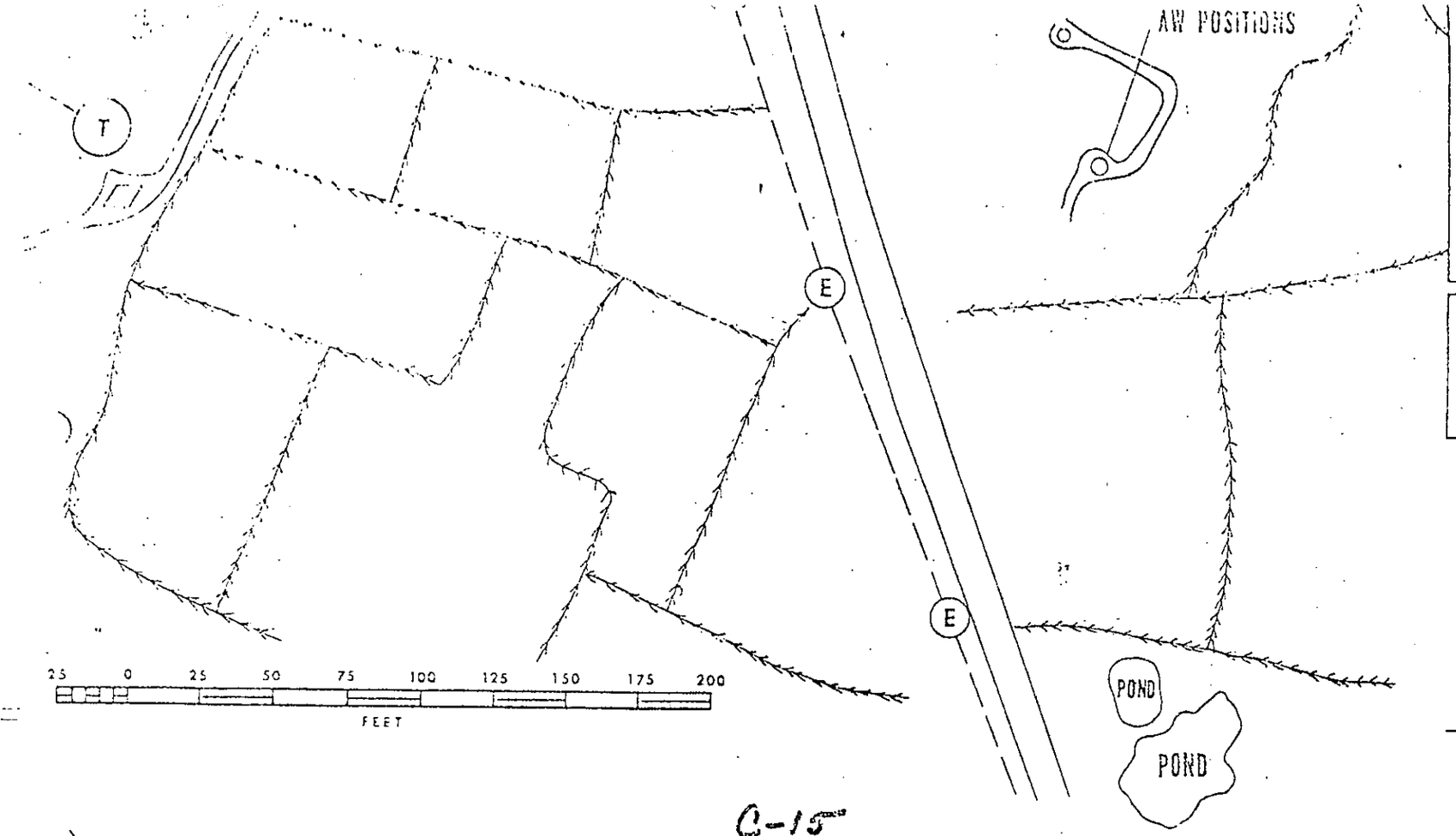
(b) From initial radar detection, the NVN SAM System took approximately 27 minutes to go 'hot' at four battalions and 38 minutes to go 'hot' at an additional 2-3 battalions. In approximately 13 minutes of peak activity, these six to seven battalions launched a total of 16 missiles. Fourteen, possibly all 16, missiles were launched at the F-105G force. Launches occurred in pairs with an approximate six second separation between missiles. All launches were accomplished when the F-105Gs were between 5 and 15 thousand feet and approximately 6-15NM from the radar site.

(c) MIG activity could not be positively identified.

2. Special Intelligence Annex provided under separate cover.


E ON WALL
8D
9A
7B
8F
13E
AW POSITION
TRENCH
T
E
TRENCH
AW POSITIONS
N
20'-22'
25 0 25 50 75 100 125 150 175 200
FEET
POND
POND

C-15



12. FOOD STG/GUARD MESS 27' × 23'
13A. FAMILY HOUSING (GUARDS)
13B. FAMILY HOUSING GUARDS)
13C. FAMILY HOUSING GUARDS)
13D. FAMILY HOUSING GUARDS)
13E. FAMILY HOUSING (GUARDS)

NOTE:
ALL STRUCTURES ARE OF MASONRY CONSTRUCTION UNLESS OTHERWISE NOTED.

(E) = CONCRETE LINE POLE (POWER)

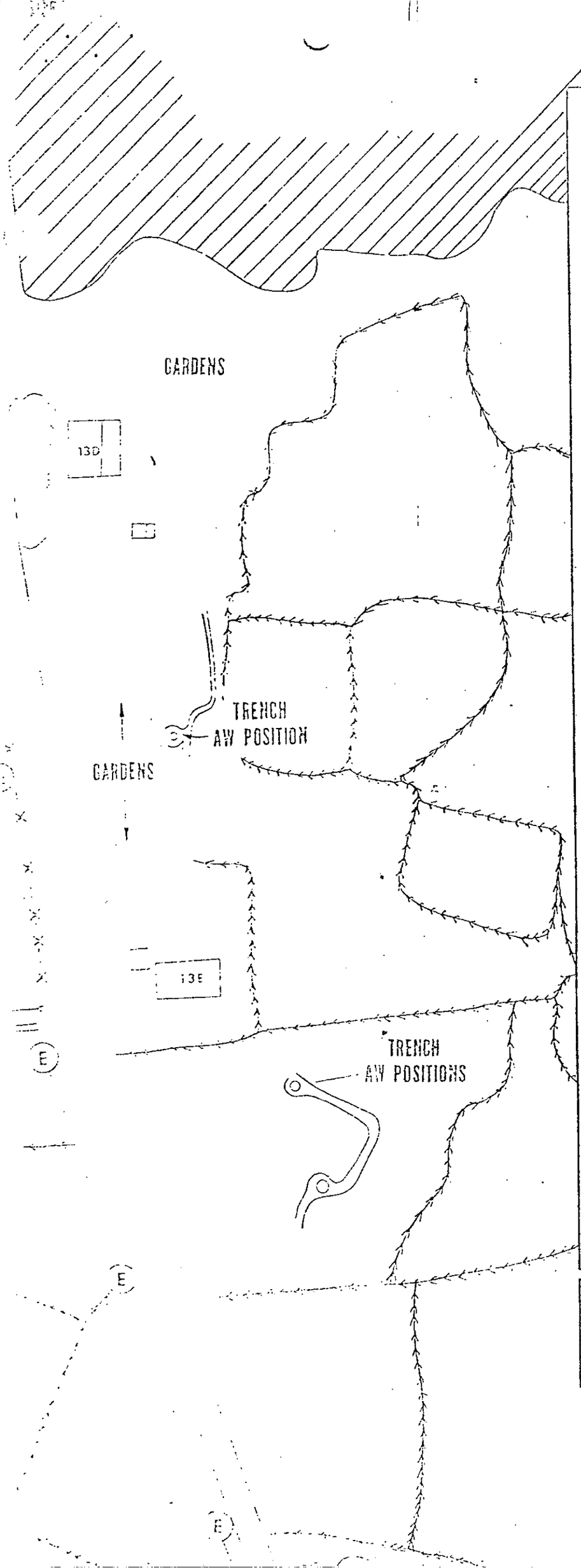
15'–18'

(T) WOODEN PROBABLE TELECOM POLE

12'–14'

PADDY DIKES

C-15



LEGEND

1. COMPOUND 185' × 140' × 110'
2A. GUARD TOWER
2B. GUARD TOWER
2C. GUARD TOWER
3. LATRINE
4. LATRINE
4A. LATRINE
5A. PW CELLS 55' × 25'
5B. PW CELLS 55' × 30'
5C. PW CELLS ISOLATION 16' × 16'
5D. PW CELLS 16' × 37'
5E. PW MESS/INDOCTRINATION 50' × 30'
6. OLD BLDG FOUNDATION
7A. ADMIN AND COMM 40' × 27'
7B. GUARD QUARTERS 60' × 25'
8A. SUPPORT 25' × 20' (THATCH)
8B. SUPPORT 17' × 22' (THATCH)
8C. SUPPORT 25' × 25' (THATCH)
8D. SUPPORT 36' × 22'
8E. PROBABLE WATER STG 12' × 35'
8F. PROBABLE LAUNDRY 12' ×12'
9A. WELL
9B. WELL
10. GUARD SHACK AND MAIN GATE
11. KITCHEN 20' × 24'
12. FOOD STG/GUARD MESS 27' × 23'
13A. FAMILY HOUSING (GUARDS)
13B. FAMILY HOUSING GUARDS)
13C. FAMILY HOUSING GUARDS)
13D. FAMILY HOUSING GUARDS)
13E. FAMILY HOUSING (GUARDS)

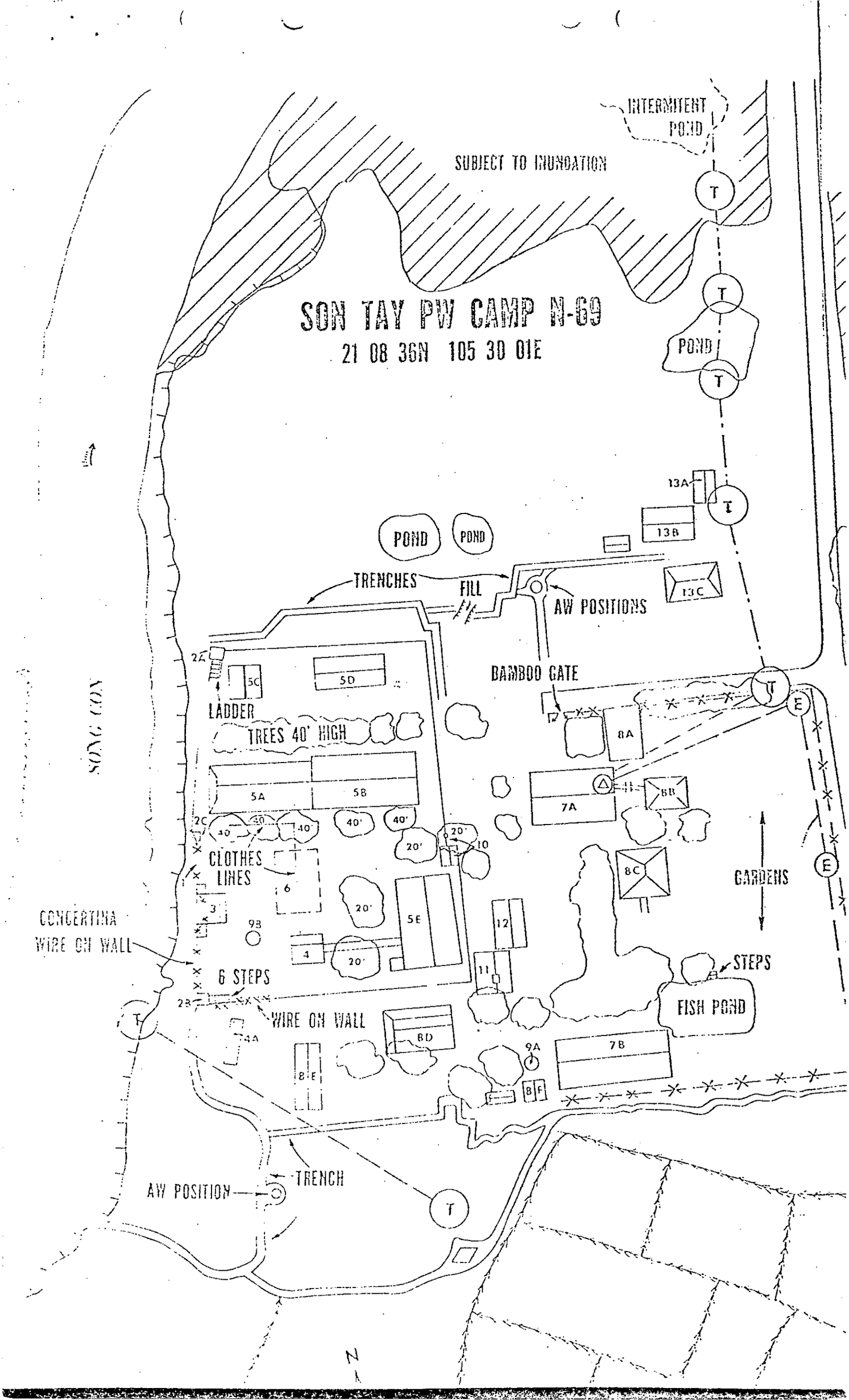
NOTE:
ALL STRUCTURES ARE OF MASONRY CONSTRUCTION UNLESS OTHERWISE NOTED.

(E) = CONCRETE LINE POLE (POWER)

15'-16'

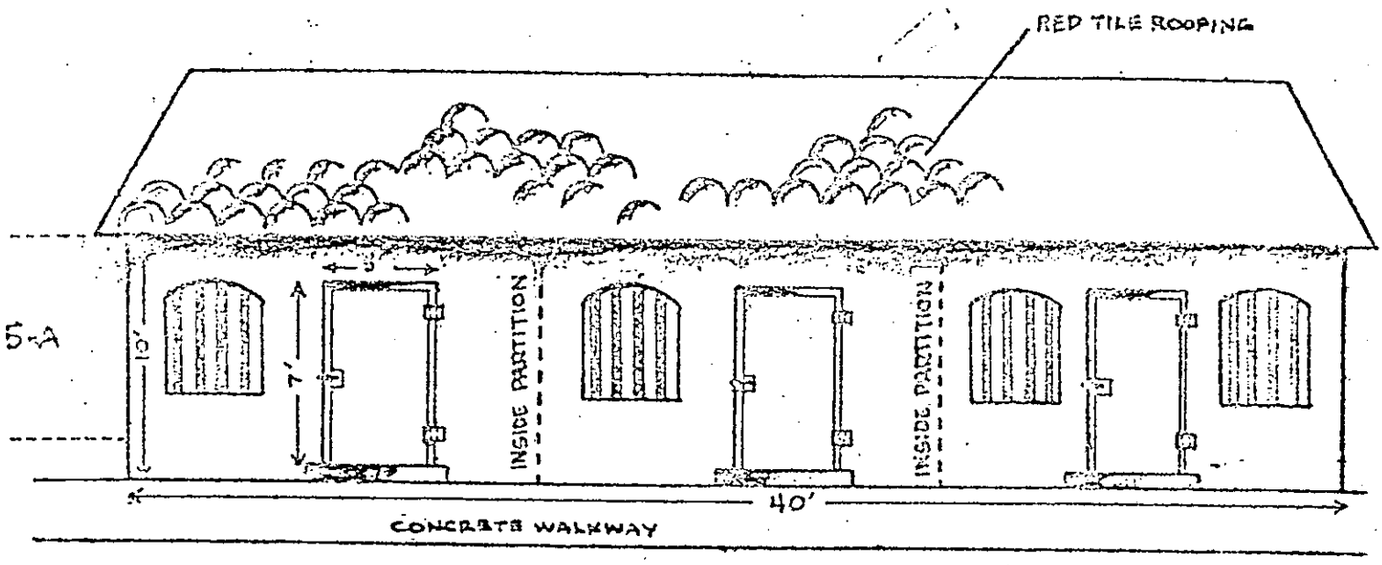
(T) WOODEN PROBABLE TELECOM POLE

12'-15'



SON TAY PW CAMP N-69
21 08 36N 105 30 01E
INTERMITENT POND
SUBJECT TO INUNDATION
POND
POND
POND
TRENCHES
FILL
AW POSITIONS
BAMBOO GATE
LADDER
TREES 40' HIGH
CLOTHES LINES
CONCERTINA WIRE ON WALL
6 STEPS
WIRE ON WALL
GARDENS
STEPS
FISH POND
TRENCH
AW POSITION
SONG CON
N

BUILDING 5-B / OUTSIDE VIEW (South Side)



BUILDING 5-B TOP VIEW

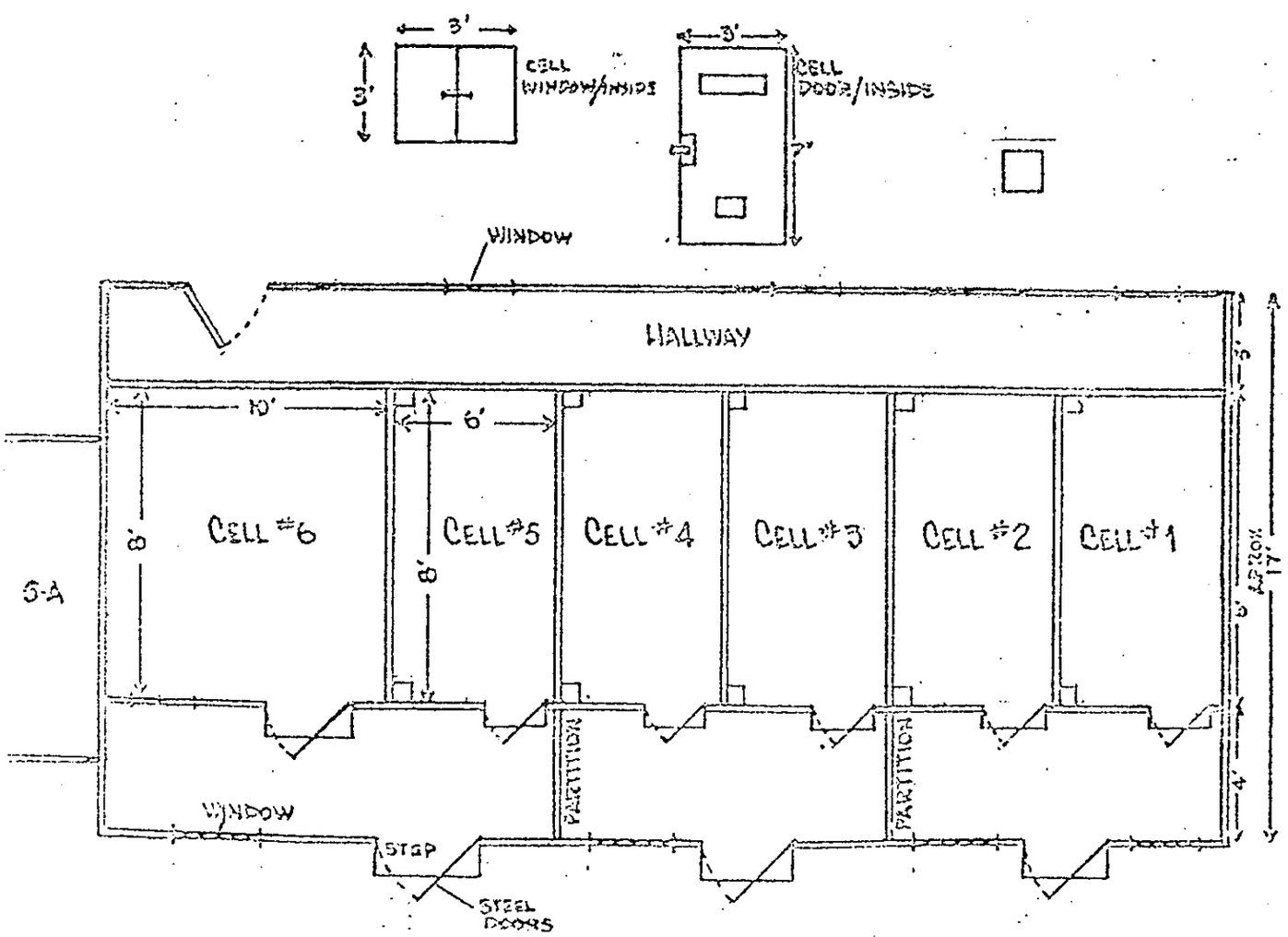
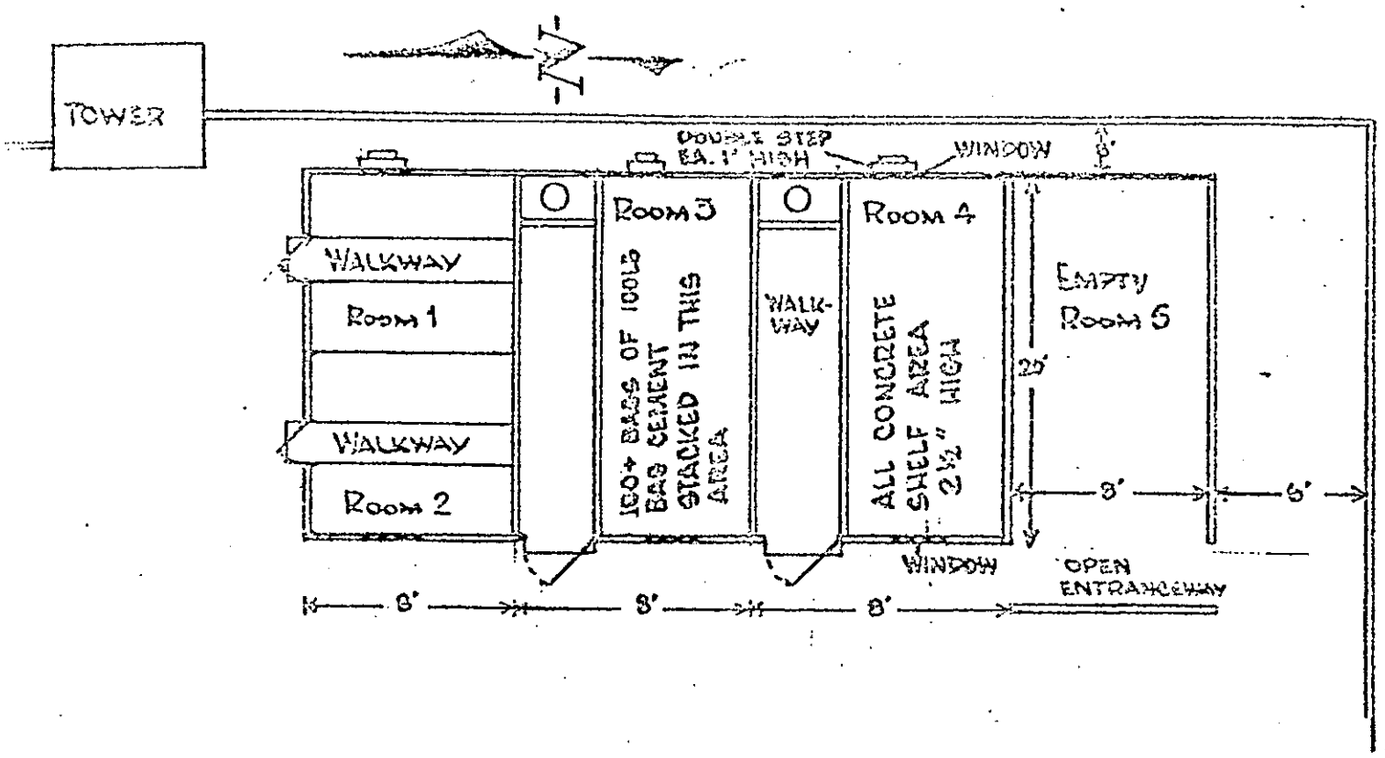


FIGURE 2

BUILDING 5-E / TOP VIEW



BUILDING 5-E / OUTSIDE VIEW (West Side)

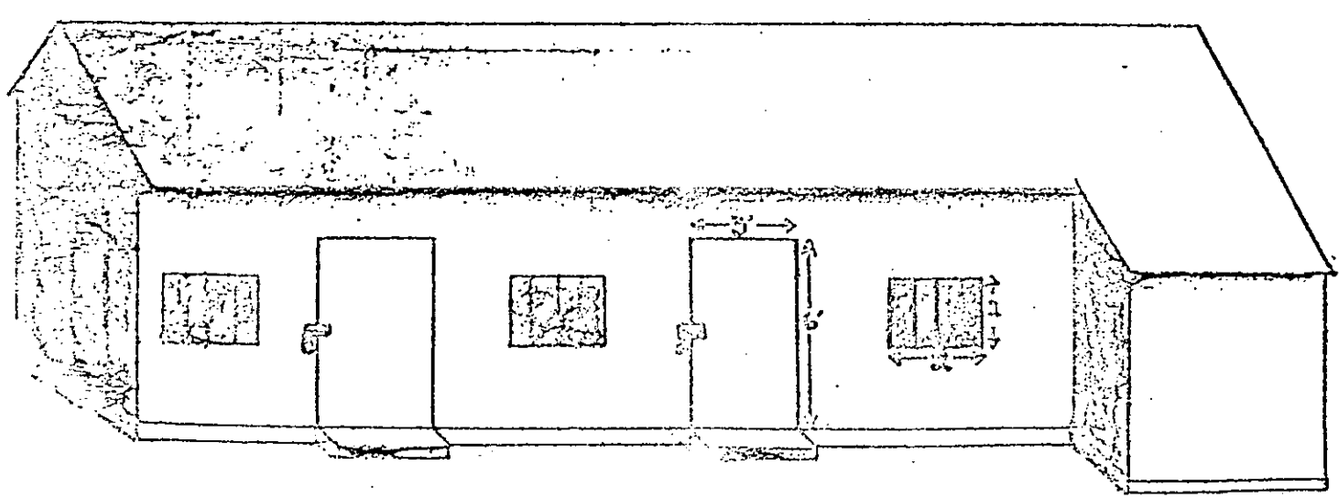
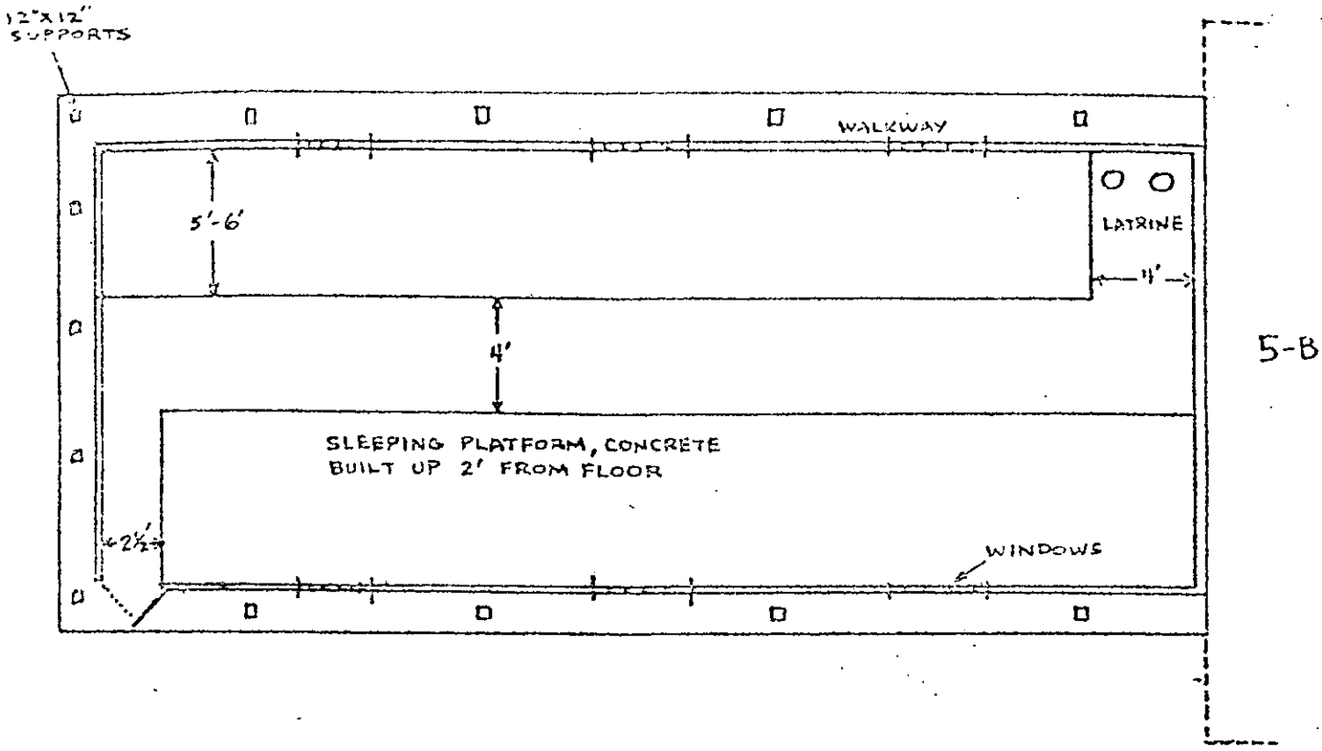
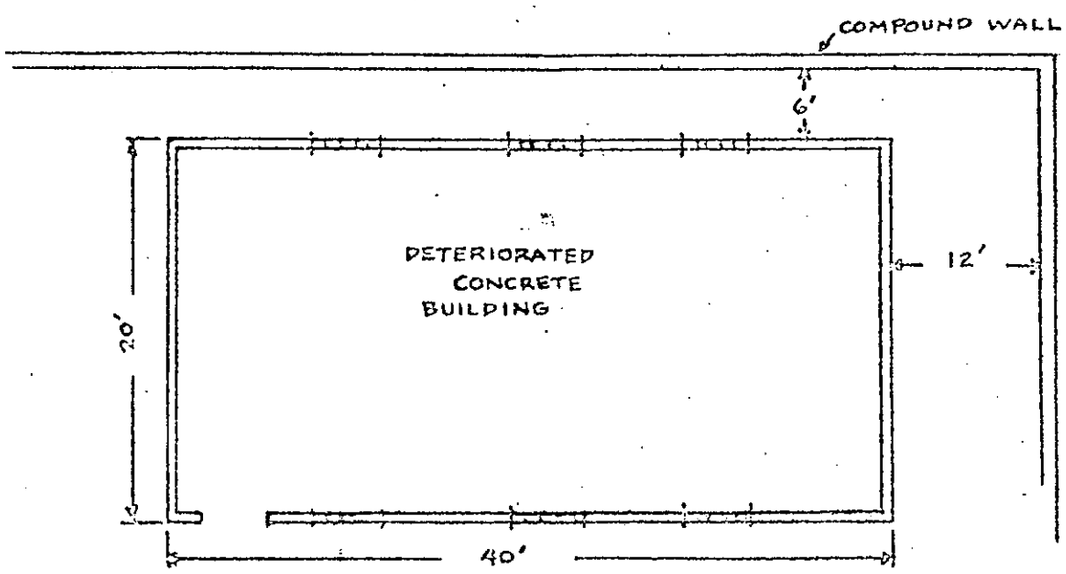


FIGURE 3

BUILDING 5-A / TOP VIEW



BUILDING 5-D / TOP VIEW



BUILDING 5-C / TOP VIEW

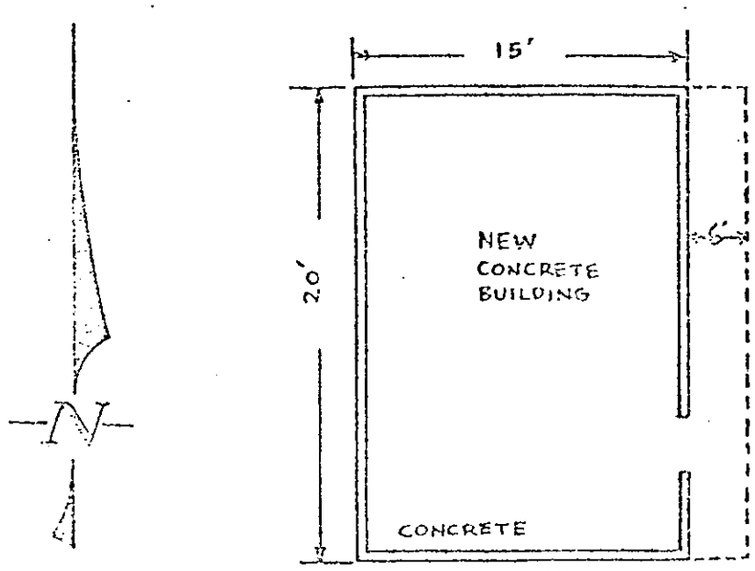


FIGURE 4

PART II

SECTION D - PLANNING. Medical:

1. Selection of Personnel:

a. In the process of selecting 15 officers and 88 enlisted men for special duty, over 300 were interviewed. Present at each interview was the Commander of the Ground Forces, the JCTG Surgeon and two Sergeant Majors.

b. Many of the volunteers were not acceptable due to attitude, family problems, pregnant wives, and physical deficiencies.

c. All personnel assigned to COMJCTG during the training and deployment phases had their records reviewed by the JCTG Surgeon with negative results.

2. Prisoners of War:

a. A complete medical profile on the health of the previous nine POW returnees was compiled, listing expected health problems to be encountered.

b. Air Force and Navy plans for handling a large number of POWs were reviewed.

c. Medical facilities in Thailand, especially at Udorn RTAFB, were thoroughly reviewed.

d. A complete review of all available information concerning suspected internees in North Vietnam was accomplished. A profile was developed for the POWs from pre-internment, internment, and post liberation studies.

(1) Pre-Internment. Based on medical records of suspected internees in NVN, the average POW had the following statistics:

	MEDIAN	MODE	RANGE
Weight	171 lbs	160-180 lbs	135-215 lbs
Age	33 yrs	30-34 yrs	27-46 yrs
Height	70 inches	70 inches	64-74 inches

(2) Internment. Estimates of body weight, disease, and psychological state were made. It is estimated that the average weight loss would be 20%. The average weight loss in World War II prison camps was 32%. This included Japanese prison camps where there were severe problems. In World War II, the major categories of health problems after liberation of POWs were:

malnutrition,
disease,
wounds or injuries,
skin disease, and
respiratory disease.

A sample of 60 was structured to represent typical POW internees. It was estimated on that basis that the following diseases will be found:

DISEASE	NO. OF CASES
Malaria (Have had or have now)	25
Intestinal Parasites	35
Goiter	4
Malnutrition, Primary	40
Peripheral Neuritis	12
Active "Dysentary"	15
Tuberculosis, Active	12

A psychological profile based on interrogations of returning POWs was constructed to prepare for prisoner handling problems. The profile follows:

The POW has heard very little noise, has had very little physical exercise, and lives in dimly lit rooms. He eats two meals per day, usually consisting of cabbage soup plus bread or rice. Fish and pumpkin occasionally supplement the diet with less than two ounces of meat per week. Sometimes a banana or some other fruit is provided. Flour and sugar cookies are rarely given to the POW. Restriction of total protein intake plus physical inactivity will cause marked muscular atrophy plus a slow reaction to stimuli.

A few POWs will maintain a strong hope for liberation, and some will have given up all hope, but the majority are probably unsure and live day to day driven only by a natural desire to survive. Therefore, for most, the sudden realization that "liberation is here" will be shocking.

3. Post Liberation. Army ground forces will see stunned individuals managing a weak smile. There will be no yelling on their part. The POW will be easily fatigued, having lost so much weight and muscle mass. His night vision will be poor. There will be lesions at the angles of the mouth. The skin on the arms and legs will irritate and bruises will be evident. There may be a slight swelling of the thyroid (neck) area, and the tongue will be somewhat swollen. Speech will be slow and somewhat slurred. He will complain that his feet burn. He will bruise easily, walk unsteady, and may be emotional and prone to some display of tears.

4. Medical Logisitics:

a. A special M-5 medical kit was prepared containing a Duke Inhaler Set for use with Penthrane, a non-flammable inhalation anesthetic agent; Ketamine HCL, a rapid acting general anesthetic agent; scissors and canulas for cricothyroidectomies; hemostats, airways, various sizes of bandages; and inflatable splints.

b. After several meetings with the Army Natick Laboratories, Natick, Massachusetts, the following equipment was devised:

(1) Unlined camouflaged ponchos were procured, plus specially made ponchos lined with one-half of a poncho liner necessary to keep the POW warm. The ponchos were 82 x 60 inches and weighed approximately one pound. The specially lined ponchos were vacuum packed to conserve volume on the egress helicopters.

(2) Using a Bata comfort shoe as a base, a specially devised olive drab sneaker with high rise eyelets and reinforced firm sponge insoles was designed.

(3) Heinz rice baby food, selected for its palatability and consistency, was packaged in plain sealed foil for security reasons.

(4) Canned survival food, consisting of a high carbohydrate, low protein meal, was procured for use by operational personnel in the event of an E&E situation. In addition, canned water was obtained.

(5) Three other M-5 kits were readied for prepositioning on rescue helicopters. These were in addition to the routine medical kits carried by the rescue helicopters.

(6) One hundred sets of pajamas and bathrobes were sent by the Army Surgeon General from Valley Forge Headquarters to Eglin AFB, Florida. These were to be worn by the returnees on their trip to CONUS.

PART II

SECTION E - TRAINING:

1. GROUND FORCES:

a. Organization:

(1) Pre-Mission Selection:

(a) The Army Element was organized into a three platoon concept at Fort Bragg from a one "B" and five "A" Detachment concept. The three platoons were equally strong in personnel by rank, MOS, and special qualifications. During this phase, strong emphasis was placed on individual leadership traits and physical stamina. Personnel lacking in either category at the completion of Phase I, were eliminated from the unit. Training in the MOS skills of demolitions, weapons, and communications was conducted to identify individual qualifications for future selection. Interviews were conducted to identify personnel skilled in SCUBA, HALO, rappeling, photography, chainsaw operation, torch operation, pathfinder, and forward air guides. Additional training was conducted in small unit tactics, with emphasis on evasion, escape, and patrolling techniques. Individual weapons were zeroed and familiarization training on all Force weapons was conducted. Aircraft orientations were held on the A-1E Skyraider aircraft, the UH-1H, HH-3, and HH-53 helicopters. These orientations included loading and unloading procedures on the aircraft to be used.

(b) The selection of personnel for the Ground Force was effectively accomplished and minimum changes were necessary during subsequent phases.

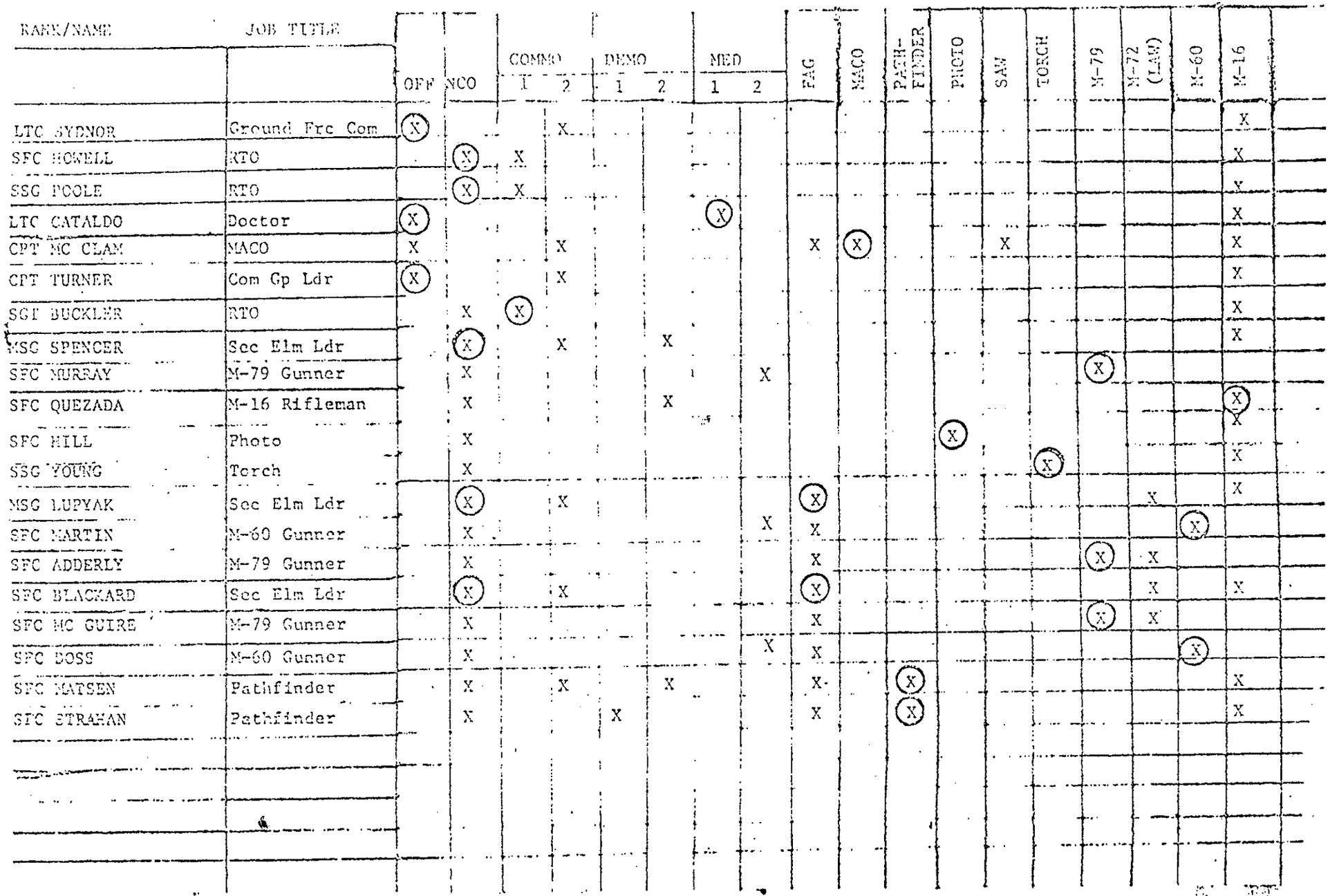
(2) Mission Selection:

(a) The Army Element was re-organized into a ground force structure on 17 September 1970 for the purpose of fulfilling the mission requirement which called for three Groups (ASSAULT, COMMAND, SUPPORT). Fifty-one primary personnel and ten backup personnel were selected on the basis of their performance during Phase I training with special emphasis

placed on leadership, MOS, rank, physical stamina, special skills, and other attributes. The ten backup personnel were distributed equally among the three Groups to provide immediate replacements or substitutes. Personnel not selected were returned to the support detachment. Realizing the Assault Group was unique in its mission, heavy emphasis was placed on the selection of the more experienced, skilled, mature personnel. The Deputy JCTG Commander selected the Ground Force Commander who in turn selected the leaders for subordinate groups and one MACO (Marshalling Area Control Officer). The Assault Group Leader selected the three officer element leaders who in turn selected personnel to fill their elements. The Support Group Leader selected two officer element leaders who selected their members. The Ground Force Commander further selected four radio operators. Two were assigned to the Ground Force Commander and two to the JCTG Deputy Commander. (See Inclosures 1 and 3). Further evaluations of individuals were made within each group for selection of required special skills, i.e., photographers, chain saw operators, helicopter machine gunners, special demolitions, and pathfinders. This selection was accomplished by the Group Leaders with the aid of comprehensive worksheets derived from screening of 201 files and through personal interviews concerning requisite skills desired.

(b) The reorganization was completed by housing all personnel (officers and EM) in assigned group barracks under the control of the Group Leader. All individuals were briefed on the reorganization and a modified cover story was announced in the interest of security and to satisfy the curiosity of the Force members. Difficulty was encountered in maintaining positive and smooth coordination with the Support Detachment due to lack of their knowledge of the true mission. Special ranges and a ground "mock-up" were constructed by the Support Detachment without explaining the why - only the where and the what were given. Example, construction of the mock-up posed even more problems peculiar to this situation. Distinct and concise guidance had to be given to the Support Detachment stifling any allowance for individual

initiative. Experienced and mature individuals suffered a sense of frustration and a feeling of being left out of the total training objective. All of these difficulties were eventually overcome by the leaders of the Ground Force.

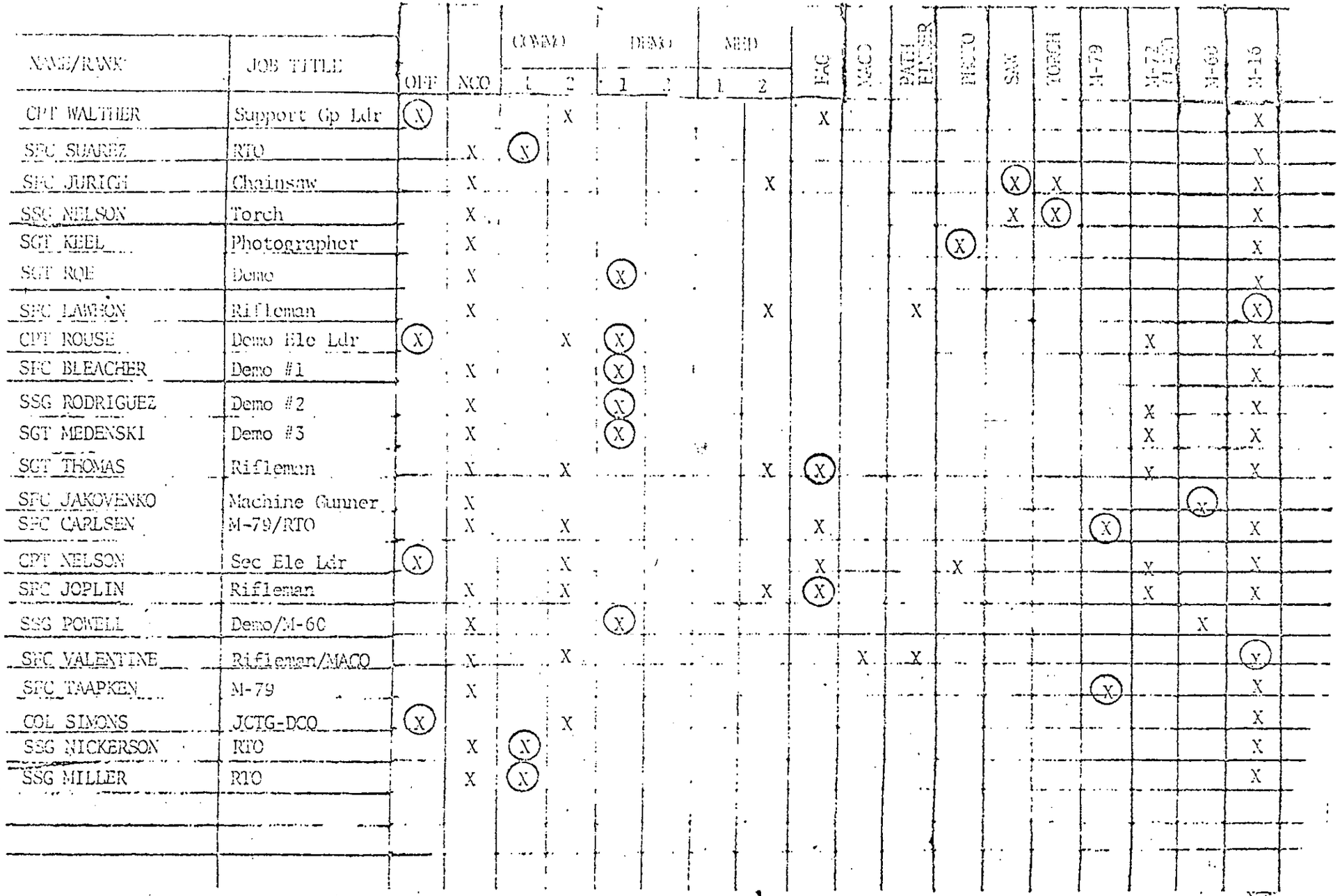


RANK/NAME	JOB TITLE	OFF	NCO	COMMO 1	COMMO 2	DEMO 1	DEMO 2	MED 1	MED 2	FAC	MACO	PATH-FINDER	PHOTO	SAW	TORCH	M-79	M-72 (LAW)	M-60	M-16
LTC SYDNOR	Ground Frc Com	(X)			X														X
SFC HOWELL	RTO		(X)	X															X
SSG POOLE	RTO		(X)	X															X
LTC CATALDO	Doctor	(X)						(X)											X
CPT MC CLAM	MACO	X			X					X	(X)			X					X
CPT TURNER	Com Gp Ldr	(X)			X														X
SGT BUCKLER	RTO		X	(X)															X
MSG SPENCER	Sec Elm Ldr		(X)		X		X												X
SFC MURRAY	M-79 Gunner		X						X							(X)			
SFC QUEZADA	M-16 Rifleman		X				X												(X) X
SFC HILL	Photo		X										(X)						
SSG YOUNG	Torch		X												(X)				X
MSG LUPYAK	Sec Elm Ldr		(X)		X					(X)							X		X
SFC MARTIN	M-60 Gunner		X						X	X								(X)	
SFC ADDERLY	M-79 Gunner		X							X						(X)	X		
SFC BLACKARD	Sec Elm Ldr		(X)		X					(X)							X		X
SFC MC GUIRE	M-79 Gunner		X							X						(X)	X		
SFC BOSS	M-60 Gunner		X						X	X								(X)	
SFC MATSEN	Pathfinder		X		X		X			X		(X)							X
SFC STRAHAN	Pathfinder		X			X				X		(X)							X

X= Current Experience (X)= Assignment/Task

RANK/NAME	JOB TITLE	OFF	NCO	COMMO 1	COMMO 2	DEMO 1	DEMO 2	MED 1	MED 2	FAG	MACO	PATH FINDER	PHOTO	SAW	TORCH	M-79	M-72 (LAW)	M-60	CAR-15
CPT MEADOWS	Assault Gp Ldr	(X)		(X)															X
MSG MOORE	Demo/Maco		(X)		X	(X)			X						X				X
SFC DOIGE	RTO			(X)			X												X
CPT McKINNEY	Element Ldr	(X)		(X)														(X)	X
MSG KITTLESON	Member		(X)				X		X						X			X	X
SFC ROBBINS	Member																		X
SGT ST CLAIR	Member																		X
CPT JAEGER	Element Ldr	(X)		(X)															X
SFC TAPLEY	Member		(X)						X						X				X
SSG McMILLEN	Member																		X
SSG ERICKSON	Member																		X
1STLT PETRIE	Element Ldr	(X)		(X)			X												X
MSG KEMMER	Member		(X)												X				X
SFC WINGROVE	Member								X										

X = Current Experience O = Assignment/Task


NAME/RANK
JOB TITLE
OFF
NCO
COMMO
1
2
DEMO
1
2
MED
1
2
FAC
MACO
PATH FINDER
DECTO
SAW
TORCH
M-79
M-72 LAW
M-60
M-16
CPT WALTHER Support Gp Ldr
SFC SUAREZ RTO
SFC JURICH Chainsaw
SSG NELSON Torch
SGT KEEL Photographer
SGT RQE Demo
SFC LAWSON Rifleman
CPT ROUSE Demo Ele Ldr
SFC BLEACHER Demo #1
SSG RODRIGUEZ Demo #2
SGT MEDENSKI Demo #3
SGT THOMAS Rifleman
SFC JAKOVENKO Machine Gunner
SFC CARLSEN M-79/RTO
CPT NELSON Sec Ele Ldr
SFC JOPLIN Rifleman
SSG POWELL Demo/M-60
SFC VALENTINE Rifleman/MACO
SFC TAAPKEN M-79
COL SIMONS JCTG-DCO
SSG NICKERSON RTO
SSG MILLER RTO
X = Current Experience
O = Assignment/Task

b. Facilities (US Army):

(1) As Eglin AFB had been chosen as the CONUS Training Site, immediate action was taken to select a definite billeting and training area for the Army Element. Accordingly, on 12 August 1970 representatives from JCTC proceeded to Eglin AFB to make this selection. After inspecting the facilities at Auxiliary Field 3 on 13 August 1970, it was determined that this area was suitable for the Army requirements. The cantonment, recently vacated by AFROTC Summer encampment consisted of:

(a) Six barracks for troop billets.

(b) Space for class room.

(c) One building with barred windows for the TOC.

(d) PX and Snack Bar.

(e) Theater.

(f) Messing facilities.

(g) Motor Pool.

(2) The area was essentially isolated and nearby apron space was suitable for helicopter training.

(3) After selecting Auxiliary Field 3 and evaluating logistical support facilities a decision was made to send a representative to Eglin AFB to make arrangements for required support.

(4) On 19 August 1970, a representative traveled to Eglin AFB to arrange an interservice agreement. Liaison was made with SOF personnel to arrange for more immediate logistical support while Base Logistical Planners were contacted to arrange for requirements such as:

(a) Messing.

(b) Barracks space.

(c) Transportation support.

(d) Medical facilities.

(5) The initial estimate of funds to be placed within the Base Supply System computer at Eglin AFB was $11,300.00 based on prior experience

with Cabin Light Exercises, Exotic Dancer III and guidance provided by the Deputy Commander, JCTG.

(6) During the feasibility study it became apparent that a full scale mock-up of the objective would have to be used to train and rehearse the assault force. This concept was later carried over into the training phase and a full scale model of the compound constructed on Range C-2, Eglin AFB. Several plans for this construction had been discussed early in the program. A complete, realistic construction was dismissed as this would be impossible to conceal from casual observers and would give a definite indication of the target area because of building characteristics. It was pointed out that a Russian photographic satellite was programmed over Eglin AFB and a mock-up might be discernible on photos taken from this satellite. Accordingly, this plan was modified to permit dismantling of the mock-up during the hours of daylight.

(7) During the planning phase, it was decided that construction would be of target cloth and 2" X 4" lumber. Accordingly, some 1500 yards of target cloth and seven hundred-ten (710) six foot 2" X 4"s were requisitioned and stored in the C&E yard at Auxiliary Field 3. The use of target cloth would allow the "rolling-up" of each wall and facilitate the storage of the mock-up. Post holes were to be covered by lids so as to conceal the outline. The survey and layout of the mock-up, which was referred to as a village for cover purposes, began on 7 September 1970 and was maintained on a continuous basis.

(8) The Support Detachment SGM was the project NCO on building the mock-up, normally using eight to ten personnel during the morning hours. Training conducted in the afternoon and evening in the vicinity of the mock-up limited work to four hours a day.

(9) The method of construction involved pre-assembling the mock-up in the cantonment area, fabricating each building mock-up separately. The trees inside the compound were simulated by simply transplanting trees into the compound. Landing areas around the compound were cleared, and gates and windows either painted or constructed in frame.

(10) The first insert (landing) within the compound was made on 14 September 1970. Results were satisfactory using both the HUEY and the HH-3 with the pilots, in both cases, expressing concern and amazement at the small space allowable for landing.

(11) The tendency of the target cloth to whip and tear in the prop blast from the helicopters was a problem. This was solved by cutting holes in the cloth, thus reducing the "sail effect" of the stretched cloth.

(12) The mock-up became the center of all training activity with insertions practiced under a variety of conditions; day and night, dry and live fire.

(13) On 24 September 1970, the schedule of the satellite was supplied and it was determined that there was virtually no possibility that the mock-up could be interpreted through aerial observation and identified as a POW Compound, much less the specific objective.

c. Support and Logistics:

(1) The Support Detachment and five Operational Detachments were formed, for administrative reasons, at Fort Bragg on 26 August 1970 and were deployed to Eglin AFB, Florida in two increments. The advance party, consisting of a small administrative force, departed on 1 September 1970 with the main body following on 8 September 1970. The unit was reorganized for training on 9 September 1970 into three platoons and a support detachment. The mission of the support detachment was to:

(a) Provide all administrative and logistical support to the operational plattons.

(b) Furnish back-up personnel for the operational units.

(c) Maintain a training program to cover the deployment of the operational element, thereby giving the appearance of continued operations in the Eglin AFB area.

(2) The original thought concerning the Support Detachment was that it would be modeled after the basic structure of a "B" Detachment and was designed to relieve the Ground Commander of all burdens concerned with administration, supply, messing,and coordination with other units including the Air Force, in order to free him exclusively to train his force.

(3) The Detachment was to consist of:

(a) The "B" Detachment and Conventional Staff Sections.

(b) A Mess Section.

(c) A Security Section of six guards.

(4) All personnel were briefed at 1300 hours, 26 August 1970, as to administrative and logistical actions to be accomplished prior to departing Fort Bragg, North Carolina.

(a) Appointments were made at CIF for issue of clothing and equipment.

(b) Appointments with JAG for Wills and Power of Attorney.

(c) A shakedown was conducted to ensure that all required equipment was in the possession of each man.

(d) Unit personnel officers were alerted of personnel actions needed and the priority required.

(5) On 1 September 1970, the advance party of twenty-eight officers and enlisted men were processed and departed for Auxiliary Field 3, Eglin AFB, Florida. The following week the remainder of the unit completed

all processing, and departed on 8 September 1970. No problems were encountered in the preparation of personnel for movement to Eglin AFB. Upon arrival at Eglin AFB, the Support Detachment was reorganized to three officers and twenty-three EM. The following is an organization of the Support Detachment:

(a) Commanding Officer, Major.

(b) S-4 Officer, Captain.

(c) Surgeon, Captain.

(d) Detachment SGM.

(e) S-2/S-3 NCO, MSgt.

(f) One Admin Supervisor.

(g) One Assistant Admin Supervisor.

(h) One Heavy Weapons Leader.

(i) One Light Weapons Leader.

(j) One MSgt as S-4 Sergeant.

(k) One Supply Sergeant.

(l) One Radio Supervisor.

(m) Two Radio Operators.

(n) One Medical Supervisor.

(o) One Medical Aidman.

(p) Four Cooks.

(q) Six Security Guards.

(6) In addition to normal administrative and logistical support, the Detachment provided:

(a) Medical coverage.

(b) Communication support during all phases of training.

(c) Weapons assistance during range firing.

(d) Construction of ranges and mock-up.

(e) Security for ranges during training.

(f) Security of Tactical Operations Center.

(g) Transportation support to ranges and training sites.

(h) Personnel for various details.

(7) The staff sections were organized as follows:

(a) The S-1 Section consisted of one officer and two enlisted men whose primary duty was to perform purely routine administration for all personnel involved.

(b) The S-2 was to maintain routine intelligence paperwork.

(c) The S-3 was primarily a coordinator for instruction and training of the Operational Detachments, drawing instructors from within the "B" Detachment and arranging for Air Force Instructors when necessary.

(d) The S-4 was to perform the normal functions of an S-4 with the assistance of two supply sergeants.

(8) During the entire exercise very few personnel actions were required due to the temporary duty status of all individuals. Actions that were of a routine nature were held by unit personnel officers of the man's parent unit and no priority actions were necessary. There was a small amount of typing required by the supply section, however, it did not interfere with normal administrative functions. During the training phase six personnel were released on emergency leave, varying from three to fifteen days, beginning the day the individual departed the training site and terminated on his return. The DA Form 31 (Request and authority for Leave) was mailed to the officer or EM's UPO.

(9) Mess Hall No. 5 had to absorb the additional messing-strength, and it became necessary to hire additional cooks and mess attendants. The small mess section in the Support Detachment was to operate the mess hall primarily for meals beyond the regular schedule, and were unable to aid the mess hall in its normal scheduled meals and contribute to the expanded kitchen force requirement. Coordination with Eglin Food Service revealed the amount of $8,500.00 would be necessary to pay this force. Accordingly, this amount was requested from Fort Bragg to be used by Eglin Food Service for attendants and cooks.

(10) It was decided that a late evening meal was needed when conducting night training. Food was prepared by mess personnel assigned to

the unit and consisted of breakfast type food. It was normally fed at 2200-2400 hours and enabled operational personnel to sleep beyond breakfast the following day.

d. Logistics:

(1) Logistical actions at Eglin AFB during the training phase are categorized as follows:

(a) Actions taken by supply personnel at Fort Bragg prior to movement of the main body. This began when, in accordance with the initial equipment list, supply requisitions were submitted and equipment - hand receipted from units at Fort Bragg.

(b) Support and services necessary to maintain the Army component at Auxiliary Field 3, such as billeting, messing, laundry, munitions storage, telephone service, transportation, helicopter shop support, medical, and civil engineering. These were accomplished by liaison with Logistics Plans Branch, Test Programs and Requirements Office, Headquarters, 3246th Test Wing and formalized by published Project Directive Number 9176F035, Ivory Coast.

(c) The establishment of an organizational supply account and the acquisition of equipment for both the training and operational phases of the mission was necessary. This supply account was utilized to secure items of common supply, exclusively Air Force equipment, local purchase items, expendables and Army equipment available by "transceiving" through Air Force computer channels.

(d) Supply Branch, G-4, USAJFKCENMA provided direct support for locally available supplies, primarily ammunition, pyrotechnics and exclusively Army material.

(e) Direct contact with Depot, CONARC and item managers for those items deemed necessary for the success of the operation where time or scarcity precluded requisition through normal supply channels.

(2) The very nature of the mission dictated that peculiar special equipment items be obtained for the Force. This equipment was primarily to be used to remove those devices that were expected to be used to secure POWs. Guidance from debriefings of previously freed POWs indicated that stocks, metal hasps, and a variety of locks would be encountered. During the planning stage, provision had been made for the inclusion of these items in the equipment list but the actual procurement of these items, in many cases, proved to be involved and difficult.

(a) Two oxygen-acetylene emergency cutting outfits, FSN: 3433-026-4718, were obtained through Supply Department, NAS, Pensacola, Fla., after search of the commercial market determined that such an outfit was unavailable through civilian sources. The criteria for selection included a comparative light weight, a burning time of thirty minutes and simplicity in operation. Oxygen and acetylene were procured through local civilian sources.

(b) Six commercial chain saws, GED, with 16" drive, Skill Models 1631 and 1645 were acquired through local purchases. Again, the criteria included a light weight and simplicity and ease of operation.

(c) Bolt cutters, angular cut, rigid head 36", FSN: 5520-22--7057 were acquired after training experience revealed that other models had soft metal jaws that failed upon cutting metal links of the type expected within the compound. The selected model was the type used by Air Force Fire Fighters.

(d) The 35mm Pen-EE cameras originally planned for the force were unavailable through normal supply channels. Search for a suitable substitute revealed that the Kodak Model S-20 Instamatic Camera had the desired ruggedness and simplicity. Six of these were purchased through Eglin AFB EX and operators trained in their use.

(e) The electrical head lamps, FSN: 6230-643-3562, utilized by the force are a standard item available through GSA sources. Training experience proved the inadvisability of wearing the lamp on the head and, in most cases, it was worn on the load-bearing-equipment harness.

(f) E&E Equipment (Page D-5-2, JCTG OPLAN) was modified from the original plan as further requirements became identified. In lieu of the indigenous and LRRP rations, regular survival rations for the force and special rice food for the detainees was acquired. The water mentioned was can, water, military, FSN: 7240-242-6153 and was obtained through commissary channels. In addition, each individual carried one survival kit, tropical, wet climate and a survival sheath knife.

(g) Fifteen rucksacks, similar to the indigenous rucksacks used by the CIDG personnel in the Republic of Vietnam, were made by the fabric shop of the Special Operations Force at Hurlburt Field, Fla, for the purpose of E&E for individuals of the assault platoon.

(h) To offset the danger of fire inherent in the landing of the assault helicopter, three extinguishers, fire 9076F, FSN: 4210-595-1782 were acquired for this helicopter. However, they were not needed as the helicopter did not burn.

(i) As training continued, a need for some sort of ear protection for the force became apparent. Twenty ear protectors, PRU-14/P were secured through normal Air Force channels for those individuals in close proximity to demolitions. For the remaining members, standard ear plugs were made available to reduce helicopter noise.

(j) It became necessary to modify the M-79 grenade [illegible] vest, FSN: 8415-141-0926, because of the difference in ogive [illegible] the newer round issued and round for which the vest was [illegible]. This consisted of the moving the strap securing [illegible] each individual pocket and was performed by the Eglin AFB Fabric [illegible].

(k) Acquisition of the Armalite Single Point Sight posed problems of yet another sort. After recognizing the usefulness of this particular item, a call was placed to Costa Mesa, California on 15 September, inquiring as to the availability of the sight. On 18 September, one sight was airmailed to the project with a mount that was the only model available to the JCTG during the requisite time frame of the problem. After testing the sight under field conditions, it was decided to purchase an additional 49 sights for use by the operational detachments. A local purchase agreement was subsequently entered into and 27 sights, with mounts, were immediately forwarded at a cost of $49.50 each. Upon arrival, these sights were zeroed under daylight conditions and used in an assault situation during the next night insert. Problems arose due to the looseness of this particular mount, but a generous use of black electrician's tape prevented breakage or loss of these items. Target hits increased greatly and groupings of hits were smaller, resulting in more confidence in the individual weapon. On 21 October the remainder of the sights arrived, were used, and a proper zero established.

(l) Loss of night vision due to the sudden illumination of a flare received a great deal of study. Dark lens goggles, obtained from Air Force stocks, proved inadequate as the amber and green lens failed to provide sufficient protection. The use of radiological glasses was considered but these proved to be too hard to use. The solution was to coat clear lens with red chart pak pressure sensitive tape (TC 1-2) which provided sufficient protection from sudden flare light.

(m) It was determined, during training, that a requirement existed for a knife similar to a machete but with a heavy blade and a sharp point usable for prying open doors or barricades. The machete produced by Natick Laboratories and tested by the Ranger Department some time earlier appeared to be the solution. However, upon investigation, it was found that it would take sixteen weeks to produce the needed quantity. Accordingly, a local purchase request was made through Eglin AFB to buy a similar knife

locally, Again, this was found to be an extremely lengthly process. It then became necessary to alter regular government machetes to provide the desired blade. This was done through Eglin Machine Shop which produced the necessary numbers in a matter of days.

(n) Eighty-four pair of summer flying gloves, FSN: 8415-935-6330, were acquired from the Eglin Supply Squadron. These gloves were used by force personnel to prevent injury to hands while locating locks to be cut. The gloves were a tight fit to the hands, and items of equipment could be operated without having to remove the gloves.

(o) Two-hundred-fifty 30 round magazines for the M-16 were acquired directly from the Colt Arms Company through coordination at DA as magazines were not available through the normal supply channels. A problem with the magazines was that there are no ammunition pocket for carrying these on the Load-Bearing-Equipment, however, another carrying means, a modified Claymore mine bag was developed.

(p) Six single cut fire axes were acquired through the Eglin AFB Supply System. Although weighing eight pounds, these axes proved to be the best available for the mission, providing the necessary flexibility and utility. It was planned to use these axes for breaking doors and locks.

(q) An alternate plan called for the use of a scaling ladder by the assault platoon. The fourteen-foot fireman's roof ladder was determined to be the best for the job. Accordingly, this item was acquired through Eglin AFB supply channels.

(3) Problem Areas:

(a) Problem areas encountered during the operation were primarily related to the unique nature of the operation, competition for resources by other exercises, and a reluctance by some to support the operation as stringent security requirements prevented explanation of its priority.

(b) Critical problems encountered in the ammunition area were as follows:

1. Shortly after the ammunition arrived at Eglin, a phone call from Mr. Thomas, Fort Bragg Ammunition Dump, revealed that one lot number of the LAW's was suspended. This lot was later released "For Training Only". A call to Field Service Division, Joliet Arsenal revealed that 250 LAWs were available at Lone Star Arsenal and would be diverted from South East Asia upon requisition. This was accomplished through Fort Bragg.

2. One thousand non-electric blasting caps were requested through Fort Bragg and were shipped from Fort Benning. During the demolition training phase there was a 22% misfires with non-electric caps received from Fort Benning. The S-4 officer submitted a report to the G-4 USAJFKCENA requesting the Fort Bragg ammunition officer be notified of the problems with these blasting caps. Mr. Thomas, from the Fort Bragg Ammo Dump, contacted the ammunition officer of Fort Stewart and requested 100 non-electric caps be shipped to Project Ivory Coast. A subsequent test was conducted on the caps received from Fort Stewart, and no misfires experienced.

3. As Forward Air Guide training progressed in scope, a suitable system of marking targets had to be developed. Ground action would be characterized by sharp rapid action and the force would be completely dependent on air support. Several methods of target marking were tested including 5.56 tracer, .45 tracer, M-79 HE and White Star Cluster (WSC). .45 caliber tracer, controlled item, was secured from Aberdeen Proving Grounds after coordination with the item manager at Joliet Arsenal. A search developed for a 40 mm white phosphorus round to fulfill the requirement for a "spotter round" through ammunition channels up to Department of the Army, and the CIA with no success. As experiments with the 40 mm WSC were, perhaps the most successful, it was determined that this would be the primary marking round. Experimentation and training had quickly exhausted the local supply and action was taken to acquire more from Fort Bragg. As these items were in extremely short supply, a call to DA produced a contact at COMARC to ship 250 40 mm WSC from Depot to the project.

(d) Acquisition of the auxiliary fuel equipment kit, FSN: 1560-073-3300, for the UH-1H helicopters involved considerable coordination with Fort Rucker, Alabama; these items are uncommon in the supply system and were not available at Fort Bragg. Kits were essential to increase the range of the UH-1H in the event it became the primary means of insertion.

(e) It is recommended that, in future operations, if the use of helicopters of this type is envisioned, that PLL, spare parts and necessary test equipment be identified, earmarked and made immediately available at the training site.

(4) Lessons Learned.

(a) All sources, both military and commercial, must be investigated for peculiar items of equipment. Sears Roebuck, sport shops and other firms publish catalogues useful in obtaining specifications and often give valuable information on their products which is of use to supply personnel.

(b) Future operations of this nature must include sufficient supply personnel to insure prompt reaction to sudden requirements. The original concept of one supply officer and two supply sergeants did not provide sufficient flexibility. A solution is to provide, in addition to the personnel mentioned above, an armorer, an ammunition specialist and a light truck driver/clerk. In addition, an Air Force supply liaison sergeant well versed in Air Force supply procedures and forms would have been invaluable.

(c) Direct coordination with DCSLOG agencies during the Planning Phase proved to be invaluable in the acquisition of initial equipment. The planner of any future operation should make a definite attempt to achieve and maintain this coordination.

(d) The Air Force computerized supply system proved to be a rapid means of acquiring supplies and equipment. Every advantage must be taken of this asset and future training sites should possess this valuable system.

(e) Local purchase could have been greatly expedited and facilitated if a Class "A" Agent could have been appointed on orders and a suitable amount of cash made available for direct local procurement. This amount, based on experience gained in this operation, need not have been over $4000.00. The additional aspects of bonding and accurate accounting would have outweighed the administration of local purchase through the Eglin Supply System and attendant time loss.

(f) Establishment of a Property Book Account Number for the operation would have been of immense value. Supplies and equipment hand receipted from units at Fort Bragg could have been laterally transferred to the the Task Group allowing losing units to requisition replacement items. This particular course was recommended by DA where it was determined by the DA Staff that because of the high level of the exercise it was not necessary to maintain formal property accountability. In future operations of this nature, a property account should be established at the highest level to expedite the acquisition of vital supplies and equipment. Formal accountability should be maintained as outlined in AR 220-1, AR 735-35, and USCONARC Regulation 700-11.

e. Special Equipment Development: The nature of the mission assigned to the ground force, that of forcibly removing the POW's from the compound cells, led to the examination and selection of many special items of equipment.

(1) Shotgun (12 gauge duck-bill):

(a) Purpose: To provide an area-type weapon which insures positive kills while being utilized in building clearing procedures.

(b) Manner. The original 12 gauge pump shotguns were not suitable due to the small shot pattern received at 20 meters. When the

automatic (5 shot) duck-bill shotgun was tested the shot pattern at 25 meters covered a six (6) foot area and ensured positive kills.

(c) Outcome: The 12 gauge, duck-bill shotgun was used with great success in the objective area.

(2) Acetylene Torch: A light weight acetylene torch was required to cut locks, shackles or other restraining devices. Training was conducted extensively. Personnel carrying the torches were highly proficient in their use. Due to the absence of prisoners at Son Tay Prisoner of War Camp, the torches were not used.

(3) Ax (Fire): The requirement for a tool for breaking down doors or knocking off locks was resolved by the selection of a fire ax. The ax was heavy and effective in gaining entrance to buildings.

(4) Bolt Cutters: The primary tool used by the Assault Group to open and provide quick entry into cell blocks and cells, secured by means of padlocks, was the medium size bolt cutter. Three sizes were carried which would cut any known size padlock and metal bar up to 3/4 inch in diameter. Three bolt cutters of each size were carried by the Assault Group and back-up bolt cutters were carried by the Support and Command Groups for employment in alternate plans.

(5) Goggles: Goggles were used originally to preserve night vision. As training progressed, it was determined that the value in the use of goggles was not in the preservation of night vision, but in the protection they afforded from flying debris created by the rotor wash of the HH-53 helicopter. Goggles were effectively used at the Son Tay Prisoner of War Camp.

(6) Chain Saw: Chain saw was not used at the objective, however, training was conducted with intended usage in clearing the landing zone of [illegible] obstructions and as a stand-by tool should the Assault Group need it while releasing POW's.

(7) Megaphone, Hand Held/S-197: The megaphone was used to control ground force personnel during heliborne training, by the Assault Group in issuing instructions to Assault Group personnel within the assault helicopter, and to issue other instructions within the compound.

(8) Night Vision Device: Group and Element Leaders were provided the device early in Phase IV. Its limitations and capabilities were explained to each individual. Use of the device was then demonstrated in a practical application exercise. During the mission, the device was used to adjust M-79 fire on a target. It was also used to identify two armed enemy/personnel at approximately 80 to 100 meters distance. In another incident two enemy personnel were sighted moving on a road at approximately 300 meters distance.

(9) Single Point Sight: The sight is designed to military specifications and can be dropped eight feet on to concrete without altering the zero. Length 6-3/4 inches. Diameter 1 inch. Weight 7 ounces.

(a) Mounting: The sight was mounted with standard one inch rings on a bar base. The base was then secured in the recess of the M-16 carrying handle. The eye relief was somewhere between two and five inches from the eye when in the firing position, with the elevation adjustment upwards and the windage adjustment facing right as seen by the firer.

(b) Sighting: The sight is designed to make full use of the amazing automatic reflex characteristic of the human eyes and brain. The sight blanks out the view of the target with one eye and substitutes the aiming point which appears at infinity. The other eye has a clear view of the target and the output from each eye is passed via the optic nerves to both sides of the brain. The brain collates the two sets of information and the normal process of binocular vision gives the shooter an aiming point apparently projected out in the target area. The shooter's eyes focus on the target.

The sight gives all round vision apart from a small blind area. The eye in front of the lens becomes a gathering source, and as it does not see the target, eliminates the problem of master eye. The other eye sees the aiming point projected onto the target. The sight makes full use of both eyes and the shooter's natural reflex action makes it fast and simple to use.

(c) Problem Areas:

1. Learning to shoot with both eyes open.
2. Not tightening the rings and base enough.
3. No tool to tighten the mount rings.
4. Stripping the bolt on mount rings.
5. Lack of confidence in the sight.
6. Tendency to shoot lower at night.
7. Concentrating on dot too long.
8. Concentrating on the dot instead of the target.

(d) Results: After one sight and several parts were lost, a proper degree of tension was found for all bolts on the sight. This can only be found through experience and common sense. In order to get further stability and prevent the sight from being lost if the bolts come loose, tape was placed around the sight and weapon at strategic points. A large 12 inch screwdriver can be notched to fit the configuration of the mount screw. Shooting with both eyes open required from 30 minutes to two hours of practice. All shooters found that this gave a wide angle view and true picture of the target area. This also enabled the shooter to switch from one target to another more rapidly and accurately, with a clear view of the target after firing. All shooters were constantly reminded to shoot rapidly. This stopped them from concentrating on the spot and causing it to blur, and shifted the concentration to the target. The correction of these problem areas produced a complete confidence in the single point sight. An average of one out of twenty could not learn to use the single point. This [illegible] to one out of a hundred with time.

(e) Accuracy: At a distance of 25 meters, the poorest marksman could place all rounds in a 12 inch circle at night. At a distance of 50 meters, the same shooter could place every round in an E type silhouette both day and night. The only advantages found in day shooting were speed in engaging the target and shifting fire. The single point could not compare with open sights for accuracy. At night the situation reversed. Shooters could engage targets and shift fire just as rapidly as in day fire with the same amount of accuracy. Open sights would have produced only a fraction of this speed and accuracy.

(f) Use of Sling with Weapon and Sight: It was learned that the rifle sling as described in Para (10), had the same advantages with the single-point sight as with the open fixed sight.

(g) Summary:

With the proper training, the Single Point Sight is an invaluable aid to the infantry rifleman. There are no liabilities to the sight other than additional weight. The key to the sight is the fact that the open sights are still clear, giving the shooter an option of sights depending on time and illumination.

(h) The above information was gathered from several unofficial sources and is not in any form or fashion intended to be a substitute for full scale tests to determine its value to the military as a whole. It is considered fully suitable for the precise use to which it was put and under the conditions which it was used.

(10) Weapon Sling: It was determined that a fabric sling, attached to the front sight post and rear of the carrying handle enabled the firer to assume a good firing position and better stablize his weapon. It also gave the firer a constant sight picture, with his eye always the same distance away from the open sight or the single point sight eye-piece.

With the sling looped over the neck the weapon could instantly be put into firing position, enabling the firer to free both hands at any time desired.

(11) Demolition Charges:

(a) Satchel charges:

1. Five pound satchel charge: Four (4) five pound satchel charges were carried to destroy the concrete power tower located south of the target. These charges were carried by the Command Group.

2. Thirty pound satchel charge: Four thirty pound satchel charges were carried by the Support Group. These items were heavily overcharged in order to minimize personnel exposure and to ensure destruction of the target.

(b) Special Demolition Charges:

1. Three pounds of C-4 were used to blow a hole at the southern end of the east wall of the compound.

2. A three pound mixture of C-4 and Thermite, in a thirty inch length of four inch fire hose was used to destroy the HH-3. This was placed under the floor in the bilge sump between the fore and aft fuel tanks, and secured by metal cover and padlock. The charge was designed to insure positive destruction of the HH-3 helicopter. Detonation was ensured by dual priming a 10 minute time fuse.

f. Tactics and Techniques: The special tactics and techniques employed by the ground force during the training period and the actual operation were the employment of the helicopter as a gun platform, techniques for POW cell search, specially adapted hand and arm signals and the bridge demolition plan.

(1) Helicopter Platform Firing:

(a) Purpose. A need was recognized for additional skills in firing machine guns and shoulder weapons from the assault helicopter in flight during its landing phase. The techniques developed would be necessary to provide fire power on the Son Tay Prisoner of War Compound during the insert.

(b) Manner. The two helicopters employed and provided for the Army UH-1H helicopter and the Air Force HH-3 helicopter. Each was put through strenuous tests from which comparable data was kept, including number of personnel, weights, and type weapon that could fire from each type helicopter. During the test many changes were made in individual firing positions in order to arrive at a system that would allow maximum number of rounds placed on the high threat areas (the gate and U/W tower). With this consideration in mind, left hand firers were placed in position to give greater accuracy and longer engagement period. The UH-1H helicopter platform allowed four shoulder weapons (CAR-15) to fire from the right side and two from the left side. The UH-1H proved to be much faster than the HH-3 on insert which reduced the time and number of rounds delivered on the target. Approximately two 30 round magazines could be fired by each firer. The HH-3 helicopter allowed one 7.62 Cal Machine Gun mounted in the left front window and ten shoulder weapons positioned in the windows, right front door and on the ramp to be fired. This system provided excellent accuracy and 360 degree target coverage. The approach into the target was slower allowing approximately one hundred 7.62 Cal rounds to be fired from the mounted machine gun and three 30 round magazines from the CAR-15s prior to touchdown. All ammo used during this period of firing was tracer aiding the machine gun in maintaining accurate fire on its target, as well as the added psychological impact the tracers create. Tracers were not necessarily useful for the CAR-15s as the single point sight was used with great accuracy, but did not hinder the night firing.

(2) Cell Search:

(a) Purpose. To acquaint the assault group with techniques of clearing and searching cell blocks cells, releasing and securing POWs within.

(b) Manner. Field 1, an abandoned auxiliary air field, was used for this purpose. Condemed buildings with hallways and small rooms were selected. Doors were equipped with padlocks. Shackles were positioned in the simulated "cells". Personnel were positioned in the cells with instructions to act out a part to simulate a prisoner of war; i.e., sick, wounded, in state of shock, etc.

(c) Outcome. This training was invaluable as it brought out many problems that had not been anticipated.

(3) Hand and Arm Signals/Battle Formations:

(a) Purpose. To establish an SOP within the Force - a list of simple, easy to learn and effective hand and arm signals/battle formations in which a small unit leader can control his men.

(b) Manner. Due to the caliber and background of personnel within the Force, many systems concerning small unit hand and arm signals/ battle formation were in effect. However, a standard list was drawn up and approved for use. (Para b (3)).

(4) Bridge Demolition Plan. Special emphasis was given to the swift removal of the vehicle bridge 120 meters north of the Prisoner of War Compound. The satchel charge method of demolition was chosen in the interest of swift placement and reduced personnel exposure time at the bridge site. Two 30-pound charges (with two similar back-up charges) were fabricated in individual ruck sack carriers. These charges were designed to be placed, one each over the two metal stringers under the treadways. The charges were expanded to ten times the formula-computed composition to insure positive effect. A related one and one-quarter pound charge for the communications cable crossing the bridge was to be initiated with the main charge.

(5) Standard Arm and Hand Signals:

(a) Thumb down - DANGER - enemy or no good, prepare weapons for action.

(b) Hand in front of face waving back and forth, thumb near face - NO!

(c) Thumb up - YES!, all clear, prepare to move out, O.K., good.

(d) Thumb up, point in any direction - Move in that direction.

(e) Thumb down, followed by two fingers moving and point in that direction - Enemy in sight in that direction.

(f) Thumb down and both hands forming a roof - ENEMY STRUCTURE.

(g) Hand over eyes and point in a direction - Hide there at that location.

(h) Left hand forming a fist - Odd number element/team.

(i) Right hand forming a fist - Even number element/team.

NOTE: IF THE GP LDR FORMS THE ELEMENT/TEAM SIGNAL, AND SWINGS HIS ARM FORWARD, THEN THAT ELEMENT/TEAM MUST MOVE INTO POSITION IMMEDIATELY.

(j) One hand forming fist and pumping from belly to extension of arm - AMBUSH POSITION. Move away from the fist and take up a position immediately. If leader gives grabbing signal, then the team will secure the enemy on his command.

(k) Hand waving as if to say "GOOD BYE," indicates "COME HERE."

(l) Both fists formed as if breaking a stick - TAKE A BREAK

(m) Two fingers formed as chop sticks and the other hand as a dish, two fingers move from the dish to mouth rapidly - EAT CHOW. This is normally given in conjunction with the break signal.

(n) The break signal with the fist to the ear - BREAK FOR RADIO CONTACT.

(o) Hand rotating over the head with finger pointing upward - FORM THE CLOCK DEFENSE.

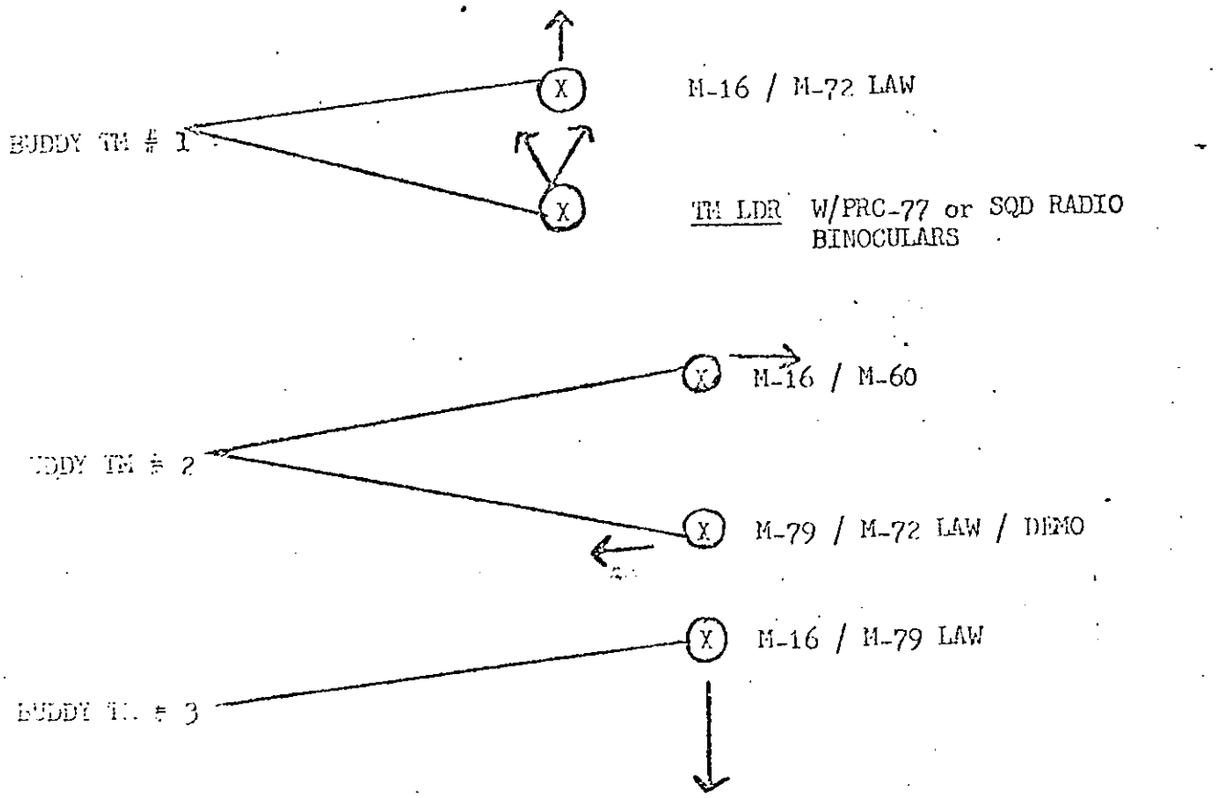
(p) Three sounds of any fashion - DESIRE TO CONTACT Two sounds of any fashion - DESIRE TO RECEIVE. i.e., snapping of the thumb and finger three times means ATTENTION, Desire to contact. The answer would be two snaps of the thumb and finger to receive. This is used normally when the team leader wishes to contact the team members to give a signal. At this time, no reply is necessary, only look his way. Also, when a team member is lost and believed close to a rallying point, this is a good signal which is much better and quieter than verbal noises such as shouting names, etc. (especially good at night.)

(q) Place the hand on top of the head and point to one's self, means COVER ME.

(r) Pointing to a team member and then to one's self and in a direction means, YOU AND I WILL MOVE IN THAT DIRECTION.

(s) Point to a team member, then to the eyes and in a direction means TO COVER THAT AREA.

FORMATION FOR A 5 MAN TEAM (System will be used in all size Group, Elements or Teams)

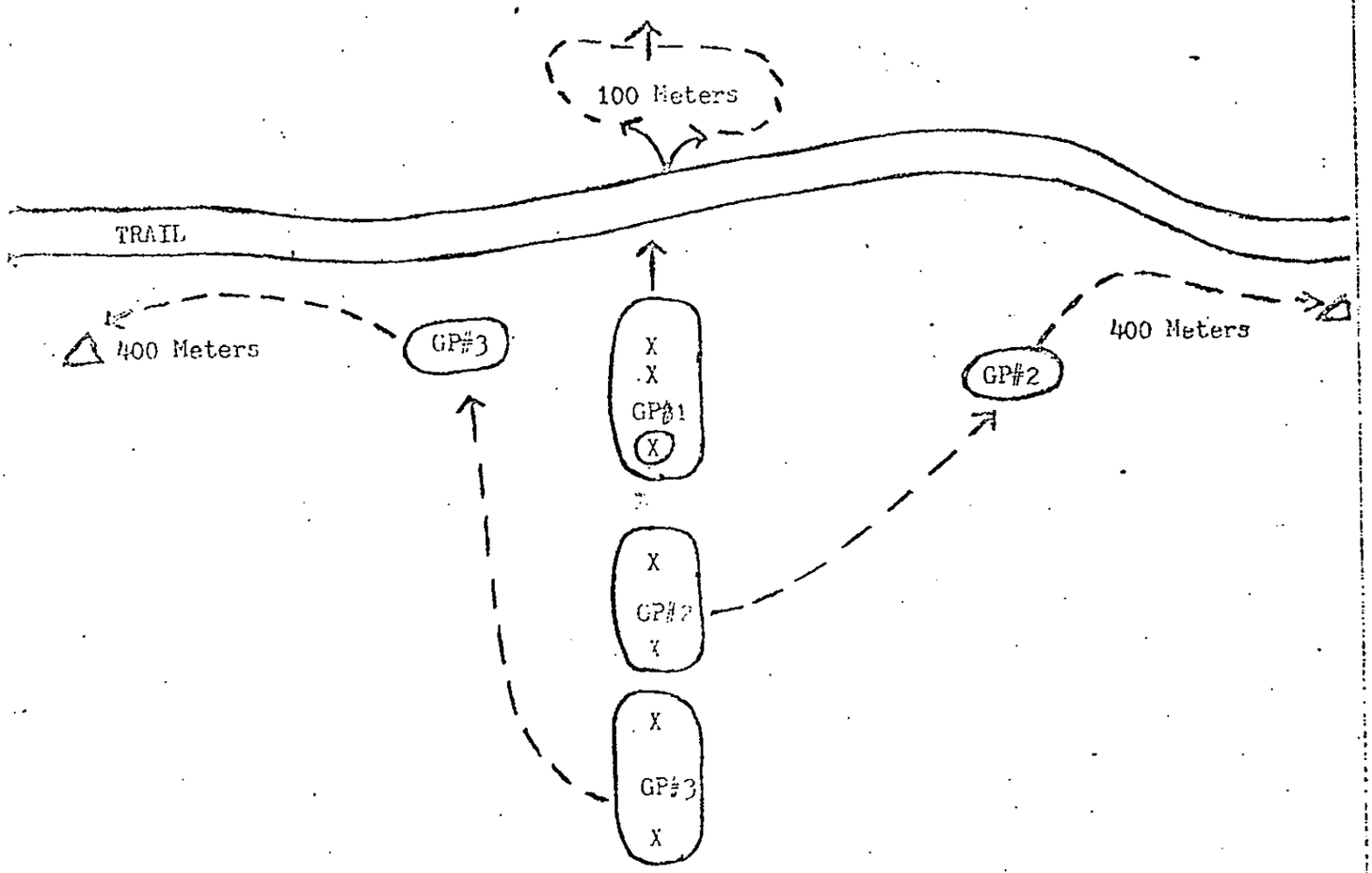


NOTE: RESPONSIBILITIES for Buddy Tm or Indiv Applies To Any Size GP, ELM Or TM.

1. Navigation, security and leadership to front
2. Security to flanks, PW's and medical problems..
3. SECURITY to the rear.

SITUATION:

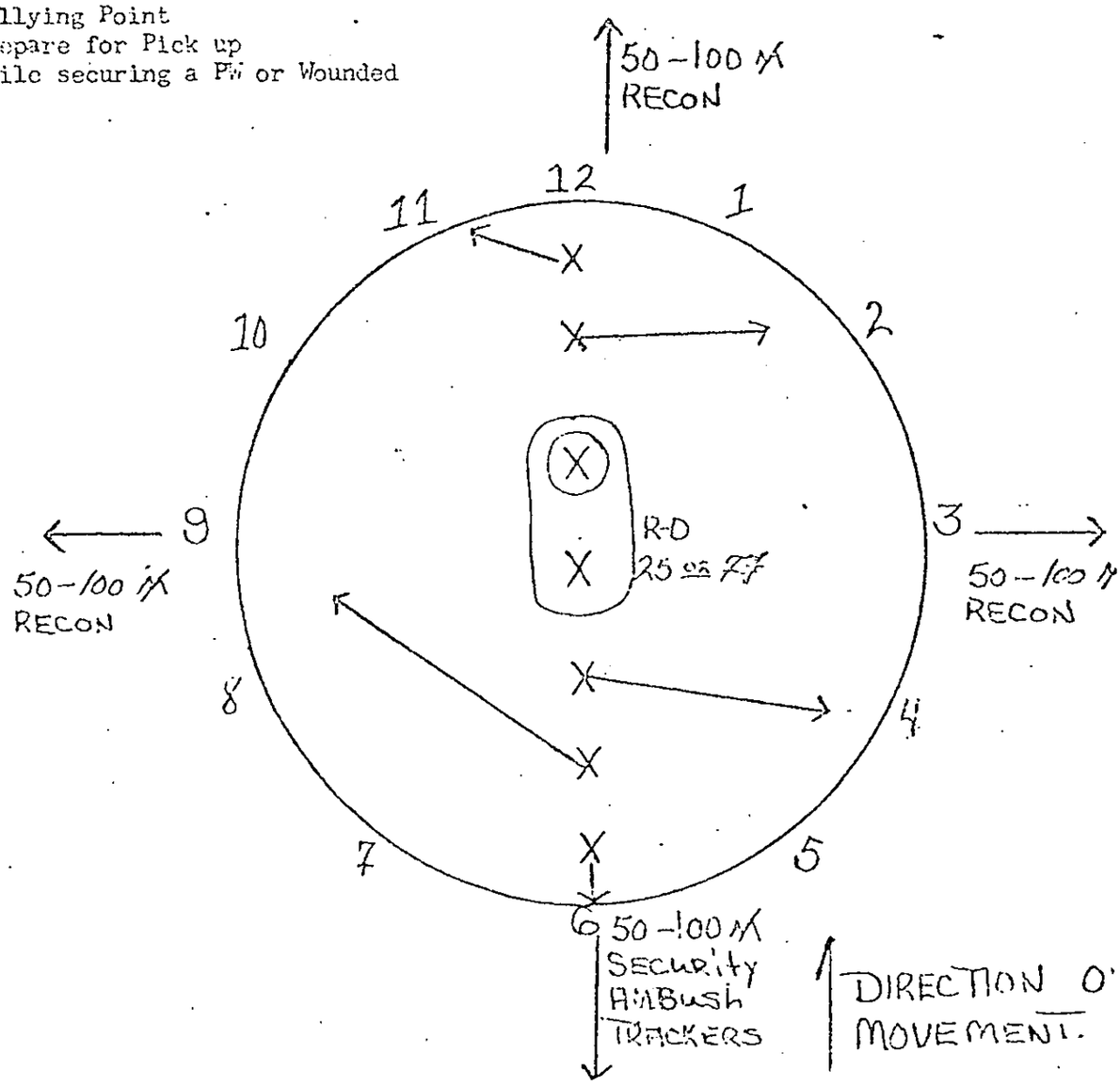
1. Trail Search.



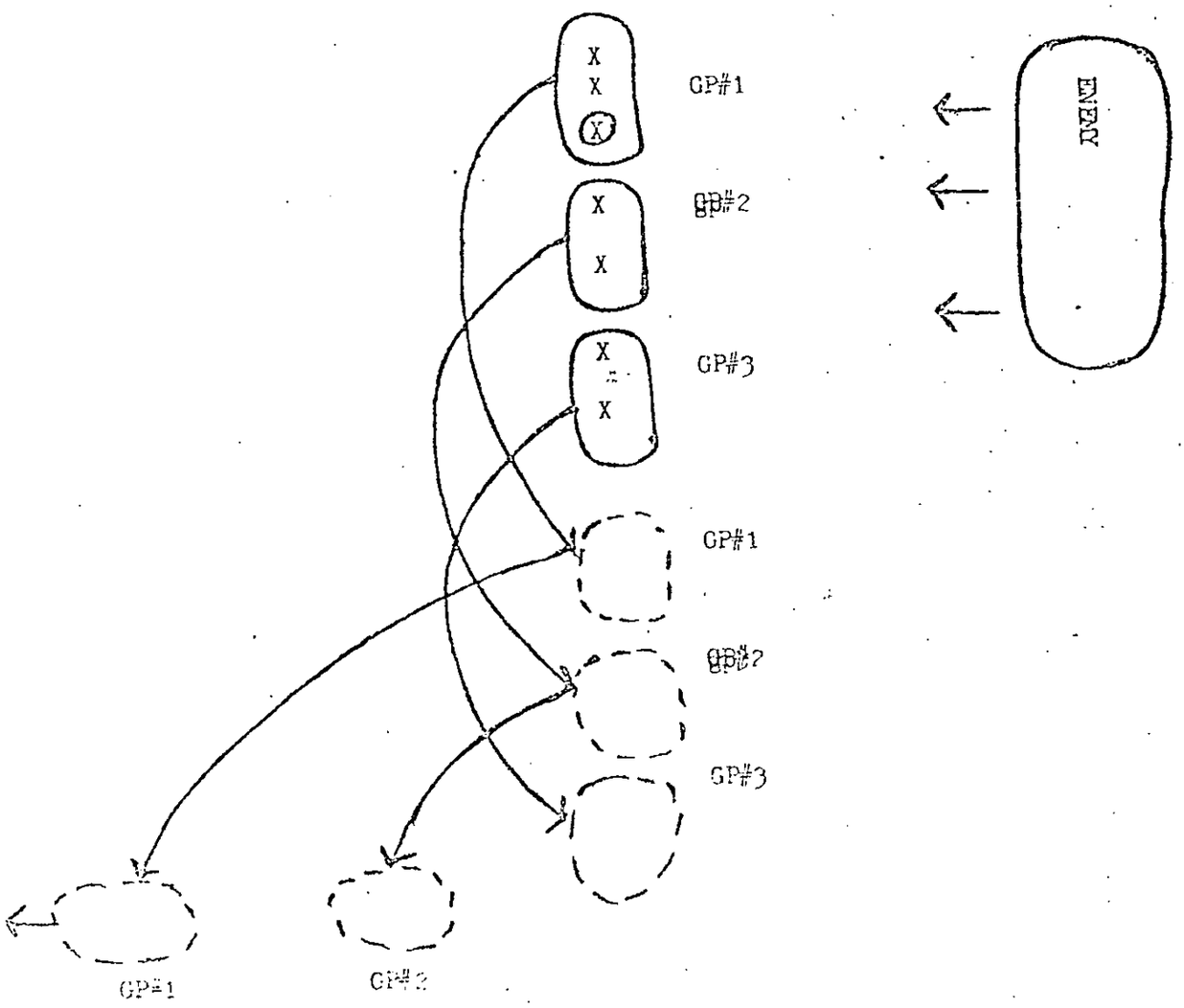
GP / ELM / TM # 2 HAS THE AREA TO THE RIGHT TO CLEAR, GP/ELM/TM #3 HAS THE AREA TO LEFT TO CLEAR. THESE GPS WILL NOT GO BEYOND 400 METERS. GP/ELM/TM # 1 WILL CLEAR THE AREA ACROSS THE TRAIL FOR A DISTANCE OF 100 METERS WIDE BEFORE CROSSING.

SITUATION: CLOCK DEFENSE.

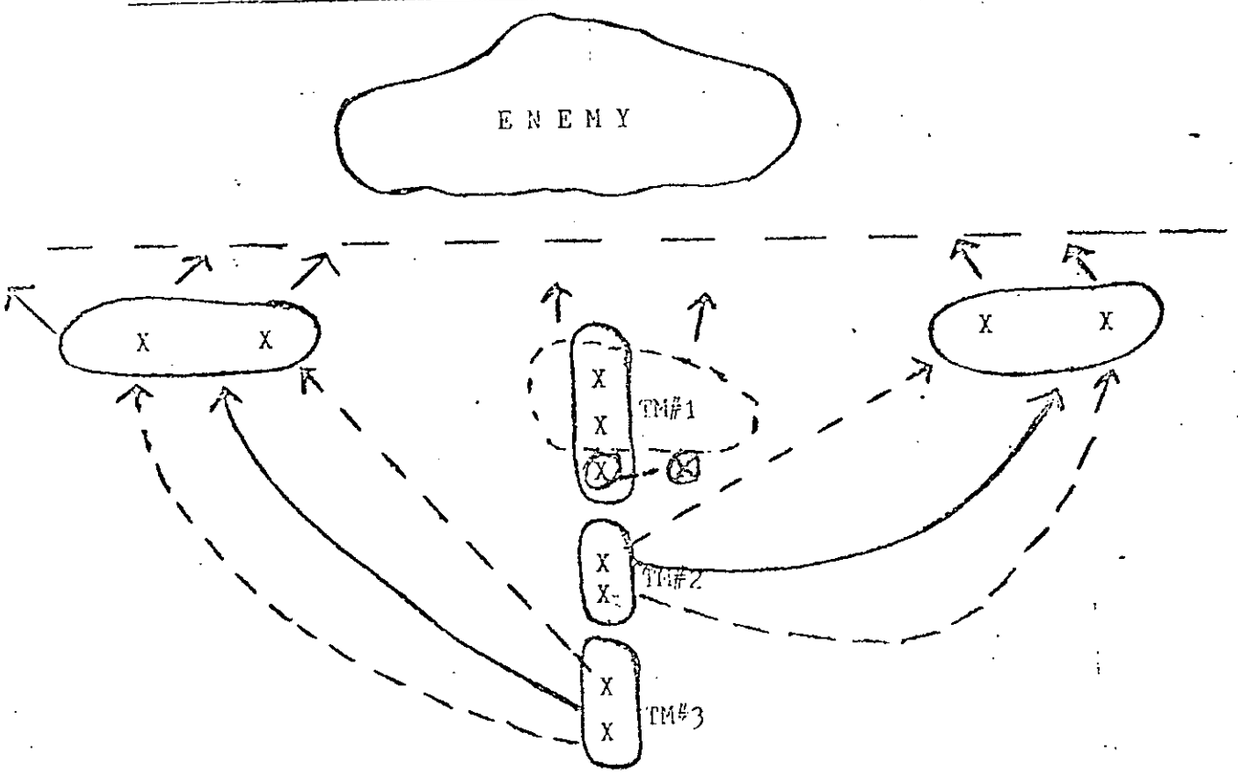
1. Radio Contact
2. Fat Chow
3. Sleep
4. If Surrounded
5. Rallying Point
6. Prepare for Pick up
7. While securing a PW or Wounded



SITUATION:
1. AMBUSH from the right, TM must break contact immediately. GP/ELM/TM # 1 will move behind and in direction TM LDR gave. 3 O;clock directly into enemy, 9 O;clock directly away or 6 O'clock in rearward direction. The change direction for escape time to break contact: APPROXIMATELY THREE (3) MIN.



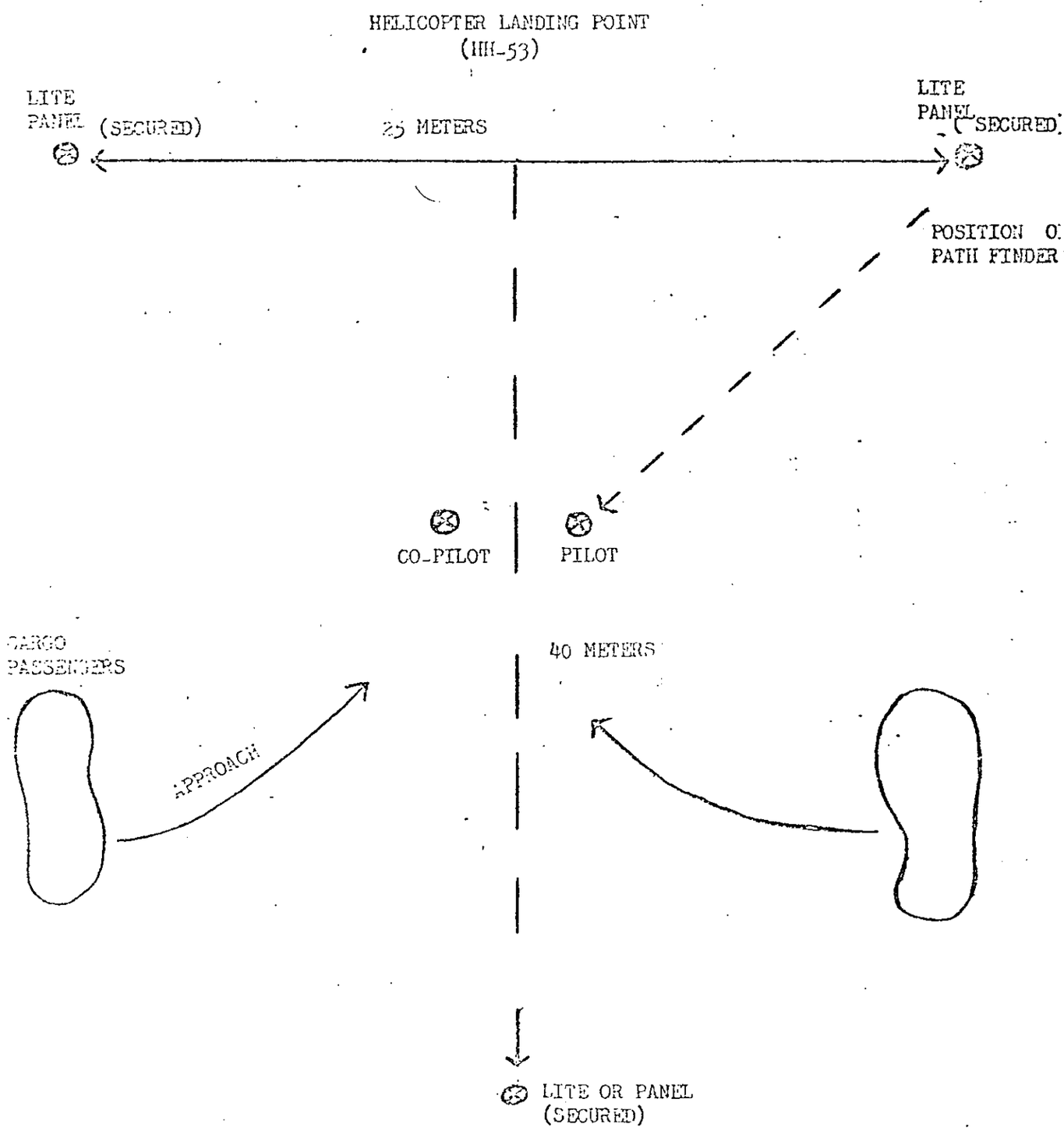
SITUATIONS FOR IMMEDIATE ACTION AND GP/ELM/TM ACTION, BASED ON A 7 MAN TM.



SITUATIONS:

1. CONTACT W/ENEMY IF DESIRED
2. ARRIVE AT DANGER AREA
3. ROAD WATCH FOR SHORT PERIODS
4. HASTY AMBUSH
5. TO RECOVER A WOUNDED SCOUT

"TIME TO FORM INTO THIS FORMATION, APPROXIMATELY THIRTY (30) SECONDS.


HELICOPTER LANDING POINT
(HH-53)
LITE
PANEL (SECURED)
25 METERS
LITE
PANEL (SECURED)
POSITION O
PATH FINDER
CO-PILOT
PILOT
CARGO
PASSENGERS
APPROACH
40 METERS
LITE OR PANEL
(SECURED)

PHOTOGRAPHS OF EQUIPMENTS

A. SATCHEL CHARGES

B. DUAL IGNITION SYSTEM

C. AUDIO HAILER MICROPHONE

D. SIGNAL MARKER

E. SIGNAL, DISTRESS

F. GOGGLES, TINTED LENS

G. RIFLE, US, 5.56MM

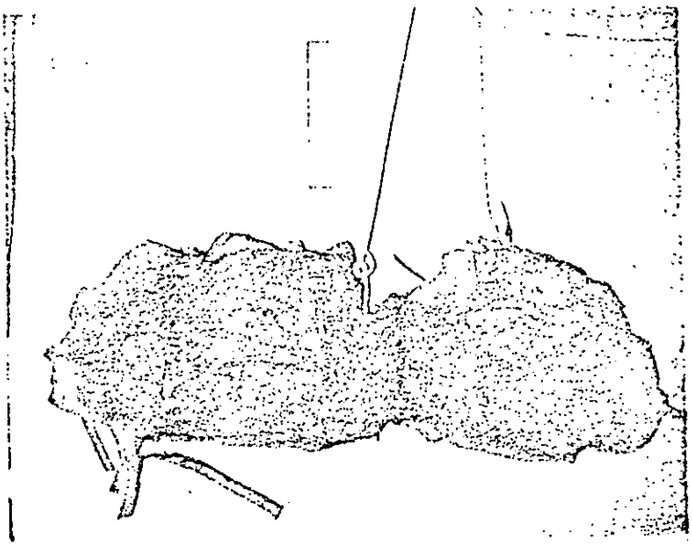
H. SIGHT, SINGLE POINT

I. CUTTER, BOLT

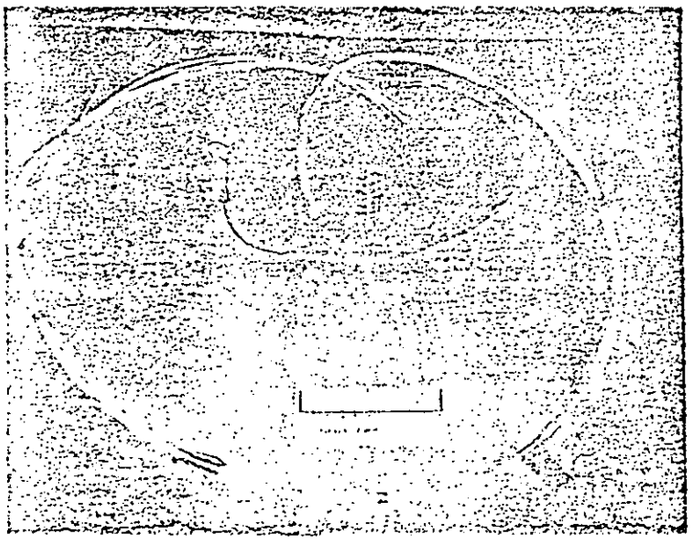
J. WIRE CUTTER

K. AXES

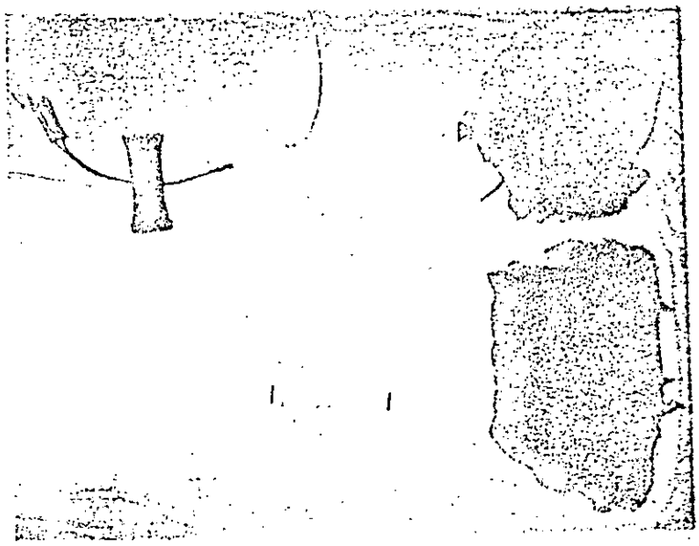
L. TORCH, CUTTING



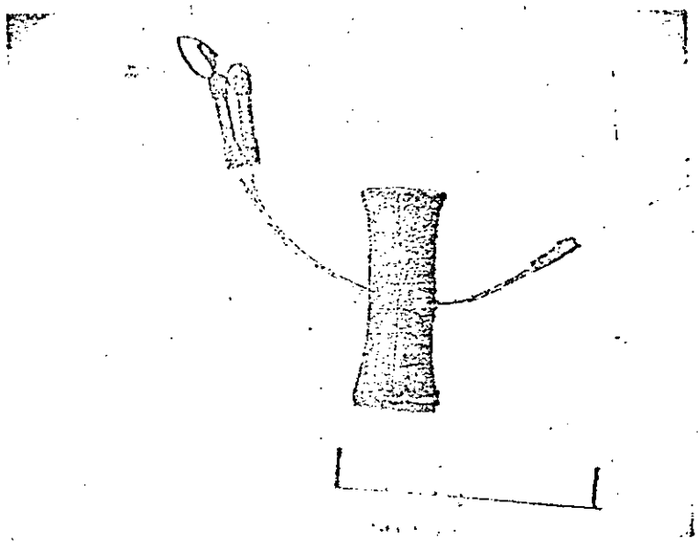
Two 30 lb Satchel Charges



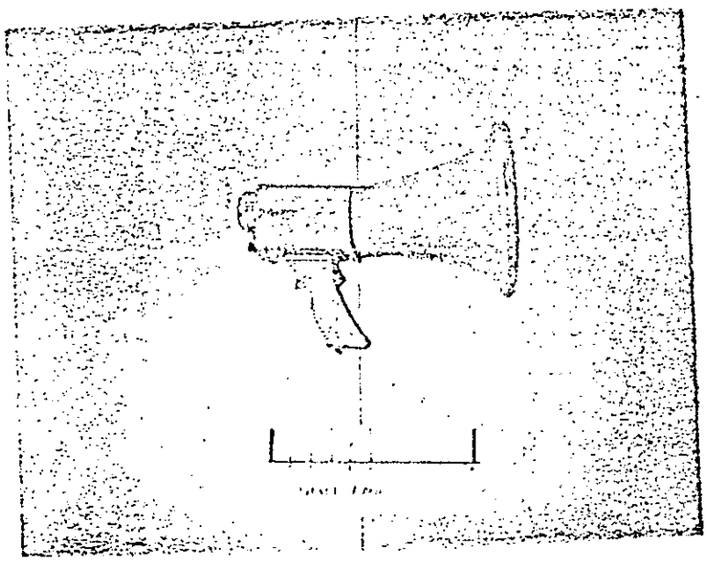
Det Cord, 8 Strand, Knots Every 18', w/Ignition System



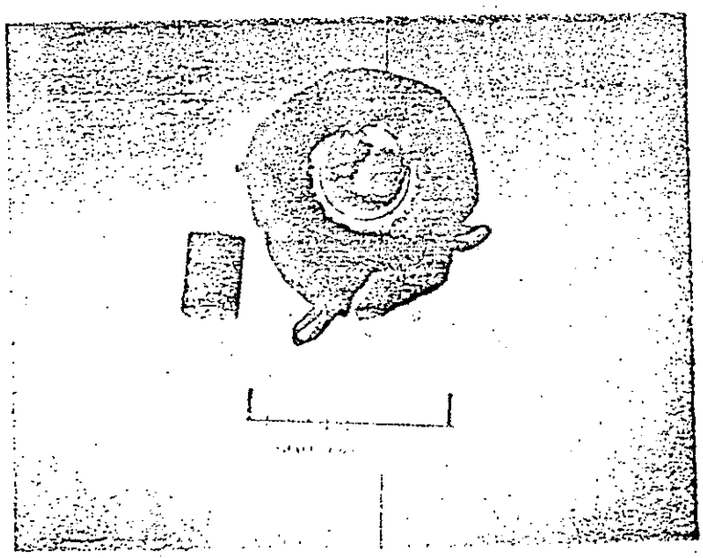
Two 30 lb Satchel Charges w/Branch Line and Dual Ignition System



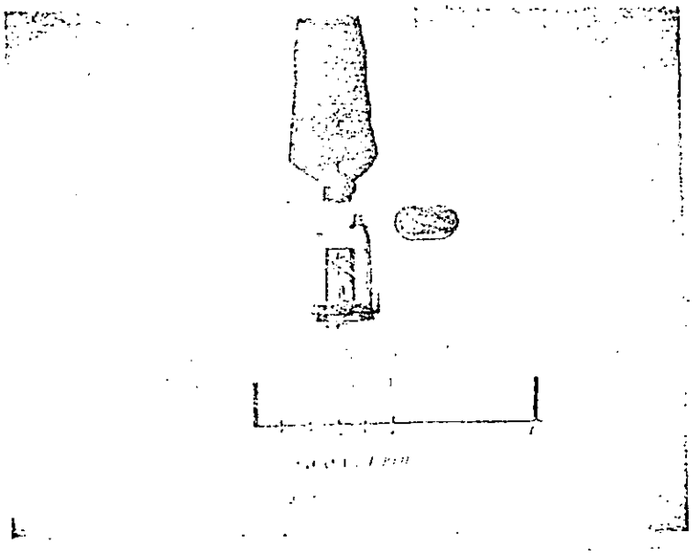
Dual Ignition System w/Securing Shot Bag Weight



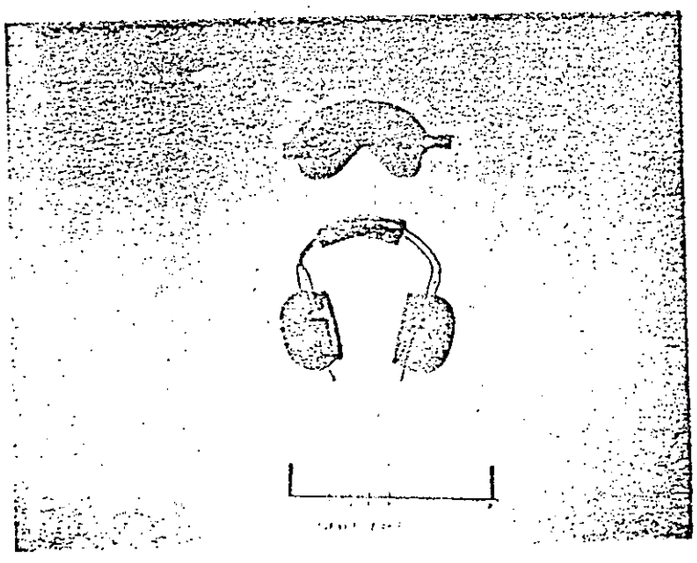
Microphone, Audio Hailer, S-120



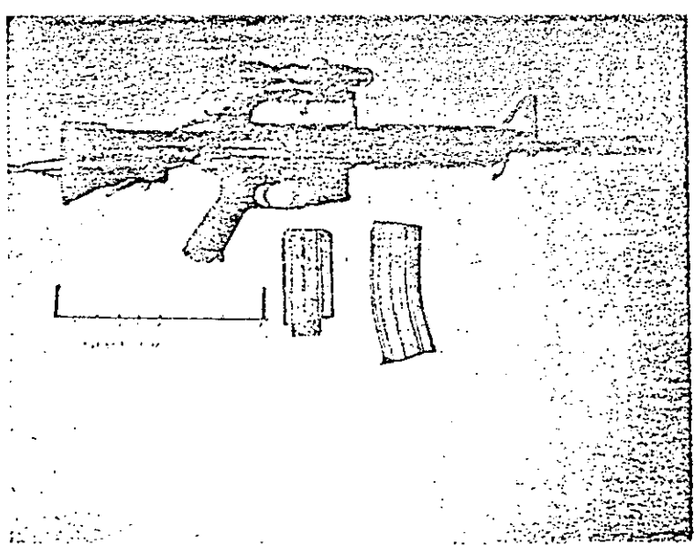
Signal Marker, Ground to Air



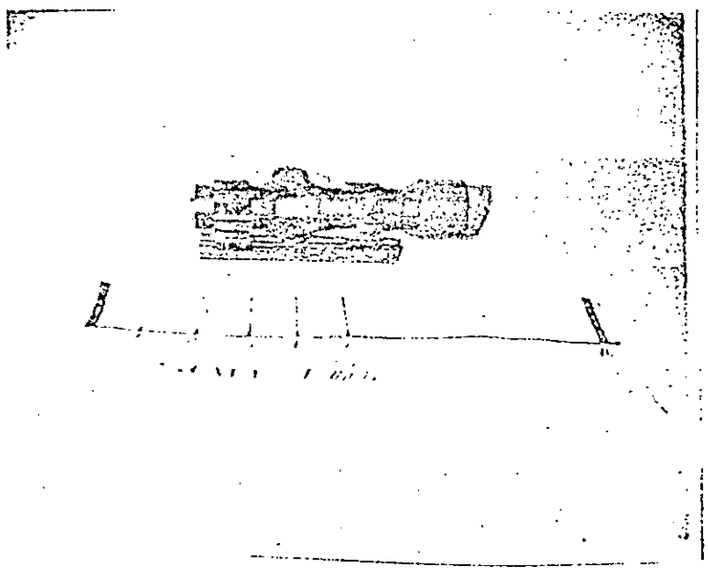
Signal, Distress (Strobe Light)



Goggles, Tinted Lens
Aural Protectors

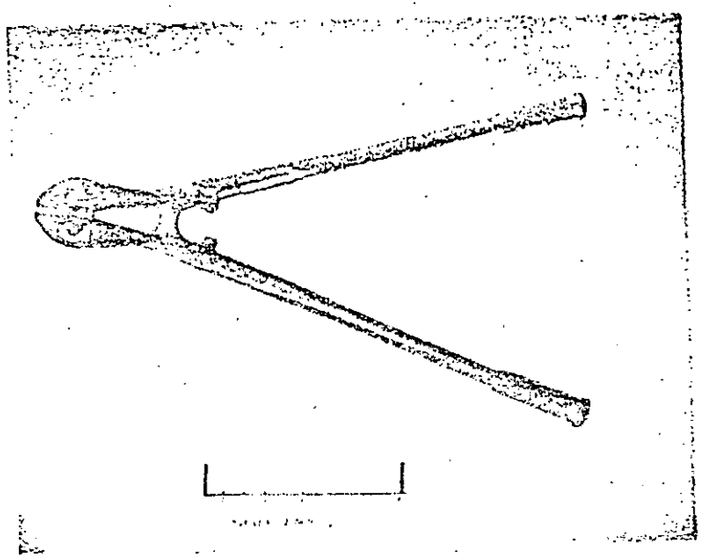


Rifle, US 5.56mm, CARR 15 w/Scope

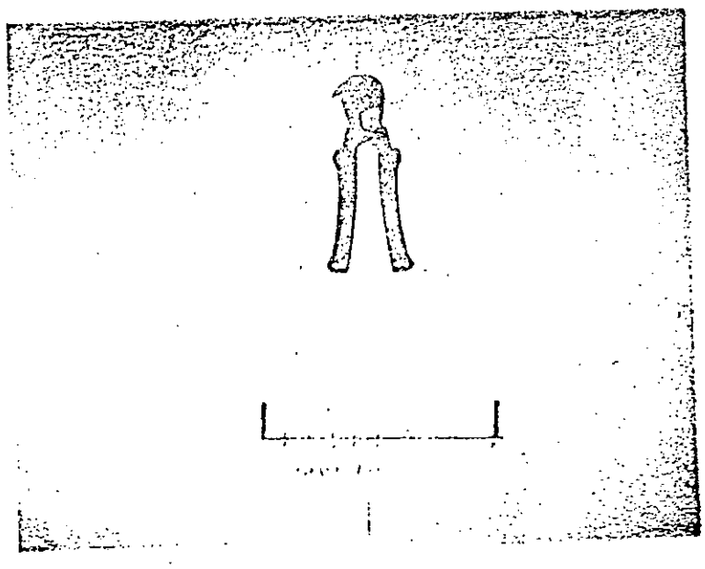


Sight, Day/Night, Single Point

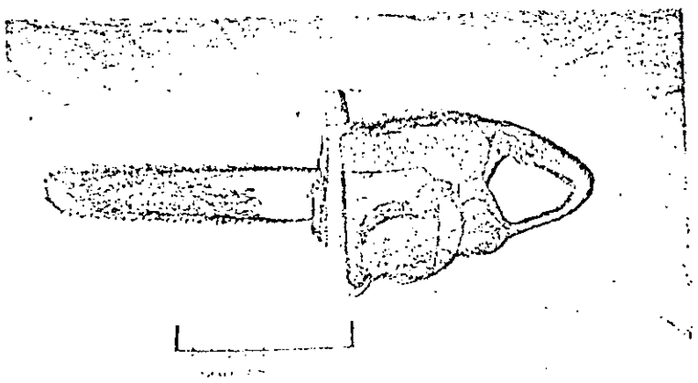
Sight, Day/Night, Single Point



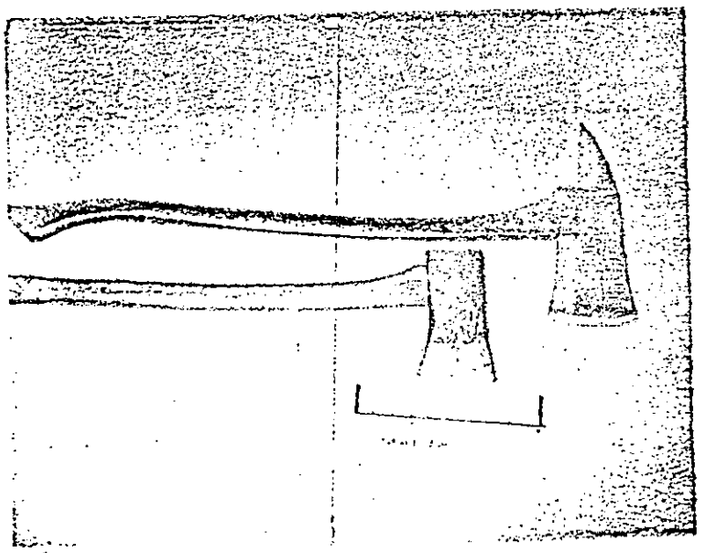
Cutter, Bolt, 36"



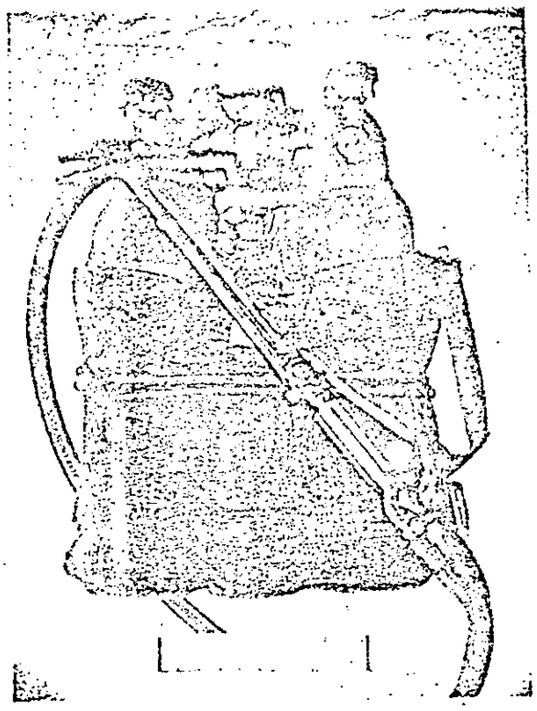
Wire Cutter w/Insulated Handle 20,000V Rated



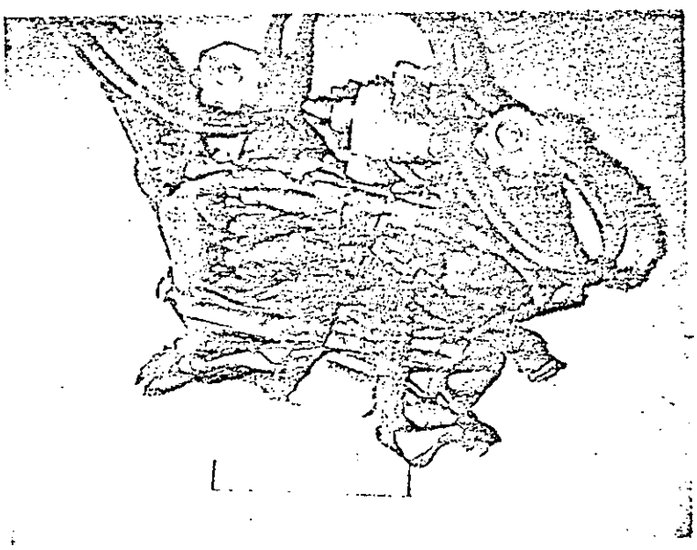
Chain Saw, GED, 18" Cut



Axe, Fire, Single Cut
Axe, Chopping, Single Cut



Torch, Cutting, Portable



g. Individual and Unit Training (Phase I-IV). Individual and unit training were combined throughout the entire training period. Joint training was the major theme of Phases III and IV. A detailed break out of each phase follows:

(1) Phase I: (9 September to 16 September 1970) A general review of military subjects. Personnel were evaluated during this period with the purpose of selecting primary and alternate group members at the completion of Phase I.

(a) Physical Training. Each morning before breakfast, each of three platoons and the "B" Detachment executed six repetitions of Army Drill I, then ran two miles -- running three minutes, walking one -- advancing to eight repetitions and a continuous two mile run. On the days that training was completed before the last hour, organized athletics were scheduled for all personnel.

(b) Medical Training (Psychology). Personal hygiene and preventive medicine was presented by the JCTG Surgeon in preparation for the psychological aspects of evasion and escape training.

(c) Map and Compass Review. Basic techniques of map reading, use of compass, and orientation methods were presented in conjunction with land navigation training.

(d) Communications Procedures. Lectures and practical exercises in short range nets, communications checks and maintenance of equipment were presented.

(e) Radio Sets (AN/PRC 77, 25, 41, 90 and URC 10). Introduction to operating procedures and familiarization classes on each radio was presented in conjunction with practical exercises.

(f) Helicopter orientation (HH-3, HH-53 and UH-1H). Introduction to each type of helicopter with loading and unloading procedures and aircraft capabilities. Each platoon was landed several times at the training LZ. Rapid loading and unloading in tactical situations was practiced for aircraft familiarization.

(g) Demolition methods and techniques. Basic introduction to non-electric charges included preparation of charges, testing of time fuze, safety precautions and placement of charges. Each man initiated one one-quarter pound charge.

(h) Evasion, escape and survival. Basic techniques of survival, snares, traps, and water collecting were of primary interest.

(i) Patrolling techniques. Short lectures and practical exercises in small unit tactics, movement in hostile territory, and hand and arm signals were conducted.

(j) Range firing (M-16, M-79, M-60 and .45 pistol). All personnel zeroed M-16 rifles and fired the M-79 Grenade Launcher, M-60 machine gun and caliber .45 pistol for familiarization. Firing at known and unknown distance targets was conducted. Special neck slings for M-16 rifles were constructed and fitted for each individual.

NOTE: This relaxed schedule of approximately seven hours per day was designed to allow the individual Ground Force member sufficient time to adapt to the strenuous PT program and to become acclimated.

(2) Phase II (17 September to 27 September 1970) included a continuous review of basic skills with the addition of special training appropriate to the operation. More emphasis was placed on night activity during this period.

(a) Medical training included a general review of the five life-saving steps associated with treatment of battle wounds, fractures, and shock. The use of serum albumin and morphine was discussed and demonstrated.

(b) Night range firing. Familiarization and firing of the M-16 rifle, caliber .45 pistol, M-60 machine gun, and M-79 grenade launcher. (Same as day firing, minus zero of M-16 rifle)

(c) FAC/FAG training. An orientation on selected close air support aircraft was followed by a series of day and night practical exercises. (See para (4)(j))

(d) Cross country movement. The emphasis was on small unit tactics, crossing of danger areas, hand and arm signals, and land navigation with map and compass. The training was exclusively night oriented.

(e) Raid and immediate action drills. The emphasis was on small unit tactics with each element practicing and perfecting approved techniques.

(f) Day/night aerial platform fire techniques. Development of assault platoon firing techniques from HH-3 and UH-1H helicopters.

(g) Village surveillance, house search, demolition placement. Emphasis on perfection of techniques and unit coordination reoriented toward separate unit missions.

(h) Medical training. A review of treatment for battle wounds, shock, and fractures was conducted in greater detail.

(i) Night firing and target recognition. Small unit movement and firing techniques for engagement of targets at unknown distances were emphasized.

(j) House and way-station clearing (day and night). Each group and its subordinate elements developed and perfected proper techniques and team work required for future mission requirements. NOTE: Raids, immediate action drills, target surveillance and house clearing operations received extensive attention during day and night problems. To add realism, abandoned buildings on Field 1 were used as a training aid.

(3) Phase III (28 September to 6 October 1970). Joint training was begun in earnest during this period. For the first time,

the Ground Force units were married up with their Assault Force aircraft to begin development of detailed insertion and extraction phases of the ground plan. The period was broken into separate sections when live firing by assault elements was conducted. Dry firing landings were rehearsed extensively prior to live fire conduct. The period culminated with a series of "profile" flights. The last profile was flown was flown full-time to include a one hour flight simulating the flight from staging base to launch site. (See Schedule.)

(a) Rehearsals. Three inserts (landings) by helicopter were made during each daylight period and three during each period of darkness. Dry runs and live fire inserts were conducted, FAG's worked with A-1Es.

(b) Weapon training (range firing). Selected M-60, M-79 and M-72 gunners were given extensive training with these weapons. The single point sights were issued and weapons were zeroed with the sight mounted.

(c) Search and rescue training. Introduction to search and rescue (SAR) procedures and SAR capabilities were followed by practical exercises with each individual riding the "jungle penetrator" mounted on the HH-53 helicopter.

(d) Medical aspects of evasion and escape. Each individual was given one survival ration for evening meal with no other food to be eaten that day. The benefits of the ration were explained in detail.

(e) Range firing (night). Using the single point sight, night firing techniques were practiced and refined.

(4) Phase IV (6 October to 13 November 1970). Following the completion of Phase III, a period of continuation training was

directed. This period, Phase IV, was designed primarily to maintain Force readiness, to improve skills and techniques of operation and to develop and rehearse alternate plans. The period was open-ended as the deployment date had not yet been fixed. Individual training with special equipment was conducted with primary emphasis on rehearsals of the basic and alternate plans.

(a) Dress rehearsals. Numerous day and night rehearsals were conducted to refine techniques and to cut down the time required in the target area.

(b) IAD, house-to-house fighting (live fire). A review of earlier training was given in live fire and movement by individual units.

(c) Medical training. All individuals practiced giving and receiving injections.

(d) Specialized training. Individuals were given instruction in:

1 FAG procedures, live fire (A-1Es). Review of air strike techniques with practical application periods following.

2 Demolition training. Electrical and non-electrical systems were emphasized.

3 Chain saw. Operation and care and cleaning were reviewed.

4 Acetylene torch. Proper techniques of use were covered.

(e) House clearing (day and night). A live-fire exercise with primary emphasis placed on group fire and movement and fire and movement by elements of the groups.

(f) E&E/SAR exercise. A lecture in methods and techniques used in a hostile environment to rescue personnel by helicopter was followed by a three day E&E exercise culminating with an actual extraction by UH-1 helicopter on the last day.

(g) Rehearsal of alternate plans. Each group was familiarized with applicable alternate plans. Numerous dry and wet firing runs to develop and refine individual portions of these plans were extensively conducted.

(h) Issue and zero of CAR-15. All individuals not carrying CAR-15s, but desiring them, were issued a weapon. The weapons were zeroed, without and then with the single point sight, during daylight and at night. At a later date all individuals reconfirmed the weapon zero.

(i) UH-1 Gunship platform firing. The Assault Group rehearsed firing from the helicopter while making insertions into a landing zone in simulated tactical situations.

(j) FAG training (A-1E live fire). All personnel acting as FACs were given the opportunity to call-in several live fire strikes on selected targets.

(k) Cell-clearing and search. Support and Command Groups acted as POWs in confinement as Assault Group carried out its mission of releasing the POWs in mission-type situations.

(l) E&E/SAR FTX. Each group practiced land navigation and evasion and escape techniques. On the final night of the exercise each group was extracted by HH-53 helicopter in a simulated tactical situation.

(m) Pistol firing and hand grenade training. Each Force member activated one fragmentation and one concussion grenade. Pistol firing at targets of various distances both day and night was conducted for all members.

(n) Night vision device. Capabilities of the device and its proper use was explained to all personnel who were assigned a device for use during the mission.

(o) Target study. Each group was given the opportunity to study the mock-up and to examine the latest photos of the objective area during scheduled periods and upon request. One USAF photo interpreter was available on call to answer questions.

h. Signal:

(1) General:

(a) Joint communications training was conducted concurrently with joint operational training as the complexity of the operations and the number of diverse elements involved made stringent communications discipline and responsiveness an operational necessity.

(b) The primary means of coordination and direction of joint communications training was through preparation and publication of Ground Force Signal Operating Instructions (SOI) based on Annex K, Communications Electronics JCTG OPLAN. The Ground Force SOI established radio telephone, audio and visual communications means to be employed, radio net structure and procedures, and assigned training call words and frequencies. The SOI was modified in each successive training phase to reflect new operational requirements and procedures which had been identified in training as best supporting effective mission execution. Extracts of the Ground Force SOI were issued to each ground and air operating element and became in effect a fragmentary communications training order.

(2) Assault Force Communications Training:

(a) Phase I:

1 Training emphasis during Phase I was placed on classroom instruction in operation and maintenance of communications equipment, radio telephone procedures, and net discipline. Reduced distance radio nets were established to insure that every member of the Ground Force could set up and operate each type radio to be employed.

2 Joint training during Phase I was limited by a problem encountered in clearing the required training frequencies for use in the Eglin Air Force Base Complex. Approval for air-to-air and air-to-ground frequencies was obtained by action at Department of the Air Force level. The Ground Force FM frequencies were restricted to the mission crystals requisitioned during planning phase. Accordingly, formal approval for Ground Force FM frequencies was not obtained. An informal understanding with the local Eglin Air Force Frequency Coordinator permitted the Ground Force to utilize FM frequencies on a low-power noninterference basis.

3 The organization for storage, issue and maintenance of Ground Force Communications equipment was an important activity during Phase I training. Two complete sets of communications equipment were on hand, one set on loan from US Army CONARC to be used for training and one set on loan from the US Army Depot System to be used for mission execution. The total number of radios on hand was 234. The JCTG ARCOM Communications Supervisor obtained a complete electronic repair shop from US Air Force at Eglin AFB Auxiliary Field 3. The use of this facility enabled the Communications Supervisor to effectively manage the Ground Force Communications Supply and Maintenance support of training activities with the full time assistance of one noncommissioned officer and periodic assistance from four Ground Force radio operators.

(b) Phase II:

1 Joint communications training during Phase II moved out of the classroom and off the parade field into actual communications support of joint operational training at realistic distances under specific operational conditions.

2 Joint communications training during Phase II identified two problem areas:

a The Phase II training SOI did not assign new training call signs to Air Force operating elements. The call signs assigned were those used by Air Force elements in both the normal training at Eglin Air Force Base and in SEA operations. The use of these call signs presented a security problem as they were traditionally associated with a specific function (close air support/Rescue and Recovery). The presence of a Russian trawler off the coast of Florida with a signal intelligence capability indicated that a security threat existed. Analysis of electronic transmissions could result in association of call signs with operational functions and a logical reconstruction of the type mission for which training was being conducted. The decision was made to assign new and unrelated call signs for all Assault Force elements in Phase III training.

b The Phase II Ground Force SOI prepared by the ARCOM, JCTG, and issued to key Air Force operating elements was not initially coordinated with the Air Force planning and operating staff and consequently was not included in Air Force mission briefings. This resulted in confusion in joint operational training as the ground and air elements arrived in the training area with different frequencies for use on key nets. This problem was resolved by the decision to prepare and coordinate the Phase III Ground Force SOI at joint staff level.

3 The principal value of Phase II joint communications training was in developing confidence in radio equipment, familiarization with air-ground SOI communications procedures and the details of arranging communications equipment on Ground Force personnel so as to avoid damage while entering and exiting aircraft.

(c) Phase III:

1 Joint communications training during Phase III was concentrated on placing a realistic traffic load on the Assault Force communications system during full mission profile training. A continuing evaluation was made of the communications system to determine its responsiveness and effectiveness in meeting actual operational requirements.

2 Joint communications training during Phase III resolved several problem areas as follows:

a Radio Net Discipline and Procedures. The Phase III Ground Force SOI was still deviated from with respect to radio telephone call signs, frequencies and procedures. This resulted in delay and confusion in the transmission of critical command and control messages. A Ground Force SOI was established as the single authoritative document for communications within the joint Assault Force. Deviations from the SOI required joint coordination and command approval.

b Visual Signals. The basic JCTG OPLAN had been published without an appendix establishing visual signals and ground beacon signals as it was planned that these be worked out in training and published in the OPLAN at a later date.

(1) Night Markings. During Phase III joint training, the type, color, and arrangement of lights to be used for night marking of ground obstacles and helicopter landing zones was developed and tested on a joint basis and published in the Phase III Ground Force SOI.

(2) Visual Signals. During Phase III joint training the type, color and number of star clusters to be used for emergency recall of helicopters and Ground Force elements was developed and tested on a joint basis and published in the Phase III Ground Force SOI.

(3) Ground Beacons. During Phase III joint training, it was jointly determined that the planned low frequency beacon (AN/TRN-25) and ultra-high frequency beacon (AN/URC-33) to be positioned by the Ground Force Pathfinders on the landing zone in the objective area were not required. A more effective procedure was worked out and published in the Phase III Ground Force SOI, which enabled the Ground Force to provide a beacon signal by keying the AN/PRC-41 radio on the air/ground net (UHF). This procedure met the air support and air lift requirements without requiring the ground force to carry additional communications equipment into the objective area.

c Forward Air Guide Net. The initial communications plan, in order to provide maximum operational information to the Ground Force Commander and reduce the weight and number of radios carried by Ground Force elements, provided for Forward Air Guides to coordinate and direct close air support operations on the Ground Force command net (FM).

(1) This concept proved to be impractical in actual operational training as the amount of traffic required to direct close air support precluded the Ground Force Commander controlling ground operations on the command net.

(2) A separate Forward Air Guide net was established to provide a primary means for command and control of close air support strikes. Ground Force Forward Air Guides utilized the squad radio on this net and the close air support aircraft (A-1Es) entered the net, on direction of the Ground Force Commander, utilizing organic aircraft radios.

(3) Stringent control was required on establishment of the Forward Air Guide net as it required the close air support aircraft to make a frequency change in flight and leave the

Ground Force command net (FM). The Ground Force Commander continued to exercise command and control of the close air support aircraft on the air/ground net (UHF) and by monitoring the Forward Air Guide net with an additional radio.

d Mission Equipment. All new communications equipment on loan from US Army depots was issued to the Ground Forces for use in the final Phase III full mission profile training. This action ensured that all new equipment was checked out during training and that no equipment failures adversely affected accomplishment of the full mission profile training.

3 The principle value of Phase III joint training was in testing the overall Assault Force communications system under simulated mission conditions. Adjustments to procedures and equipment were required, identified and made.

(d) Phase IV:

1 Joint communications training during Phase IV was directed toward detailed refinement of the Assault Force communications system to support not only the basic plan but also four separate plans. Adjustments continued to be made in net structure, equipment distribution, and configuration in relation to Assault Force mission requirements.

2 Joint communications training during Phase IV required the following adjustments in preparation for actual mission execution:

a The Ground Force Phase IV SOI was expanded to include the COMJCTG and COMARCOM in the radio net structure with appropriate call signs. Operational procedures were worked out for relaying COMARCOM situation reports from the objective area to COMJCTG in the Tactical Air Control Center-North Sector utilizing the A-1E aircraft in a primary relay role.

b A Ground Force emergency net was established to provide each individual element and member of the Ground Force a means to communicate directly with the Ground Force Commander on an emergency basis without cluttering the primary Search and Rescue (SAR) net frequency. This emergency net was established without the addition of any communications equipment by utilizing the previously issued individual SAR radios (AN/PRC-90) on the alternate SAR frequency. The Ground Force command party now guarded both the primary and alternate SAR frequencies.

c Complete communications equipment lists were prepared identifying each item of communications equipment carried by Ground Force personnel and the radio net or function in which it was to be used. This list was used in final checks of full equipment layouts by each Ground Force element.

d Spare headsets, handsets and earphones were issued to Ground Force personnel as required and spare radios were identified as primary radios in appropriate alternate plans.

e Operational code words for internal use of the Assault Force were refined and published as a part of the Phase IV SOI.

3 The principle objective and value of Phase IV training was in accomplishing final refinements to the basic communications plan and rehearsing the communications adjustments required in execution of the four alternate plans. The actual Ground Force mission SOI was prepared directly from the Phase IV Ground Force SOI and after in theater coordination was implemented with minimum change. The value of one document such as the Ground Force SOI to guide and direct joint communications training was repeatedly demonstrated and in fact is considered essential to successful joint communications training.

c. Equipment lists and signal operating instructions (SOI) communications equipment lists and SOI used during training are contained in Part III, Section P.

2. Air Force Training:

a. General Training Requirements. The rescue mission required precision night formation flying at low AGL altitudes over mountainous terrain. The formation composition complicated the above task because some of the aircraft were required to perform at the extremes of their capabilities. This demanded the installation and use of special equipment as well as the development of new tactics and procedures before the Task Group could become mission ready.

b. Task Group Composition. Two COMBAT TALON C-130s were selected to provide precise navigation to the target area. One C-130E was programmed to lead the Assault Force composed of five HH-53s and either one HH-3 or UH-1H. The other C-130E became the lead ship of the Strike Force which consisted of five A-1Es. The C-130 crews trained to perform both lead roles and practiced switching formation leads enroute to the objective area.

c. Method of Training. The training was conducted in four phases: Phase I, Preparation; Phase II, Specialized Training; Phase III, Joint Training; and Phase IV, Follow-on Training.

(1) During the preparation phase, personnel were selected for the operation, augmentation personnel were deployed to the Eglin Complex and certain preliminary formation training was accomplished. Tactics and material development continued throughout all four phases.

(2) During the specialized training phase, UH-1, HH-3, and C-130 aircraft conducted formation training. Day and night formation, rendezvous and mission profile missions were flown.

(3) During the joint training phase, objective area operations were practiced. Aerial and ground rescue operations, objective area tactics, recovery, emergency procedures, and complete mission profiles were perfected.

(4) The delay in execution from October to November provided time for follow-on training not included in the training plan and was considered "Phase IV" training.

d. Special Equipment.

(1) Forward Looking Infrared (FLIR) was installed aboard each C-130E aircraft to aid in precision navigation, and an additional navigator was added to the crew.

(2) Ground Acquisition Responder/Interrogator (GAR/I) of the C-130 was used

e. Tactics and Techniques.

(1) Formation Flying. Formation training for the Assault Force was particularly challenging because, in this case, the C-130 and the HH-3 or UH-1H were required to exceed their normal limits. Both helicopters, flying in draft position, had to maintain their maximum speeds of 105 KIAS to keep up with the C-130 which, flying with flaps at 70%, was operating approximately 10 knots above its power-off stall speed. Leading the flight of A-1E aircraft presented no problem for the C-130E flying at 145 KIAS; however, grossed out A-1Es had some difficulties keeping up with the lead aircraft during turns.

(2) Special Rigging and Airdrops. The C-130E crews had to be trained in special rigging and drop procedures for the BLU-27/B fire bomb markers, flares, ground marker log flares, and fire fight simulators. Objective area maneuvers for these drops were designed and practiced.

(3) Night air-to-ground gunnery for helicopters was introduced during the latter part of training and one HH-53 was designated a Gunship.

(4) The A-1E trained in night low-level ordnance delivery and tested the effectiveness of the Rockeye bomb.

f. Task Group Crew Training. The mission of each aircraft of the Task Group was quite specific. All aircrew personnel were highly qualified in their respective aircraft but required varying degrees of training to become proficient in new and unconventional procedures and maneuvers. The phases of training, planned sorties and times, as well as actual sorties and times flown, for each aircraft type are shown in Tables I and II. The following is a detailed breakdown and description of each aircrew's training:

(1) C-130E Training (See Tables I and II):

(a) Navigational Training:

1 Missions devoted exclusively to navigational training were flown combining, where possible, several types of practice. Several sorties were devoted to familiarization and practice with the Forward Looking Infrared (FLIR) system which was installed on the C-130 aircraft for this mission. After equipment familiarization, procedures to integrate FLIR inputs into the navigational solution were developed and practiced. Targets with IR signatures similar to those in the mission objective area were located and sorties were planned to exploit these target resources.

2 A variety of low-level navigation routes were identified, surveyed, as required, and used for training. Routes in the mountains of Georgia/Tennessee, as well as areas of land/water contrast, simulating mission terrain, were flown. Over-water navigational legs were flown to satisfy command standardization/evaluation requirements.

3 Navigational missions accounted for 13-1/3 sorties (multiple tasks account for fractional sorties) and 71.8 flying hours.

(b) Ordnance Test and Delivery Development. Where possible, sorties were flown with delivery personnel from both C-130 crews. Sorties were required to certify the special BLU-27/B for the C-130 and to provide an adequate controlled sample to assure munitions reliability. Fire fight simulators were packaged in accordance with mission training requirements and delivery phasing with other mission ordnance was practiced. Five and one-half sorties and 12.2 hours were flown. (See Part III, Section O, for further description of ordnance development problems.)

(c) QRC-128 Test Support. Verification of effectiveness of mission communications, A-1 equipment compatibility and safety considerations required several sorties in support of this test. Missions were flown over the Gulf of Mexico early in the morning, requiring a chase C-130. Three and one-third sorties and 9.9 hours were flown. (See Part III, Section O, for further description of QRC-128 test.)

(d) Aircraft Ferry. Maintenance problems (requiring home base support), such as fuel leaks and phase inspections, generated ferry sorties. Other sorties were required to exchange a cargo version for mission equipped C-130. Special airlift missions accounted for the remaining sorties. Ten sorties and 33.2 hours were flown.

(e) Pilot Proficiency. Early in training, 1-1/3 sorties and 5.9 hours were devoted to pilot proficiency and standardization/evaluation requirements.

(f) Performance Check. As mission C-130 aircraft became available, individual aircraft low-speed characteristics such as slow flight, stall and engine-out performance were thoroughly investigated and practiced. One and one-half sorties and 2.2 hours were flown.

(g) Pictures. One sortie and 3.6 hours were flown to provide pictures of mission aircraft in flight.

(h) Flare Test. Flares were normally dropped on sorties included in phase training. A run of dud flares required re-evaluation of all aspects of flare delivery procedures, such as speeds, altitudes and type flare. Ultimately, the cause of the problem was identified as a bad lot. Flares from a new lot were obtained and two sorties and 3.5 hours flown, testing them for required confidence.

(i) ECM training included work against a radar bomb scoring site, fighters and chaff training was accomplished.

(j) UH-1 Performance. Sorties flown to demonstrate the long range capability of the UH-1 have been included in phase training.

(2) Lessons Learned in C-130 Training.

(a) Navigation.

1 Integrating multiple sensors in navigation training requires considerable time to develop crew coordination as well as proficiency with new (FLIR) equipment.

2

3 Aircraft attitude at slow speeds causes bore-sight alignment problems which cannot be compensated by mechanical adjustment.

4 Doppler reliability at slow speeds is a source of potential error which must be evaluated frequently to preclude error.

5 The FLIR equipment is an excellent navigational aid where land/water contrast along a route can be exploited.

6 Navigation requirements for unconventional warfare missions fully justify follow-on modification programs for the COMBAT TALON force C-130E aircraft. These should include an inertial navigational capability, improved navigational radar, and a FLIR system.

(b) Rendezvous.

1 Aircrew survival strobe beacon is a good visual air-to-air rendezvous aid. Shielding is necessary to avoid detection from the ground.

2

3 FLIR can be used as a rendezvous aid (no range capability). The engines of C-130 and HH-53 and the rotor of the UH-1 show well.

(c) Performance.

1 The C-130 at 105 KIAS is extremely sensitive to fly; however, the tactics of drafting with HH-3 and UH-1H have been proven and can be applied in future plans.

2 Depending on aircraft weight, the C-130 has marginal flying characteristics at 105 KIAS with outboard engine failure. Recovery procedure is accelerate straight ahead to safe airspeed; e. g., 180 KIAS.

3 Use of the autopilot at 105 KIAS is unstable with 70% flaps; caution must be used making power changes or during roll-in and out of turns.

4 Level off from descent is a critical maneuver which must be led with gradual addition of power and control force to preclude acceleration or stall.

(d) Ordnance Delivery.

1 Delivery of loads/packages from ramp and troop doors requires extreme care due to high noise levels and intense wind blast inside the cargo compartment. If possible, avoid opening troop doors.

2 Use of airstream deflectors reduces turbulence within the cargo compartment but creates a problem (light turbulence) for UH-1H aircraft.

3 Light bundles must be handled very carefully since they tend to float back into the cargo compartment with doors and ramp open. They must be held firmly and ejected positively from the lower position of the doorway, preferably by two men.

4 Loadmaster harnesses must be carefully rigged with minimum extension required and no loose ends.

(3) C-130 Training Conclusions. Although training in excess of that planned was required to prepare C-130E crews for their role in the JCTG mission, both crews were declared mission capable at the conclusion of Phase III.

(4) HC-130 Training (See Table I).

(a) Regular HC-130 sorties were scheduled to include JCTG training as only a portion of their mission. Accordingly, actual hours reflect only that dedicated flying time. Mission C-130 aircraft took over the HC-130 formation lead role as soon as crews were proficient in helicopter formation flying.

(b) The ability of the HC-130 to refuel HH-3 and HH-53 aircraft gives this force package an excellent long range penetration capability which can satisfy several unconventional warfare missions along with an integral worldwide mobility capability.

(c) No extension of current HC-130 tactics or procedures was necessary to satisfy mission requirements.

(5) HH-53 Training (See Tables I and II).

(a) Analysis of Growth of Training.

1 Phase I was underflown since required levels of proficiency were quickly reached by crews who had been performing substantially the same tactics.

2 Phase II growth was anticipated by the training plan in authorizing HH-53 elements of one to three aircraft, depending on development of the requirement. Introduction of TDY personnel not proficient in night mission tactics also caused growth.

3 Phase III growths can be attributed to flying five HH-53s on profile missions rather than only three as planned, confirming mission tactics for the entire force. Use of five aircraft allowed practice of complex enroûte emergency procedures as well as proof test of flareship tactics. Crews were declared mission capable at end of Phase III.

4 Phase IV was flown almost exclusively in support of ground force play in the objective area. Two profiles involving the entire force were flown which provided an average sortie length for this phase well in excess of the earlier phases. Additional missions were generated in development of the Gunship capability.

(6) Additional Programs.

(a) Gunship Training. During Phase IV, a decision was made to develop a Gunship capability for the HH-53 in which the first aircraft through the objective area would neutralize the critical points of enemy reaction; i.e., the guard towers and guard living

quarters. Range preparation and gunnery practice required two sorties and 5.3 hours.

(b) Search and Rescue Training. A simulated SAR effort was practiced with the ground force on one sortie using 1.7 hours.

(c) Flareship Training. During Phases III and IV the advantages of a backup flare aircraft for the C-130 became apparent. Flare training was integrated into Phase IV training.

(7) Lessons Learned in HH-53 Training.

(a) Aircraft Preparation. Experience in training demonstrated the importance of attention to detail in aircraft preparation not only for comfort but primarily for safety. Items such as positions of seats, litters and doors/windows; location and serviceability of headsets; oil spills on decks; weight and balance of on and off-loading troops; security of personnel in the passenger compartment; care in loading heavy and sharp equipment; and inadvertent use of aircraft wiring/tubing as handholds.

(b) Gunship. Problems which emerged in developing this capability dealt with ammunition alignment, use of flash suppressors to minimize impact of muzzle flash on night vision, use of night vision devices for target acquisition, care in positioning cables from control boxes to guns, and practice to develop judgment of ground speed and elevation for accuracy.

(c) Night Observation Devices. Electronic binoculars were tested for pilot use but were found unsatisfactory due to high levels of ambient cockpit lights. They were useful as an aid to vision behind the helicopter when used by a flight mechanic or para-medic. Starlight scopes were found useful to assist gunners in observing the

surrounding area while the helicopters were on the ground awaiting recall to the objective area.

(d) Lights. Extensive time was devoted to determining the best setting for internal and external lights. Minimum cockpit lights are desired to reduce glare on windshields and improve air-to-ground visibility. External lights were set, masked, or disconnected to minimize ground-to-air visibility yet provide sufficient air-to-air visibility.

(e) Miscellaneous: Aircrews must beware of flashes from ground operations (flares/explosions, etc.) which might temporarily blind a pilot and either pilot must be prepared to maintain aircraft control.

(8) HH-53 Training Conclusions. A heliborne assault force with a long range heavy lift capability provides a desirable addition to general purpose force capability, particularly for unconventional warfare operations.

(9) HH-3 Training.

(a) Analysis of Growth of Training.

1 Phase I growth was due to a decision to start training as soon as possible.

2 Phase II growth was due to an underestimation of the difficulty of flying a fully loaded HH-3 at its upper performance limit and of the difficulty of making an assault landing into an extremely small landing zone.

3 Phase III training underflew planned training after solution of initial problems and by sharing missions with the UH-1 which slightly overflew the planned schedule.

4 Crews were judged mission capable following Phase III.

(b) Lessons Learned in HH-3 Training.

1 Weight control of the HH-3 was an area of importance. Because of the narrow operating envelope with the C-130, only mission essential fuel and equipment could be carried. Growth of the assault team shaved the improvements in weight reduction necessitating continuing attention to this problem.

2 HH-3 pilots required high intensities of C-130 lighting to maintain formation position.

(c) HH-3 Training Conclusions.

1 Planned sorties and flying hours were adequate to prepare the HH-3 crew for its role in the mission.

2 Even though the UH-1H appeared to be better suited to land within the confines of the prison compound, training proved that the HH-3 had decided advantages in firepower, load weight and space, and refueling capability.

(10) UH-1H Training:

(a) Analysis of Growth of Training:

1 Phase II growth can be attributed to underestimation of the difficulty of mating the UH-1 and C-130 in formation flight at maximum performance of both aircraft. Initially the problem was to develop high proficiency in day/night formation flight with a fixed wing aircraft. With no precedent in Army experience and no documentation which would serve as a guide, progress was made in small, controlled increments in what was substantially a test program. This program would have proceeded with greater confidence, though at a less vigorous pace, in a test environment. Developing this high level of proficiency in both a primary and reserve crew was also a source of growth although maximum training of both crews on the same sorties was initially scheduled. Security further constrained the training since the crews were not briefed on the exact nature of the mission and could not bring their experience and knowledge to bear on the problem. Subsequently, they were able to recommend changes in the UH-1 profile based on reducing the operating weight by removal of non-mission essential equipment and extension of range by addition of internal auxiliary tanks. In areas in which they were experienced, such as low-level navigation (pilotage), assault landing and air-to-ground gunnery, the UH-1 crews were able to make substantial inputs to mission training and capability. An additional source of training growth was use of the UH-1 as a light ship to provide artificial moonlight, using a spot light obtained from Fort Rucker, and as a flare ship to provide a more economical vehicle than use of mission C-130s.

2 Phase III training proceeded substantially as planned although it should be noted that during this period greater confidence in use of the UH-1 as an assault vehicle developed based

both on intelligence inputs and growth of crew proficiency. This resulted in less emphasis on the UH-1 for mission use. Additional sorties were flown in the lightship role. At the conclusion of Phase III, both UH-1 crews were judged mission qualified.

(11) Lessons Learned in UH-1 Training:

(a)

(b) In the judgment of the UH-1H mission commander, ability to fly the UH-1H in formation with a C-130 is not within the capability of the average Army aviator. No Army training specifically serves to prepare pilots for this task nor is there any routine capability which would serve as a basis for selecting pilots who could successfully perform this most difficult mission.

(c) Only a UH-1H in the highest state of maintenance, particularly in terms of rotor linkage adjustment, should be used for this mission.

(12) UH-1 Training Conclusions: A test program should be initiated for certification of UH-1/C-130 formation operations.

(13) A-1E Training (See Tables I and II):

(a) Analysis of Growth Training:

1 Phase III sorties and hours grew from the number planned to provide for Forward Air Guide (FAG) training with selected members of the ground force, and in response to the decision to fly the ground spare aircraft. The training plan provided for three ship training sorties. Four and five ship sorties were flown to exercise

the entire force in the event there were no air aborts into the target area.

2 Phase IV sorties and hours were devoted to FAG training in support of the ground force. The A-1 crews were judged ready for the mission following Phase III.

(14) Additional Programs:

(a) Transponder Test: Early in formation training, it was apparent that some electronic aid would be desirable to enable the A-1s to station keep on their lead C-130. A device using an X-band transponder and an R/T unit with cockpit indicator was tested for possible use. The tests were satisfactory, however, the vendor retrieved the test equipment for his own purposes following the test. Excessive production lead times for additional equipment resulted in deletion of this equipment as a mission requirement. Five sorties and 6.2 hours were flown.

(b) QRC-128 Test: The JCTG OPLAN required the development of a capability for A-1 VHF communications jamming. (See report of testing in Part III, Section O.) Five sorties and 13.1 hours were expended in the evaluation of the QRC-128.

(c) Rockeye Test: A mission was flown to evaluate the desirability of including the Rockeye bomb in the A-1 ordnance package. The test was successful. Two sorties and 2.6 hours were flown in support of this evaluation.

(d) Pictures: A mission was flown so that pictures could be taken of the mission formation. Four sorties and 7.0 hours were flown in support of this requirement.

(15) Lessons Learned in A-1 Training:

(a) Airspeed Incompatibility:

1 The most serious problem which developed during the training phase resulted from the incompatibility between the cruise airspeed of a loaded A-1 and airspeed of the remainder of the original primary force.

2 The OPLAN provided for a primary and reserve force both composed of C-130s, helicopters, and A-1s proceeding to the objective area approximately ten minutes apart. However, the maximum airspeed of the HH-3 was determined to be 105 KIAS, and the A-1 was unable to fly at this slow airspeed, especially under high drag conditions. Therefore, circling or S-turn tactics were necessary to remain in contact with the C-130 led helicopter force. This fact, among others, resulted in a decision to partition the mission aircraft into assault and strike forces, rather than primary and alternate forces. Instead of two formations composed of a lead C-130 with helicopters and A-1 elements, the formations were divided according to mission function, i.e., assault and strike. The assault force was composed of helicopters and flew at 145 KIAS. The tracks of the two forces crossed in such a way that the strike force was close enough to the assault force so that the C-130s could change lead in the event of an air abort of the assault force leader.

(b) Station Keeping Capability: Initially, pilot confidence in mission accomplishment would have been enhanced if the A-1 aircraft had been equipped with some form of rendezvous/station keeping equipment. As experience was gained, however, the crews began to rely on the navigational capabilities of the C-130s, and procedures were devised which provided for loss of visual contact.

(c) Forward Air Guide Training: Extensive unanticipated sorties were generated to develop a sufficient quantity of well trained ground personnel to direct A-1 aircraft. (See Part II,

Section E, for a description of FAC training.)

(d) Formating: The most desirable procedure for A-1/C-130 joinup was for the C-130 to fly under the A-1s which had already joined up. The A-1s would then descend and complete the joinup with the C-130.

(16) A-1 Training Conclusions:

(a) Planned sorties and flying hours were adequate to prepare A-1 crews for their role in the JCTG mission.

(b) Planning did not adequately provide for development of fully qualified Forward Air Guides.

TABLE I

IVORY COAST FLYING TRAINING PROGRAM

AIRCRAFT	PHASE I PLAN SORTIES	PHASE I PLAN HOURS	PHASE I ACTUAL SORTIES	PHASE I ACTUAL HOURS	PHASE II PLAN SORTIES	PHASE II PLAN HOURS	PHASE II ACTUAL SORTIES	PHASE II ACTUAL HOURS	PHASE III PLAN SORTIES	PHASE III PLAN HOURS	PHASE III ACTUAL SORTIES	PHASE III ACTUAL HOURS	PHASE IV PLAN SORTIES	PHASE IV PLAN HOURS	PHASE IV ACTUAL SORTIES	PHASE IV ACTUAL HOURS	TOTALS PLAN SORTIES	TOTALS PLAN HOURS	TOTALS ACTUAL SORTIES	TOTALS ACTUAL HOURS
C-130E	--	--	--	--	6	16.0	10	35.2	9	26.0	8	27.9	0	0	10	41.3	15	42.0	28	104.4
HC-130	5	13.0	3	6.0	1	5.0	2	3.0	3	9.0	1	5.3	0	0	2	7.0	9	27.0	8	21.3
HH-53	15	39.0	11	21.4	7	26.0	16	50.2	25	80.0	29	96.1	0	0	28	113.5	47	145.0	84	281.2
HH-3	--	--	3	6.4	4	8.0	6	17.2	14	35.0	11	24.1	0	0	10	30.4	18	43.0	30	78.1
UH-1H	--	--	--	--	4	10.0	12	23.8	18	46.0	24	50.4	0	0	8	19.1	22	56.0	44	93.3
A-1E	11	22.0	9	16.5	8	24.0	14	35.2	14	44.0	35	76.7	0	0	32	87.2	33	90.0	90	215.6
TOTALS	31	74.0	26	50.3	30	89.0	60	164.6	83	240.0	108	280.5	0	0	90	298.5	144	403.0	284	793.9

PHASE I - PRELIMINARY TRAINING (15-31 AUGUST 1970)
PHASE II - FORMATION AND PROFILE (1-14 SEPTEMBER 1970)
PHASE III - JOINT TRAINING (15 SEPTEMBER-13 OCTOBER 1970)
PHASE IV - FOLLOW-ON TRAINING (13 OCTOBER-7 NOVEMBER 1970)

TABLE II

IVORY COAST PREDEPLOYMENT FLYING

		C-130E	HC-130	HH-53	HH-3	UH-1H	A-1E	TOTALS
PHASE TRAINING	SORTIES	28	8	84	30	44	90	284
	HOURS	104.4	21.3	281.2	78.1	93.3	215.6	793.9
NAVIGATION	SORTIES	13 1/3	---	---	---	---	---	13 1/3
	HOURS	71.8	---	---	---	---	---	71.8
ORDNANCE TESTS	SORTIES	5 1/2	---	---	---	---	2	7 1/2
	HOURS	12.2	---	---	---	---	2.6	14.8
QRC-128 TEST	SORTIES	3 1/3	---	---	---	---	5	8 1/3
	HOURS	9.9	---	---	---	---	13.1	23.0
FERRY/ AIRLIFT	SORTIES	10	---	---	---	17	---	27
	HOURS	33.2	---	---	---	31.7	---	64.9
PILOT PROFICIENCY	SORTIES	1 1/3	---	---	---	---	---	1 1/3
	HOURS	5.9	---	---	---	---	---	5.9
PERFORMANCE AND FLARE TESTS	SORTIES	3 1/2	---	---	---	---	---	3 1/2
	HOURS	5.7	---	---	---	---	---	5.7
PICTURES	SORTIES	1	---	2	1	1	4	9
	HOURS	3.6	---	3.0	1.5	1.5	7.0	16.6
GUNSHIP	SORTIES	---	---	2	---	---	---	2
	HOURS	---	---	5.3	---	---	---	5.3
SAR	SORTIES	---	---	1	---	2	---	3
	HOURS	---	---	1.7	---	3.5	---	5.2
TRANS-PONDER	SORTIES	---	---	---	---	---	5	5
	HOURS	---	---	---	---	---	6.2	6.2
MAINTE-NANCE	SORTIES	---	---	---	---	4	---	4
	HOURS	---	---	---	---	3.9	---	3.9
TOTALS	SORTIES	66	8	89	31	68	106	368
	HOURS	246.7	21.3	291.2	79.6	133.9	244.5	1017.2

TABLE III

C-130E DEPLOYMENT

PLAN		ACTUAL	
SORTIES	HOURS	SORTIES	HOURS
10	80.0	11*	81.0

*CHERRY 02 air aborted one hour out of Norton and returned for engine maintenance.

TASK FORCE EMPLOYMENT

	PLAN		ACTUAL	
	SORTIES	HOURS	SORTIES	HOURS
C-130E	2	12.0	2	11.9
HC-130	2	12.1	2	13.7
HH-53	5	30.5	5	33.9
HH-3	1	3.0	1	3.0
A-1E	5	22.8	5	23.0
TOTAL	15	80.4	15	85.5

C-130E REDEPLOYMENT

PLAN		ACTUAL	
SORTIES	HOURS	SORTIES	HOURS
8	60	8	58

PART II

SECTION F

(N O T U S E D)

PART II

SECTION C - THEATER COORDINATION. The following commands and organizations were briefed and/or requested to support COMJCEG:

1. Commander-in-Chief, Pacific Command (CINCPAC).

   - Briefing

2. Commander, Military Assistance Command - Vietnam (MACV).

   - Briefing

3. Commander, Seventh Air Force (COM7AF).

   - Briefing

4. Commander, Task Force 77 (CTF-77).

   - Briefing

5. Commander, Seventh/Thirteenth Air Force (COM7/13AF).

   - Briefing

6. 56th Special Operations Wing, Nakhon Phanom RTAFB, Thailand

   - Obtained the use of five A-1E/A-1G aircraft.

7. 307th Strategic Wing, U-Tapao RTAFB, Thailand.

   - Obtained use of ten KC-135 tanker aircraft.

   - Obtained use of one KC-135 radio-relay aircraft.

8. 376th Strategic Reconnaissance Wing, Kadena AB, Okinawa

   - Obtained use of two RC-135M (COMBAT APPLE) aircraft and required tankers.

9. 388th Tactical Fighter Wing, Korat RTAFB, Thailand

   - Obtained use of five F-105G WILD WEASEL aircraft for SAM/AAA suppression.

   - Arranged housing for deployed EC-121T aircraft (COLLEGE EYE) crews.

10. 432nd Tactical Reconnaissance Wing, Udorn RTAFB, Thailand

   - Obtained use of ten F-4D aircraft for MIG CAP.

   - Arranged for one RF-4C weather reconnaissance mission.

11. 3rd Aerospace Rescue and Recovery Group, Tan Son Nhut AB, Vietnam

- Coordinated use of seven HH-53 and two HH-3 helicopters.
- Coordinated use of three HC-130P tanker aircraft.

12. 355th Combat Support Group, Takhli RTAFB, Thailand

- Arranged for housing and other support for the Task Group

13. 505th Tactical Control Group, Tan Son Nhut AB, Vietnam

- Coordinated use of in-country Tactical Air Control System facilities and equipment

14. 1964th Communications Group, Tan Son Nhut AB, Vietnam

- Coordinated/obtained use of additional communication frequencies.
- Obtained temporary loan of three KY-8 cryptographic equipments for use in the C-130E aircraft.
- Coordinated installation of two dedicated voice circuits between the Tactical Air Control Center-North Sector, Monkey Mtn, Vietnam and the National Military Command Center (NMCC).

15. 37th Aerospace Rescue and Recovery Squadron, Da Nang AB, Vietnam

- Obtained use of two HH-3 helicopters
- Coordinated rescue alert status

16. 39th Aerospace Rescue and Recovery Squadron, Cam Ranh Bay AB, Vietnam

- Obtained use of three HC-130P tankers for refueling the helicopter assault force.

17. 40th Aerospace Rescue and Recovery Squadron, Udorn RTAF AB, Thailand

- Obtained use of five primary mission and two backup HH-53 helicopters.

18. 67th Reconnaissance Technical Squadron, Yokota AB, Japan

- Coordinated aerial photo requirements
- Accomplished required photo interpretation

19. 620th Tactical Control Squadron, Da Nang AB, Vietnam

- Coordinated use of the TACC NS as the COMJCTG Command Post
- Coordinated COMBAT EYE digital data link tests

20. 621st Tactical Control Squadron, Udorn RTAFB, Thailand

- Coordinated use of alternate TACC-NS
- Coordinated COLLEGE EYE digital data link tests
- Coordinated/tasked Control and Reporting Center to aid in tanker hookups and provide radar control as required

21. 6010 WILD WEASEL Squadron, Korat RTAFB, Thailand

- Obtained use of five F-105G SAM/AAA Fire Suppression Aircraft.

22. 6924 Security Service Squadron, Da Nang AB, Vietnam

23. [redacted]

- Coordinated airborne [redacted] requirements

24. COLLEGE EYE Task Force, Korat RTAFB, Thailand

- Coordinated support of deployed EC-121T aircraft

25. Southeast Asia Detachment, Defense Communications Agency, Da Nang AB, Vietnam

- Coordinated installation of two dedicated voice circuits between the TACC-NS and the NMCC.
- Installed a secure teletype circuit at Takhli RTAFB, Thailand, for use by COMJCTC.

26. Thailand Airlift Control Element, U-Tapao AB, Thailand.

- Obtained use of three C-130E airlift aircraft for personnel deployment to staging bases.

PART II

SECTION II DEPLOYMENT PLANNING (US ARMY)

1. Army Component deployment planning began on 20 September 1970, with a staff conference to determine what personnel, supplies and equipment were to deploy and the formulation of an initial ammunition basic load.

2. Based on these determinations preliminary planning figures, including cargo weights and cubes, were discussed with MAC planners. The shipment of such sensitive items as blasting caps, battery acid, and acetylene gas was also addressed and guidance received on how to prepare them for shipment.

3. As time of deployment neared, a more concrete formulation of the basic ammunition load became necessary. This ammunition was identified, marked, segregated, and placed on pallets to facilitate shipment. Based on security, training schedules and availability of rigging equipment, the following packing schedule was implemented:

a. Monday, 9 Nov 70:

(1) Oxygen-acetylene rigs packed for shipment on first aircraft. Six spare acetylene and four spare oxygen cylinders were prepared.

(2) Radios cleaned, batteries packed, squad radios aligned.

b. Tuesday, 10 Nov 70:

(1) Platoon leaders determined how platoon equipment was to be packed and platoon boxes packed.

(2) Personal equipment shortages identified by platoons.

(3) PRC-77s, test equipment, and squad radios packed.

(4) Models packed.

c. Wednesday, 11 Nov 70:

(1) Demolitions material packed.

(2) Platoons prepare final equipment lists.

(3) Final check of communications equipment.

(4) Loose ammunition recovered and turned in.

d. Thursday, 12 Nov 70:

(1) Weapons cleaned, tagged and packed in crates.

(2) Platoon boxes packed.

(3) Medical equipment packed.

e. Friday, 13 Nov 70:

(1) Communications equipment packing completed.

(2) Flat bed truck arrived.

f. Saturday, 14 Nov 70:

(1) Ammunition packed and palletized.

(2) Personal clothing list issued, clothing and equipment prepared.

(3) All boxes banded and palletized, cubes and weights recorded.

g. Sunday, 15 Nov 70:

(1) Flat bed truck loaded.

(2) Movement to aircraft.

(3) Loading.

4. As each individual box was packed, it was banded, weighed, a cube determined, and the box placed on a pallet. Sturdy cardboard boxes were provided to each platoon for their use in packing load bearing equipment.

5. Communications equipment was carefully packed under competent supervision to forestall damage. The BA 341, wet cell batteries, were hand-carried aboard the aircraft by designated personnel.

6. Prior to deployment, the shipping and crating section of the 3210th Supply Squadron had fabricated wooden boxes for the shipment of weapons. The boxes for the sub-machine gun 5.56mm, and rifle 5.56mm M-16A1 had to be constructed in such a fashion so as to prevent damage to the single point sights. Each box contained ten weapons, weighed 117 pounds, and measured 13.5 cubic feet. The M-60 machine-guns were packed separately due to the length of each weapon. By packing these weapons separately, it reduced the weight of each box to 47 pounds and cubic feet to 6.5 cu ft.

7. As acetylene gas presents a peculiar problem in transport, the oxygen-acetylene outfits were packed early and sent forward on the first C-130.

8. Personal baggage was limited and was planned not to exceed twenty-five pounds. In the interest of security, berets were collected before deployment and transported under cover to the forward base.

a. Required Items:

(1) Jungle Boots, 1 pair

(2) Socks, 4 pair

(3) Sterile Jungle uniform, 2 each

(4) Towel, 1 each

(5) Shaving gear

(6) Laundry bag

(7) Undershirts, 3 each

b. Additional Items:

(1) Jungle Uniforms

(2) Underwear

(3) Jungle Sweater

(4) Reading Material

(5) Small personal items such as radios, cards, etc.

9. By Sunday, 15 November, all equipment was packed, palletized and loaded on a flat bed truck ready for movement to the aircraft. Equipment and ammunition was moved to Eglin Main and was loaded on the aircraft by 0250 hours, Monday, 16 November. Concurrently with the packing schedule, the UH-1 was prepared for shipment and loaded on the same aircraft. Also by this time, personnal had been prepared for movement, briefed and ready to move. Breakfast was served at 2400 hours, and personnel departed Field 3 at 0200 hours. The plane-side check-in went smoothly and the aircraft departed at 0300 hours from Hurlburt Field.

PART II

SECTION I EMPLOYMENT

1. U.S. Navy Operations. CTF-77 was briefed and tasked by COMJCTG to carry out a diversionary effort without going through the usual chain of command for security reasons. The following operations order was prepared by Admiral Bardshar (CTF-77) to carry out the diversion effort and was handcarried to the appropriate subordinate commanders:

a. General. A special operation will be conducted by a Joint Contingency Task Group in the near future. It will be supported by elements of TF-77 whose function is to create a diversion in order to assist in the successful execution of the basic mission. Security considerations prohibit full disclosure of the exact nature and timing of the operation. However, the guidelines listed herein are sufficient for you to perform your assigned function. Should any questions arise concerning the conduct of this operation, they will be directed to me personally by courier whenever possible. Electrical transmissions of messages concerning this operation are discouraged.

b. Background. Experience has shown that a large naval air attack in the Haiphong and northeastern NVN area can confuse and saturate the enemy's air defense organization and draw MIGs in a defensive reaction to the apparent attack.

c. Concept of Operations. The primary purpose of this operation is diversion. It is therefore doubtful that political considerations will permit the expenditure of air-to-ground ordnance other than flares. Within these limits, the objective is to create as much confusion in the NVN Command and Control System as possible. In order to accomplish this objective, the Navy effort will consist of two waves of approximately fifteen strike aircraft, each wave conducting simulated missions over NVN while other Task Force 77 aircraft are positioned for force defense, EW support, and in-flight refueling as required. Details of the operation are as set forth below:

d. FORCES REQUIRED.

(1) RANGER

2 EKA3B ECM/Tanker on station H minus 25, Off station H plus 30.

1 E1B FORCECAP Back up control and manual relay of Navy Red. On station H minus 25 to H plus 1 hr and 20 mins.

4 F4 MIGCAP on station H minus 25, off station H plus 35.

2 F4 TARCAP/MIGCAP on TARCAP station H minus 12, off TARCAP Station H minus 02, on MIGCAP sta 3 H plus 10, Off MIGCAP sta 3 H plus 35.

8 A6 Strike, Coast in H plus 10, coast out H plus 25.

6 A7 Iron Hand, on station H plus 10, off station H plus 25.

2 A6 Tanker on station vicinity parent CVA H minus 15 to H plus 1 hr and 40 min.

4 A7 RESCAP on station 090 degrees/20NM NSAR H minus 25 to H plus 35.

1 KA3 Tanker launched from DaNang for Ranger Control to arrive overhead in time to top off one section of F4s enroute to CAP station.

2 F4 in Alert 5.

2 F4 in Alert 15.

2 A7 RESCAP in Alert 15.

1 A6 Tanker in Alert 15.

1 E1B in Alert 15.

(2) ORISKANY

1 E1B AEW Voice Call Tango for flight following strike aircraft at turn point Schlitz and Manual Relay of Navy Red. On station H minus 25, Off station H plus 35.

2 EKA3B ECM/Tanker on Station H minus 25, off station H plus 30.

14 A7 Strike, Coast in H minus 20, Coast out H plus 05.

4 A7 Tankers on station vicinity parent CVA H minus 45 to H plus 1 Hr and 15 mins.

2 F8 BARCAP.

4 F8 FORCECAP, on station H minus 25, off station H minus 35.

2 F8 Alert 5.

2 F8 Alert 15.

2 A7 Alert 15.

1 E1B Alert 15.

(3) HANCOCK

2 EKA3B Tankers; Launch from DaNang for Ranger Control to arrive overhead in time to top off two sections F4s enroute CAP Sta.

2 F8 Alert 5.

2 F8 Alert 15.

2 A4 RESCAP Alert 15.

1 E1B Alert 15.

e. FORCE DISPOSITION.

(1) CVAS/Escorts.

Ranger, CRAIG, KEPPLER - SECTOR OSCAR

ORISKANY, ROGERS, LLOYD THOMAS, ANDERSON - SECTOR QUEBEC

HANCOCK, KNOX, PERKINGS - SECTOR PAPA

(2) NORTH SAR (TU 77.0.1)

JOUETT/STODDERT, 5NM Radius of 19-50N, 107-20E.

(3) PIRAZ (TU 77.0.2)

WAINWRIGHT/AGERHOLM 5NM radius of 19-00N, 106-35E

CHICAGO will join 21 Nov.

(4) MIGCAP/TARCAP

STA NO	LAT/LONG	ALT	CONTROL	FREQ
1	20-45N/107-40E	16M	OSWALD	Ranger FAD 1 (233-8MHZ)
2	20-35N/107-05E	14M	OSWALD	Ranger FAD 2 (337.8MHZ)
3	20-15N/107-00E	26M	OSWALD	Ranger FAD 3 (350.6MHZ)
TARCAP	21-30N/106-35E	21M	OSWALD	ORISKANY ATTACK PRIMARY (265.1MHZ)

Note: RED CROWN will provide back up control for the above CAP stations.

(5) FORCECAP

4	19-00N/106-00E	12M	UNIFORM	ORISKANY FAD 1 (382.7MHZ)
5	19-00N/107-20E	12M	RANGER	ORISKANY FAD 2 (271.4MHZ)

(6) BARCAP

Flown along the Combat Apply track under Stoddert control on button 4 (354.6MHZ) Alt. 34M.

(7) AEW

TANGO vicinity 20-30N, 107-40E, altitude as required to flight follow strike aircraft at turn point SCHLITZ and will be under STODDERT control on button 10, attack primary (265.1MHZ). Uniform vicinity 19N, 107-00# 9M under parent CVA Control.

(8) AF TANKER

AN AF KC135 augment tanker will be in the Gulf of Tonkin (GOT) from H minus 75 mins to H plus 50 mins and will monitor PIRAZ freq (386.6MHZ). Red Crown will direct this tanker to take station between PIRAZ and NSAR at 25M. When required, USN tanker aircraft will refuel from the KC-135 in order to maintain satisfactory give away fuel. Although KC-135 crews will be briefed on Navy aircraft refueling limitations, all tanker aircraft (EKA4B) requesting fuel from the KC-135 will ensure the KC-135 fuel delivery pressure is within proper limits.

f. STRIKE PLANS AND ROUTES.

(1) The Strike Plan consists of two waves of aircraft divided into three tracks and three Iron Hand orbits. Each track will consist of three or four A7 sections or eight single A6 aircraft as set forth below. Each Iron Hand orbit consists of two A7 aircraft.

(2) Strike timing requires the first section of the first wave over the coast-in-point (CIP) at H minus 20 minutes and the last section of the first wave over turn-point four at H plus 5 minutes. The first aircraft of the second wave will be at turn-point Mary at H plus 10 minutes. The last aircraft of the second wave will be outbound at H plus 25 minutes.

(3) FORCE COMPOSITION.

(a) Wave One: 14 A7 (Seven Sections)

(b) Wave Two: 6 A7 (Three Sections)

(4) NAVIGATION DATA.

(a) Wave One.

1. Track Alpha: Four sections of A7 aircraft. Two minute separation between sections. Speed 420KTAS. The first section will be at 8,000 ft. Succeeding sections will be at 9,000, 10,000 and 11,000 ft respectively.

POSITION	LAT/LONG	TIME
NSAR	19-50N/107-20E	H Minus 28 Min
CIP	20-44N/107-94E	H Minus 20 Min
TP-1 (SCHLITZ)	21-00N/107-45E	H Minus 14 Min
TP-2	21-12N/107-36E	H Minus 11 Min
TP-3	20-44N/107-04E	H Minus 04 Min
TP-4	20-48N/107-25E	H Hour
BUDWEISER	19-00N/106-20E	H Plus 17 Min

NOTE: All times are for lead section. Flares dropped at time H minus 04 Min.

2. TRACK BRAVO: Three sections of A7 aircraft. Two minute separation between sections. Speed 420KTAS. First section will be at 17,000 ft with succeeding sections at 18,000 and 19,000 ft.

POSITION	LAT/LONG	TIME
NSAR	19-50N/107-20E	H Minus 30 Min
CIP (SCHLITZ)	21-00N/107-45E	H Minus 20 Min
TP-ALPHA	21-32N/106-45E	H Minus 11 Min
TP-BRAVO	21-01N/107-22E	H Minus 03 Min
TP-CHARLIE	20-43N/107-28E	H Hour
BUDWEISER	19-00N/106-20E	H Plus 18 Min

NOTE: All times are for lead section. Flares dropped at time H Minus 08 Mins.

(a) TRACK CHARLIE: Eight single A6 aircraft. Two minute separation between aircraft. Speed 420KTAS. Altitude 4,000 ft maximum. These aircraft are to simulate laying a minefield along the below listed

track and may adjust flight profile accordingly.

POSITION	LAT/LONG	TIME
NSAR	19-50N/107-20E	H Plus 03 Min
TP-MARY	20-37N/107-13E	H Plus 10 Min
TP-ALICE	20-41N/106-59E	H Plus 12 Min
BUDWEISER	19-00N/106-20E	H Plus 27 Min

NOTE: All times are for lead aircraft.

(b) Zulu Orbits (Iron Hand): Three sections of A7 aircraft. Altitude for Zulu One is 28,000 ft, Zulu Two 30,000 ft and Zulu Three 32,000 ft.

ORBIT POINTS	LAT/LONG	TIME
Zulu One	20-52N/107-07E	H Plus 10 Min to H plus 25
Zulu Two	20-35N/107-00E	H Plus 10 Min to H Plus 25
Zulu Three	20-20N/106-55E	H Plus 10 Min to H Plus 25

g. ECHO ORBIT: Will be used as an alternate orbit in the event decision is made not to use the Brave Track. The Echo Orbit is defined as holding inbound on the NSAR 342 Deg Radial between 47 and 27NM with right hand turns. Altitudes will remain 17M/18M/19M ft.

h. TARCAP will consist of two F4 acft on station (21-30N/106-35E) at 21M from H Minus 12 to H Minus 02. Considering the high density of support aircraft in the GOT, TARCAP will be required to cross NSAR and CIP at 26M. Descent to 21M will commence after crossing CIP. TARCAP will climb after H minus 02 to enable crossing the COP at 26M and will arrive CAP sta 3 by H Plus 10 and depart CAP Sta 3 at H Plus 35.

POSITION	LAT(N)/LONG(E)	TIME
NSAR	19-50 107-20	H Minus 27
CIP	20-48 107-20	H Minus 20
TP	21-00 107-20	H Minus 18
TARCAP STA	21-30 106-35	H Minus 12
TP	21-00 107-20	H Plus 04
COP	20-48 107-20	H Plus 06
MIGCAP STA 3	20-15 107-00	H Plus 10

i. INGRESS/EGRESS: All aircraft will proceed to station at their assigned altitudes via the NSAR. PIRAZ check in will not be made. Oriskany attack primary frequency (265.1MHZ) will be used by all strike aircraft. Egress will be at assigned altitudes via Pt Budweiser. Prior to reaching PT Budweiser all aircraft will check in with Red Crown on Button Nine (386.6MHZ) for identification. Low state aircraft may proceed directto their parent CVA, however, they will confirm position with Red Crown.

j. SEARCH AND RESCUE:

(1) CTU 77.0.0, Call sign Harbormaster located at NSAR will coordinate Navy SAR efforts in the Gulf of Tonkin and over land in NVN.

(2) SAR efforts over land in NVN are authorized (the SAR on-scene Commander will make recommendations to Harbormaster). In all cases permission is required from CTG 77.0 prior to vectoring SAR Forces over land.

(3) Commencing at H minus 70 minutes NSAR and PIRAZ units will have one SH3 Helo Alert 5 with the UH-2s in Alert 15; at H minus 20 the Alert 5 Helos will be launched to remain in the vicinity of their respective units.

(4) Ranger will provide 4 A-7 acft for RESCAP, stationed 090 degrees T, 20NM from NSAR at 7,000 ft. These aircraft will be on station from H minus 25 until H plus 35. These aircraft will be armed with Rockeyes and 20mm and are authorized to expend this ordnance in support of SAR efforts.

k. ELECTRONIC WARFARE.

(1) The following DECM equipments are required by all aircraft entering a SAM/AAA threat environment:

APR 25/30

APR 27

ALQ 100

ALE 29/18

(2) All DECM equipment will be checked with appropriate line test sets within twenty four hours of launch time for proper operation. Each equipment with a self test feature will be checked by the flight crew prior to launch for proper self test indications. Any aircraft with equipment which does not perform proper self test will not launch.

(3) Flight crews will be briefed on latest counter tactics against the NVN SAM/AAA threat environment in order to insure proper utilization of all DECM equipments.

(4) The ECM orbit will be from 20-00N/107-00E to 20-30N/107-30E. Ranger ECK3B flight leader will coordinate the orbit to effect proper spacing along the track on jammer control Freq 281.2 MHZ. Altitudes are as follows:

Ranger aircraft 21M/22M

Oriskany Aircraft 23M

Hancock Aircraft 24M

(5) Radar jamming will be directed against the Haiphong Area and will be IAW the following priorities.

(a) FanSong / of any FanSong radar detected. If a SAM warning in the Haiphong area has been given by Big Look (Navy EC-121) and has not been detected by the EKA3B ESM equipment, all EKA3Bs will commence jamming between directed against the Haiphong area.

(b) In the absence of FanSong activity, AAA fire control radars will be jammed.

(c) / will be jammed when directed.

(6) Jamming coordination between EKA3Bs will be maintained by using jammer control frequency 281.2 MHZ. jamming will be initiated when directed by the FAAWC or by Big Look. Big Look will pass by Code Word on Jammer Control Frequency. Example: Jammers, Jammers, ALPHA - Deep Sea 31. jamming will continue until told to stop by the FAAWC.

(7) support will be provided by an EP3 Big Look aircraft from H minus 2 hours 55 mins to H plus 1 Hr 30 Min. One EC-121 will be available as back up at DaNang. One airborne EA38 positioned overhead the CVA force at H minus 1 hr will provide relay as required and airborne back up for the EP3 in case of airborne abort.

(8) Strike aircraft will use Chaff when necessary to break fire control lock on. Additionally, A6 aircraft will dispense chaff between TP Mary and TP Alice.

(9)/

l. Rules of Engagement. The following rules of engagement are in effect once forces have actually been committed in support of this operation and until it has been terminated or cancelled.

(1) Any aircraft over NVN or the GOT attacking or acting in a manner which indicates with reasonable certainty an intent to attack friendly forces in this operation will be engaged. All detected tracks over NVN North of 20N which meet this criteria will be classified as 'confirmed Hostile'. Current rules of engagement will apply for those air contacts detected south of 20N.

(2) No pursuit is authorized into the territorial seas or airspace of Communist China.

(3) USN aircraft, CAP or Strike, will, under no circumstances, proceed west of 106-10E when north of 20-00N.

(4) No air to ground ordnance is authorized with the exception of the flares carried by Strike aircraft and the Rockeyes/Guns carried aboard RESCAP. (Later modified to permit firing of Shrikes at SAM and AAA Radars.)

(5) With the exception of the above, all other rules of engagement will be IAW current directives.

m. Command and Signal.

(1) Commander, Joint Contingency Task Group, under the operational command of CINCPAC, and located at Monkey Mountain has overall authority for the conduct of this operation.

(2) CTG 77.0 is CCD-7 in USS Oriskany.

(3) CTF 77 located in USS Oriskany will exercise overriding authority for the conduct of the Navy diversionary effort as directed by CJCTG.

(4) FAAWC is CCD-7 in USS Oriskany.

(5) Alt AAWC is CCD-9 in USS Ranger.

(6) All other assignments IAW current YT RECAP.

(7) For this operation, Yankee Station communications remain IAW Green two and Red three. In addition to regular net members, CJCTG and Alt-TACC-NS (HOTEL ALPHA) may join the AC/CID nets and the secure TDS coordination net (CKT 616).

(8) Red Rocket procedures will be used to deliver mission approval/delay/cancellation messages to selected addees. Afloat commanders will receive messages via the broadcast, the Fleet Flash net (South) (FFN-S) and/or the CINCPACFLT HICOM voice net. Addees will submit acknowledgement report IAW CINCPACFLT 002300.11. (Red Rocket requirements below CJCTG were subsequently cancelled.)

n. ADMINISTRATION AND SPECIAL INSTRUCTIONS.

(1) Once this plan is opened by the designated addressees, disclosure of such portions as necessary to accomplish your assigned mission is authorized. Such disclosure will be restricted to those with an absolute need to know and will be accomplished as late as possible in order to minimize the chances of compromise. Once this plan has been opened, no personal mail will leave your unit and personnel will be transferred only in emergency cases until the operation has been terminated or cancelled.

(2) Scheduled D-Day and H-Hour are ---------- at --------Z. These will never be transmitted electrically. COMJCTG will make a preliminary GO/NO GO decision at H minus 9 hours and a final decision at H minus 5 hours. These decisions will be relayed to all participants via Air Force Green (CKT 616).

(3) The mission may be delayed by as much as two hours by the mission commander or it may be rescheduled for subsequent days should circumstances prohibit its execution on a given day. In case of delay/ rescheduling, H hours will remain the same for D plus 1 and D plus 2. On D plus 3 and D plus 4, H hour will be one hour later. On D plus 5 and subsequent, H hour returns to the originally scheduled time.

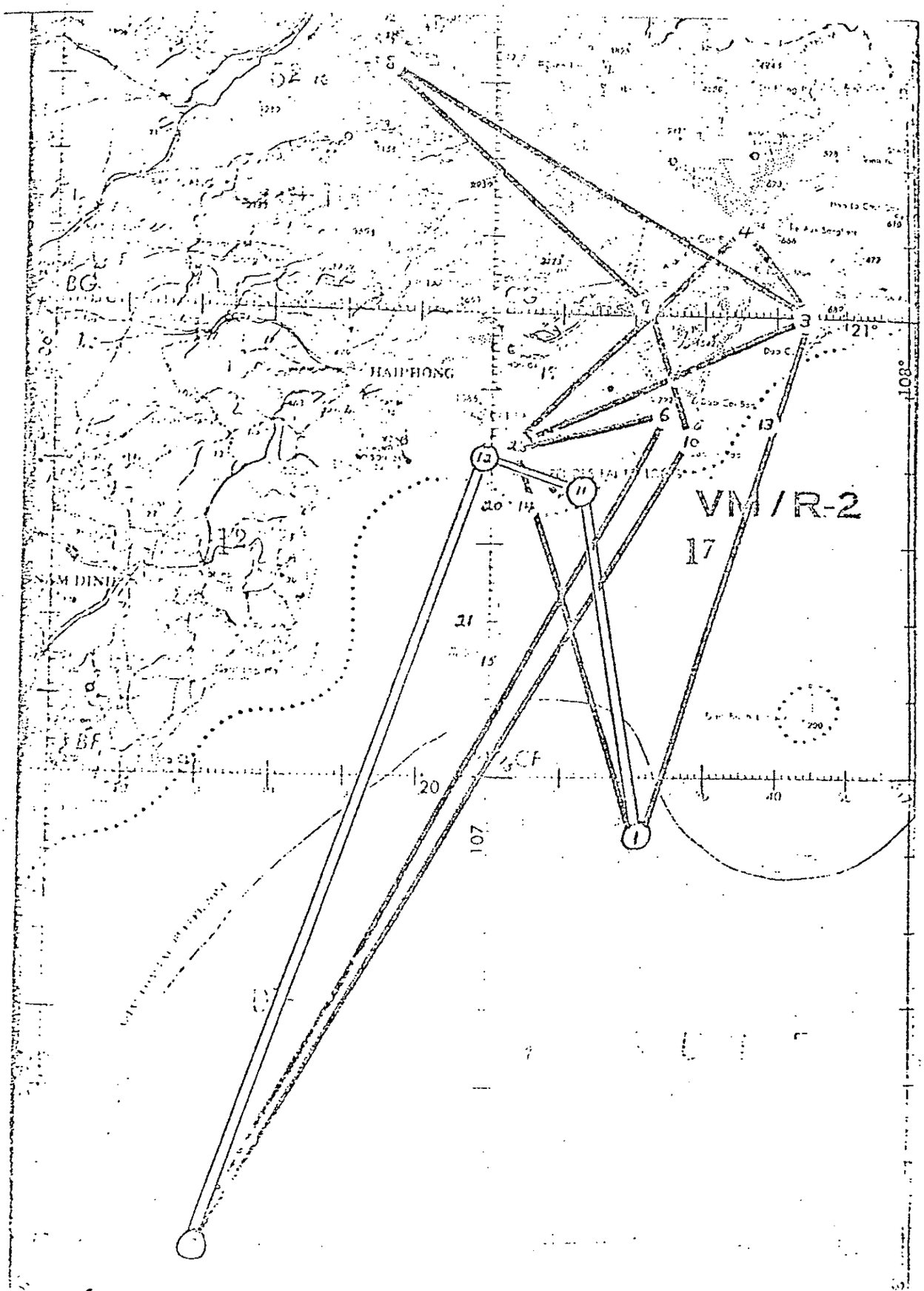
(4) USAF aircraft will be operating in the Gulf of Tonkin and over NVN during this time frame. Air Force aircraft over the Gulf of Tonkin will consist of the Luzon RR relay, Combat Apple, a KC-135 tanker, and two College Eye EC-121 aircraft in the vicinity of 19-30N/106-40E. Additionally, USN aircraft will have IFF on at all times. Therefore an inoperable IFF is cause for aircraft abort.

(5) No public statements regarding this operation are permitted even after its completion, unless specifically authorized by CTF-77 IAW directives received from higher authority. Additionally, press and other visits to units involved in this operation are to be discouraged whenever possible, provided that such incidents will not lead to unnecessary speculation. Refer all decisions on these matters to CTF-77.

(6) Abort orders during the execution phase of this operation will be issued on guard channel utilizing the appropriate code word from paragraph 10. Upon receipt of the abort code word, all Navy aircraft over land in North Vietnam will come to Heading 135 degrees True and exit the NVN land mass remaining at assigned altitude.

(7) The requirement for accuracy of navigation must be emphasized to all concerned. Such factors as accurate DR, Terrain orientation, precise NSAR stationing, EIB navigation assistance and cross checking of instruments including reference to both TACAN channels on NSAR are mandatory.

(8) Upon termination of this operation, this OPORD will be destroyed. Message report to originator stating that destruction has been accomplished is required.


HAIPHONG
VM/R-2
17
21°
108°
107
20

2. Task Group Navigation:

a. Task Group Composition. Two COMBAT TALON C-130Es were used to provide precise navigation to and from the target area. One C-130 (Cherry 01) escorted the helicopters and the other, (Cherry 02), the fighters on the inbound route. Both C-130s provided only DF steer assistance on the return route.

b. Navigator Crew Duties. Because exceptional navigational accuracy was required, FLIR (Forward Looking Infrared) was installed on both aircraft and an additional navigator was added to the crew. Navigational duties were assigned as follows:

(1) Radar navigator operated the APQ-115 radar and doppler and maintained the inflight log.

(2) FLIR navigator verified the checkpoints and turning points, provided the necessary precision doppler updates and was the primary crew member for calling the drops over FLIR identifiable targets.

(3) Map reading navigator updated the doppler by visual means and was the secondary crew member for calling drops over visually identifiable targets. The third pilot assisted in map reading from the left-hand side of the cockpit.

c. Inbound Navigation:

(1) Formation Airspeeds. Cherry 01 flew a controlled 105 KIAS which was the fastest airspeed the slowest helicopter (HH-3) could maintain during inflight drafting. Cherry 02 flew a controlled 145 KIAS, which was the maximum cruise A-1E airspeed.

(2) Formation Routes (see attached flight plans). Both C-130s flew separate flight plan routes to the common IP. Cherry 02 had to be prepared to take over the helicopter lead in case Cherry 01 dropped out for some reason. Because of this requirement, the two separate routes were laid out in such a way that the two formations were within 10 minutes of each other at the time Cherry 01 assumed helicopter lead from the HC-130

tanker (Pt 4). Thereafter, Cherry 01 and 02 flight plan separation decreased to two minutes at the IP. Because it was thought to be impractical to change lead once a descent to the objective area had begun, no change of lead was to take place once Cherry 01 and its helicopter formation crossed the North Vietnamese border. If the switch in lead was to occur, the fighter formation was to proceed on the flight plan course to the objective area alone. Some circumstances were envisioned under which Cherry 01 could take up the strike formation lead after relinquishing the assault formation lead to Cherry 02.

(3) Formation Timing. There was no firm control time of arrival over the objective area; however, it was mandatory that the strike formation arrive at the IP two minutes behind the assault formation. The time of arrival at the IP depended on the speed with which Cherry 01 could get there, even after experiencing undesirable loss of visual contacts with its helicopter formation and subsequent rejoin maneuvers. Because of this possibility and because the flight plans were computed on true airspeeds (no wind ground speeds), it was necessary for Cherry 01 to make three assault formation progress timing calls to Cherry 02 to insure that proper timing separation at the IP was attained. Cherry 02 could then either lose time by circling or doglegging or gain time by cutting corners or complete flight plan legs. The following timing calls were scheduled and made:

(a) Anticipated time ahead or behind flight plan ETA for Point 7, reported after assumption of formation lead from the tanker.

(b) Ahead or behind at Point 10, reported at Point 7.

(c) Ahead or behind at the IP reported at Point 10.

d. Outbound Navigation. Both Cherries departed the objective area and returned by separate routes. Helicopters and A-1s used the same exit route to Point 4 obtaining DF steers from Cherry 01 at the North Vietnamese border. The helicopters joined up with their tankers at Point 4 and after their refueling they proceeded to Cherry 02 orbit north of TACAN channel 103 obtaining DF steers. The A-1s flew directly from Cherry 01 orbit to Cherry 02 orbit.

e. Navigational Aids. As was foreseen, because of weather conditions, radar was the primary means of navigation over most of the route. Both formations were able to stay within one-half mile of track during doppler updating by radar. FLIR and map reading doppler updates were limited until descent to the objective area began. Thereafter, map reading became the primary means of navigation.

f. Navigational Problems:

(1)

(b)

(c) Mapping Modes. Airspeeds which cause higher than 1.5^{o} up pitch attitudes will affect the antenna sweep in the same manner as in TAO. Targets left and right will point brighter than those along the centerline of projected track.

(d)

(e) GAR/I. Used as [ ] was good. (See Section A-5)

(f) Conclusions - Lessons Learned. In spite of all the slow speed limitations, because of its adverse weather capability, the radar must be considered as the primary navigational aid in flights over mountainous terrain. On a moonless night, when visual map reading is restricted, the FLIR becomes radar's best backup.

(2) Doppler. Slow flight had adverse effects on doppler operation. In spite of excellent maintenance, it produced substandard

performance. The following problems were encountered.

(a) Occasional memory operations (break locks) during straight and level flights.

(b) Very frequent break locks during turns, power reductions or applications and pitch adjustments.

(c) Doppler drift was almost always too excessive, indicating 2-3° higher than actual. This affected not only the computer crosstrack but also the radar antenna stabilization.

(d) Doppler computer responded sluggishly to heading changes. The crosstrack had a noticeable lag with a tendency to run away or overshoot.

(e) CDI was also sluggish during slow flights and would not respond readily to heading changes.

(3) FLIR. This new equipment performed well. Because the FLIR is not gyro stabilized, its look angle calibration was affected by excessive pitch up attitude during slow flights.

g. Recommendations for future operation utilizing COMBAT TALON aircraft: [

TABLE C-13E

COMBAT TALON LOW LEVEL FLIGHT PLAN AND LOG

19 Nov 70

NAVIGATOR	ACFT MDS	ACFT NO	T O. WEIGHT	20 MIN	10 MIN	STATIONS	START ENGINES	TAXI	TAKEOFF P
				6 MIN	2 MIN	1 MIN	TOT	RECOVERY	LAND A

TAKEOFF TIME A 1517/1528 — FROM TAKHLI — TO UDORN

	TO	ETA / ATA	PTA	MSA / ESA	HC	ZONE DIST	ZONE TIME	TOTAL TIME	DIST TO SO / FUEL	TOTAL DIST	ALT / TEMP	IAS / TAS	TC	W V DC	TH	VAR	MH ▽	GS	NAV AID	R D	COORD	REMARKS
		1651																				
	NKP	1654	1647		063.2	283	1:30	1:30		283	A/R		063.0			+2						
		1726		7600							4000	142										
1A	MEKONG	1728	1726		306.4	99.7	:39	2:09		382.7	+17	153	306.0			+.4						
		1745		7600							7600	145										
2A	SKYLINE	1748	1745	8000	338.7	52.1	+19	2+28		434.8	+10	166	338.2			+.5						
		1754½		7000							7000	145										
3A	RIVER CONFL	1801½	1756½	8000	330.8	31.5	+11½	2+39½		466.3	+10	164	330.3			+.5						
		1811		7000							7000	145										
4A	RIVER CONFL	1816	1821	7200	058.7	66.4	+24½	3+04		532.7	+9	164	058.2			+.5						
		1827½		6800							6800	145										
5A	RIVER CONFL	1834½	1827½	7700	012.5	17.4	+06½	3+10½		550.1	+10	163	011.9			+.6						
		1833½		6800							6800	145										
6A	RIVER CONFL	1838½	1833½	7700	046.4	16.3	+06	3+16½		566.4	+10	163	045.8			+.6						
		1839		6800							6800	145										
7A	RIVER CONFL	1843½	1839	6800	108.4	14.2	+05½	3+22		580.0	+10	163	107.8			+.6						
		1844		6300							6300	145										
8A	RIVER CONFL out off	1849	1844	6800	060.4	13.1	+05	3+27		593.7	+11	162	060.0			+.6						
		1849		5900							5900	145										
9A	RIVER CONFL	1851½	1849	6000	347.5	12.9	+05	3+32		606.0	+13	161	346.9			+.6						
		1856		5900							5900	145										
10A	RIVER CONFL	1858½	1856	6000	060.7	19.2	+07	3+39		625.8	+13	161	060			+.7						
		1905½		5300							5500	145										
11A	RIVER CONFL	1908	1905½	5900	068.8	24.8	+09½	3+48½		650.6	+14	160	068.1			+.7						
		1913½		3900							2000	145										
TP	E END OF LAKE	1916	1913½		114.6	20.4	+08	3+56½		671.0	+21	152	113.5			+.7						
		1916½		800							800	145										
	TURN OFF	1919	1916½		077.5	6.9	+03	3+59½		677.9	+23	149	076.8			+.7						
		1919			SP RT						2000	130	A/									
	DROP	1921½	1919		270.7	5.5	+02½	4+02½		683.4	+22	135	R									

UNION RPT TO — ZONE TIME GS

SIGNATURE OF NAVIGATOR

DD FORM 33

11 5 copies

COMBAT TALON LOW LEVEL FLIGHT PLAN AND LOG

ASSAULT C-130

NAVIGATOR	ACFT MDS	ACFT NO	T.O. WEIGHT	20 MIN	10 MIN	STATIONS	START ENGINES	TAXI	TAKEO
				5 MIN	2 MIN	1 MIN	TOT	RECOVERY	LAND

TAKEOFF TIME 1555/1618 FROM TAKHLI TO UDORN

	TO	ETA / ATA	PTA	MSL / ESA	MC	ZONE DIST	ZONE TIME	TOTAL TIME	DIST TO SD / FUEL	TOTAL DIST	ALT / TEMP	IAS / TAS	TC	W / V / DC	TH	VAR	MH / V	GS	NAV AID	R / D	COORD	REMA
	UDORN	1655 / 1703	1655	A/R	049.0	192.0	1+00	1+00		192.0	A/R		049.0			0						
1	MEKONG	1706 / 1711½	1706	A/R	009.3	35.8	+11	1+11		227.8	4000 / +17	180 / 194	009.0			+.3					17 58.8 N / 102 53.5 E	
2A	SKYLINE BCN	1727 / 1730½	1727	7600 / 9000	000.7	71.1	+21	1+32		298.9	6500 / +11	180 / 202	000.3			+.4					19 10.0 N / 102 54.0 E	
	RIVER CONFL.	1738 / 1743	1738	6800 / 8000	333.3	37.0	+11	1+43		335.9	6800 / +10	180 / 203	332.8			+.5					19 42.8 N / 102 36.3 E	
	RIVER CONFL.	1815 / 1816	1815	6800 / 8400	057.4	76.9	+37	2+20		412.8		110 / 124	056.8			+.6					20 25.2 N / 103 44.3 E	
	RIVER CONFL.	1822 / 1822½	1822	6800 / 7300	036.4	13.3	+07	2+27		426.1		105 / 118	035.8			+.6					20 35.9 N / 103 52.5 E	
	RIVER CONFL.	1832 / 1832	1832	6800 / 6500	072.8	19.6	+10	2+37		445.7	6000 / +13	105 / 117	072.2			+.6					20 42.0 N / 104 12.4 E	
	RIVER CONFL.	1838 / 1838½	1838	5900 / 6600	025.3	11.8	+06	2+43		457.5	5900 / +14	105 / 117	024.7			+.6					20 52.6 N / 104 17.5 E	
8	RIVER CONFL.	1848 / 1848½	1848	5900 / 6000	064.0	19.2	+10	2+53		476.7		105 / 117	063.3			+.7					21 01.4 N / 104 35.7 E	
9	RIVER CONFL	1856½ / 1857½	1856½	5500 / 5900	091.0	16.2	+08½	3+01½		492.9	5500 / +12	105 / 116	090.3			+.7					21 01.3 N / 104 53.0 E	
10	RIVER BEND	1904½ / 1905½	1904½	5500 / 5500	058.8	14.7	+08	3+09½		506.6	4000 / +17	105 / 114	058.1			+.7					21 09.2 N / 105 05.3 E	
1P	E END OF LAKE	1911½ / 1912½	1911½	2300	105.7	12.2	+07	3+16½		518.8	1500 / +22	105 / 109	105.0			+.7					21 06.0 N / 105 13.6 E	
	OBJECTIVE POINT	1918 / 1919	1918	1500	077.7	10.9	+06½	3+23		529.7	800 / +24	105 / 108	077.0			+.7						
	DROP TURN	1920½ / 1921½	1920½	1500		5.0	+02½	3+25½		534.7	1000 / +23	130 / 135										
	LAKE DAM	1921½ / 1922½	1921½		305.7	2.5	+01	3+26½		537.2	A/R		305.0			+.7						

ZONE TIME GS

TION RPT TO

SIGNATURE OF NAVIGATOR

ASSAULT C130

COMBAT TALON LOW LEVEL FLIGHT PLAN AND LOG

Atch 1

OT	NAVIGATOR	ACFT MDS	ACFT NO	T.O. WEIGHT	20 MIN	10 MIN	STATIONS	START ENGINES	TAXI	TAKEOFF P
					6 MIN	2 MIN	1 MIN	TOT	RECOVERY	LAND A

TAKEOFF TIME A

	TO	ETA / ATA	PTA	MSL / RSA	NC	ZONE DIST	ZONE TIME	TOTAL TIME	DIST TO SD / FUEL	TOTAL DIST	ALT / TEMP	IAS / TAS	TC	W V / DC	TH	VAR	MH V	GS	NAV AID	R / D	COORD	REMARKS
FROM									TO													
	RIVER CONFL	1918 / 1918	1925	5000 / 4500	267.3	24.7	+06½	3+33		561.9	4000 / 117	313 / 230	266.6			+1.7		230			.21 06.2 N 105 00 5 E	* FLY TF OR NSL
X3	RIVER BEND	1939 / 1938	1939	5500 / 7500	227.7	41.0	+11	3+44		602.9	6500 / 111	205 / 230	227.0			+1.7		230			20 37.3 N 104 25.7 E	
6	RIVER CONFL	1941A / 1941B	1945	5500 / 6200	285.8	15.8	+04½	3+48½		618.7	5500 / 114	208 / 230	285.2			+1.6					20 42.0 N 104 12.4 E	
21	RIVER BEND	1948 / 1947	1948	5500 / 1600	016.6	15.0	+04½	3+53		633.7	5500 / 114	208 / 230	016.0			+1.6					20 54.4 N 104 16.5 E	
	*ORBIT	2027 / 2030	2027	5000 / 6000			+39	4+32				150										5500 FT to 7000 FT
38	360 & SKYLINE	2052 / 2053	2052	9000 / 7500	225.2	112.5	+25	4+57		746.2	9000 / 206	215 / 250	224.6			+1.6					19 36.0 N 102 54.0 E	
2A	SKYLINE	2058 / 2103	2058	9000 / 8500	180.4	26.0	+06	5+03		772.2	9000 / 196	215 / 250	180			+1.4					19 10.4 N 102 54.0 E	
1	MEKONG	2110 / 2118	2115	9000 / 9000	180.3	71.1	+17	5+20		843.3	9000 / 206	215 / 250	180			+.3					17 58.8 N 102 53.5 E	
	UDORN	2125 / 2128	2125		189	55.8	+10	5+30		879.1						+0						

POSITION RPT TO

ZONE TIME GO

SIGNATURE OF NAVIGATOR

TAC FORM 550 TO 63

3. US Army Operations:

a. Attachment 2 provides a schedule of ground force events in the staging area to include amplifying equipment lists.

b. Attachment 3 provides a schedule of ground force events in the objective area.

SCHEDULE OF EVENTS - GROUND FORCE

18 Nov (D-3)	0600-1400	Rest & Recover from Travel	Billets	Plat Ldrs
	1400-1430	Briefing	Theater	Gen Manor & Col Simons
	1430-1500	COs meeting	Theater	LTC Sydnor
	1500-1700	Read Plan (by Plat Ldrs)	Billets	Plt Ldr
		Unpack Personal Equip & Web Gear	Hangar	Plat Ldrs
	1700-1800	Chow	Dining Rm	
	1830-1900	Staff & Plt Ldrs Meeting	Theater	LTC Sydnor
	1900-2000	*Plat Ldrs & El Ldrs Question Pd & Briefback	Billets	LTC Sydnor
	2030	Movie	Theater	Base, CO

---

19 Nov (D-2)	0600-0700	Chow	Dining Rm	NA
	0700-0900	*Plat Ldr Time	----------	Plat Ldr
	0900-1100	Ammo Issue & Prep	Billets	Supply NCO
	1100-1200	Chow	Dining Rm	NA
	1230-1330	SAR Briefing	Theater	SAR Unit, CO
	*1330-1515	Range Firing 2nd Plat 1300-1345 3rd Plat 1345-1430 1st Plat 1430-1515	Range	CPT Meadows
	1515-1700	Wpns Cleaning Draw Demo Chgs	Billets/ Annex	Plat Ldr Sel Pers
	1700-1800	Chow	Dining Rm	NA
	1800-1900	E&E Briefing	Theater	Mr. Morton

*Comms Issue - Ready at 1330 (Coord w/SFC Erwin)

---

20 Nov (D-1)	0600-0700	Chow	Dining Rm	NA
	0700-1100	Open (Issue Night Devices and I/R Devices)	Hangar	LTC Bailey
	1100-1200	Chow	Dining Rm	NA
	1200-1210	Issue Sleeping Pills	Billets	LTC Cataldo
	1210-1700	Rest	Billets	Plt Ldrs
	1700-1800	Chow	Dining Rm	NA

20 Nov (D-1) con't	1800-1845	Final Briefing	Theater	COL Simons LTC Sydnor
	1845-	Adv Party Departs		
	1845-1915	Move to Hangar (by closed van)	Route	Plt Ldrs
	1915-2100	Equipment Checks	Hangar	Plt Ldrs & CO
	2100-2110	Marshall	Apron	MSG Britt USAF Rep
	2110-2120	On-Load	Apron	MSG Britt USAF Rep
	2125-	Take-off for Staging Area		
	2225-	Arrive Staging Area		
	2225-	Marshall	Staging Area	MSG Gann
	2256-	Depart		

ALL DATES	0715	Daily Staff Briefing	Theater	LTC Sydnor & Staff

GROUND FORCE EQUIPMENT LIST

	COMMAND GROUP	ASSAULT GROUP	SUPPORT GROUP
M-16	2	0	0
CAR .15	14	14	20
.45 PISTOL	16	14	21
M-79 & Vest	2	0	2
M-60	2	0	2
SHOTGUN	1	0	1
RUCKSACK	5	0	4
MACHETTE	5	6	6
CHAIN SAW	1	0	1
CUTTING TORCH	1	0	1
BATONS (LIGHTS)	2	0	2
BEAN-BAG LIGHTS	7	0	7
CAMERA	1	0	1
GOGGLES	20	14	22
ROPES	1	5	1
BOLT CUTTERS	2	7	2
AN-PRC-88	9	5	10
AN-PRC-77	5	2	3
AN-PRC-41	1	0	1
AN-PRC-90	20	14	22
AX	5	5	1
HEADSET	1	0	1
WIRE CUTTERS	3	6	3
MINERS LAMP	10	14	10
MASK	20	14	22
Night Vision Dv	4	1	1
HAND CUFFS	1	5	0
[illegible] HOLSTER (.45)	9	14	20
KNIFE	20	14	22

Atch 2

	COMMAND GROUP	ASSAULT GROUP	SUPPORT GROUP
CROW BAR	0	5	0
PEN FLARE	20	14	22
BULL HORN	2	3	0
INFRA RED FLASHLIGHT	2	2	2
INFRA RED HOOD FOR STROBE	2	2	2
EQUIPMENT BAG (M-60)	0	5	0
SINGLE POINT SIGHT	16	13	18
ERE RUCKSACK	0	14	0
PONCHO & LINER	0	14	0
CANTEEN, 2 QUART	0	14	0
LRPPS	0	56	0
HAMMER & NAILS	0	1 set	0
14' LADDER	0	1	0
CRASH HATCHET	0	2	0
FIRE EXTINGUISHER	0	4	0
LBE & SURVIVAL KIT	20	14	22
STROBE LIGHT	20	14	22
GLOVE - AVIATOR	20	14	22
COMPASS - M-2	20	14	22
PEN LIGHT	20	14	22
EAR PLUGS	20	14	22

GROUND FORCE MUNITIONS LIST

AMMUNITION	COMMAND GROUP	ASSAULT GROUP	SUPPORT GROUP
1. 5.56			
a. Ball	6851	3338	6024
b. Tracer	180	1640	404
2. .45 Caliber			
a. Ball	336	287	483
b. Tracer	21	7	28
3. Grenades, Hand			
a. Fragmentation	20	0	53
b. Concussion	50	28	53
c. Smoke	0	0	8
d. Incendiary	0	0	1
4. Claymore Mines	6	6	3
5. Special Demo Charges			
a. 30 lbs	2	0	2
b. 10 lbs	2	0	2
c. 5 lbs	1	0	1
d. 3-1/4 lbs	0	1	0
6. 40mm Grenades			
a. HE	120		70
b. WSC	17		12
7. Flares (Hand-Held)	17		34
8. M-72 (LAW)	12		12
9. 7.62 Ball (4/1) MLB	3000		2500
10. #1 Shotgun Shells	50		50

Medical

1. Approximately 2690 lbs of medical supplies were procured for the conduct of this operation. On each evacuation helicopter was placed:

150 Cans of Water

100 Cans of Survival food

Special sneakers, olive drab

Ponchos, camouflages

Ponchos, lined

Baby food, packaged, plain

Ear plugs

M-5 Medical kits

2. Prepositioned at the Base Hospital, Udorn, Thailand, for immediate employment were:

100 sets of pajamas

100 sets of bathrobes

Cameras (to photograph POWs)

Delousing material

Additional plain package Baby Food

3. The hospital activated its Mass Casualty Plan at H Plus 2 hours, however, deactivated upon return of the first helicopter.

SCHEDULE OF EVENTS - GROUND FORCE OPERATIONS

	GROUND ELEMENTS				AIR ELEMENTS		
TIME* (LOCAL)	FORCE CMDR (WILDROOT)	COMMAND GROUP (REDWINE)	ASSAULT GROUP (BLUEBOY)	SUPPORT GROUP (GREENLEAF)	HH-3 (BANANA)	HH-53 (APPLE)	A1-E (PEACH)
H'Hour (210219 Nov)							
H+30 Sec		Fly By	Insert in Target Area	Insert 400M S of Target Area	01	01	Orbit Area
H+2'30"		Insert (Plan Green)	Clear & Search	Combat Assault	02		
H+2'45"	Execute Plan GREEN	Clear, Search, Plan GREEN (-) El #2	Clear & Search	Begin disengagement, Secure LZ			
H+6'00"	Request Air Strike	Clear, Search, Plan GREEN (-) El #2	Search	Prep for extraction			ATK on Footbridge
H+9'00"		El #2-SE Road block	Search	Extraction (Underfire)		01	
H+9'30"	Execute Basic Plan	Basic Plan El #3 receive GREENLEAF	Search	Insertion - Pass thru RW El #3		01	
H+10'00"		Basic Plan Reorient El #3	1st Neg Item Report	Assume Basic Plan role			
H+11'00"	NET CALL Prep to Extract		Search Complete "NEG ITEMS"				
H+12'30"	Withdrawal "Normal"	Prep to W/D Secure LZ (W)	Prep to W/D	Prep to W/D			
H+17'30"	Command & Central "Exit on	Regroup for Extraction	(-) HQEl Regroup on LZ	Secure LZ			Strafe Main Bridge
H+18'50"	Initiate Marking Flare	Load (-) El #3	Load (-) Hq El	Secure LZ		01 Land	

SCHEDULE OF EVENTS - GROUND FORCE (CONT)

	GROUND ELEMENTS				AIR ELEMENTS		
TIME* (LOCAL)	FORCE CMDR (WILDROOT)	COMMAND GROUP (REDWINE)	ASSAULT GROUP (BLUEBOY)	SUPPORT GROUP (GREENLEAF)	HH-3 (BANANA)	HH-53 (APPLE)	A1-E (PEACH)
H+21'30"	APPLE 1 Cleared out	Extracted (-) El #3, MACO, P/F	Extracted (-) Hq El	Reposition for LZ Security		01 cleared out	
H+22'30"	APPLE 2					01 cleared out	
H+23'00"	"Marry Up" Transmission					02 cleared in	
H+25'30"	MACO Count		Marry Up Set Demo Charge, Depart	Execute W/D Plan	Demo Charge		
H+25'20"	Command and Control	REDWINE reported "23 Aboard"	Move to LZ. Load	Load (-) El #2		02 Land	
H+27'(?)	EXTRACTION 2 Hq El -(6)	EXTRACTION EL#3 PF, MACO	EXTRACTION Hq El -(3)	EXTRACTION			
H+27 (+)	Report to APPLE 2 "Correct Count-33"					02 Pass Count	
H+33(?)			Observed Detonation of H-3 Helicopter (Estimate)		Destroyed		
H+2(?)	Corrected count -34	Corrected count -25				01-25 02-34	

*All times are approximate - based on UHF and FM radio net tapes.

SEQUENCE OF EVENTS - COMMAND GROUP

TIME	HQs ELEMENT	SEC ELE 1	SEC ELE 2	SEC ELE 3	PATHFINDER
H+2'30"	Debarked	Debarked	Debarked	Debarked	Debarked
H+3'	Initiated Plan GREEN	Initiated Plan GREEN	Engaged Power Station with M-72 LAW	Initiated Plan GREEN	Initiated Plan GREEN
H+5'		Assaulted Bldg 8D, 4A, & 8E	Set up in Road block Position	Assaulted Bldg 7B	Cleared Pump Station, Set Chgs on Tower
H+9'		Cleared Bldg 8D, 4A, & 8E. Passed torch & Camera to Assault Group	Engaged Enemy near position. Cleared Power Station	Cleared Bldg 7B	Blew Tower
H+10'	Revert back to basic plan	Engaged Target across river		Engaged Enemy in Bldg 7A	Set up primary LZ
H+11'				Relieved at position by support group	
H+12'	Received word to withdraw. Informed Elements.	linked up with Assault Gp 2 Withdrew to LZ	engaged convoy with M-72 LAW then withdrew to LZ	moved to Pump Station Set up in Security Position	Set up Alternate LZ
H+18	Boarded Apple 1	Boarded Apple 1	Boarded Apple 1		
H+20					Received word to Board Apple 2
H+25				Moved to LZ & Boarded Apple 2	Boarded Apple 2

SCHEDULE OF EVENTS - SUPPORT GROUP

TIME	HQs ELEMENT (GREENLEAF)	ELEMENT #1 (GREENLEAF 1)	ELEMENT #2 (GREENLEAF 2)
H Hour (0300Z 19 Nov)			
H+1	Insert 450m south of Target area	Same HQs	Same HQs
H+2	Penetrate & clear compound		
H+3		Extraction LZ secured	Road clear 150m North
H+5	Aircraft inbound		Instructed to close on LZ
H+6	Began movement to LZ		Closed on LZ
H+7	Support Group closed on LZ awaiting extraction		
H+9	Extraction	Extraction	Extraction
H+9'30"	Insertion into tgt area	Same HQs	Same HQs
H+10	Cleared bldgs 7B & 8F Linkup with Command Gp Element #3	Secure 15m South/Bldg 7B	Assaulting Bldg 13E
H+11	Rcd net call "neg items, prepare to withdraw"	Net call relayed	Bldg 13E cleared & net call relayed
H+12'30"	Prepare to withdraw & secure LZ	Movement to LZ security	
H+13			Instructed to break contact & secure LZ
H+14		Established LZ security	
H+17	Broke contact & closed on LZ (Notified Wildrcot)		Closed on & secured LZ
H+23	APPLE 2 landed		
H+25'30"	Boarded Aircraft	Boarded Aircraft	Boarded Aircraft
H+26			
H+26'30"	Support Group accounted for with negative casualties		
H+27	Extraction		

SCHEDULE OF EVENTS - ASSAULT GROUP

TIME	HQs ELEMENT	ACTION ELEMENT 1	ACTION ELEMENT 2	ACTION ELEMENT 3
H+1	Debark	Debark	Debark	Debark
H+1'30"	Clears Bldg #3	Cleared Cell Block 5A	Clears Front of Cell Block 5E	Moves to Gate
H+2	Clears S/W Tower	Cleared Cell Block 5A		Clears Gate
H+2'30"	Broadcast message Places wall charge	Cleared N/W tower	Entered, Cleared & searched Cell Block 5E	
H+4	Answered Ground Force net call	Answered Assault Group net call	Same action Element 1	Same action Element 1
H+5	RCD ACD clear FM Blueboy 1	Cleared Cell Block 5C 5D		Entered, Cleared & searched Cell Block 5-3
H+9	RCD "NEG ITEMS" FM Blueboy 1			
	REC "NEG ITEM MAX security area and 5B FM Blueboy 3 REC Torch and photographer FM Redwine			
H+10	Transmits "NEG ITEMS" to Wild Root	Moved to hole		Moved to hole
	REC NEG ITEM FM Blueboy 2			
H+11	Transmits "NEG ITEMS COUNT COMPLETE" to Wildroot		Moved to hole	
H+14	PREP BANANA demo charge			
H+15	Dispatched 1st package		Moved to LZ	Moved to LZ

SCHEDULE OF EVENTS - ASSAULT GROUP (CONT)

TIME	HQs ELEMENT	ACTION ELEMENT 1	ACTION ELEMENT 2	ACTION ELEMENT 3
H+16	Dispatched 2d package	Moved to LZ		
H+23	Request permission to "MARRY UP"			
H+23'30"	RCD "MARRY UP" Initiated demo charge and fire fight simulator			
H+25	Moved to LZ			
H+33	OBSV EXPL OF BANANA			

PART II

SECTION J COMMAND AND CONTROL

1. Tactical Air Control Center-North Sector. The Tactical Air Control Center-North Sector (TACC-NS), located at Monkey Mountain, RVN, served as the Command Post for COMJCTG. It provided the Commander with real-time air situation data obtained from the Naval Tactical Data System (NTDS), [redacted] and the two in-country radars located at Udorn, Thailand, and Monkey Mountain, RVN. It was planned to use COLLEGE EYE aircraft (airborne radar platforms) to provide low level coverage west of Hanoi; however, the aircraft had equipment failure and was unable to track friendly aircraft at extended ranges.

a. COMJCTG controlled his forces through the existing air-to-ground communications network. To provide communications with the National Command Authority, two special circuits were terminated at the TACC-NS. The primary circuit, through CINCPAC, was satisfactory throughout the period of the operation and the alternate circuit was not utilized. Through the use of a radio-relay aircraft operating over the Gulf of Tonkin, COMJCTG had direct UHF communications with the Task Group and the Navy Command Post afloat. In addition, COMBAT APPLE monitored the force enroute FM frequency and relayed appropriate information to the TACC-NS and elements of the force when contact on UHF was impossible. To insure that inoperative radio equipments would not degrade the operation, backup equipments were operational at the TACC-NS. In addition, COLLEGE EYE and the radio-relay aircraft monitored the primary and alternate UHF force frequency. COLLEGE EYE also monitored the primary HF/SSB frequency.

b. The TACC-NS computerized equipments and display consoles were operational throughout the entire mission. The normal operational crew was responsible for maintaining the air situation and monitoring all of the Task Group radio frequencies. Three of the six display consoles were allocated to COMJCTG and his staff to enable them to monitor the Task Group operation. Communication terminations were realigned to meet COMJCTG requirements. The on-site operations personnel retained their normal air defense responsibilities. The Commander of the TACC-NS personally selected the operational crew that supported COMJCTG.

c. In addition to the COLLEGE EYE equipment failure, the digital link (Link-11) between the TACC-NS and NTDS was periodically inoperative, thus depriving COMJCTG with a current real-time air picture derived from Navy sensors. Because of the incompatibility of the Air Force and Navy automated systems, a USMC-operated computer buffer is utilized to pass air situation data between the two systems. Periodic power failures at the buffer site interrupted the flow of real-time data. During these power failures, the backup computer driven teletype system (Link-14) was activated. A teletype input delays the display of air situation data approximately one to two minutes.

d. The COLLEGE EYE equipment failure (IFF/SIF) negated a capability to control the MIG CAP below 7,000 feet over and west of Hanoi. If MIG aircraft would have attempted an intercept of the F-105 WILD WEASEL and F-4D MIG CAP aircraft, intercept control would have been transferred to RED CROWN (Navy Command and Control Ship). MIG aircraft operating below 7,000 feet would have to be intercepted using only the airborne intercept radar of the MIG CAP aircraft. COLLEGE EYE equipment was operational

and would have provided MIG positions to the MIG CAP using a range and bearing from Hanoi (BULLS EYE). In addition, Navy BAR CAP aircraft were available [redacted]

e. In-country identification procedures were modified to permit all Task Group aircraft to be tracked and identified using their MODE II SIF codes.

f. The following communications were available to COMJCTG:

(1) Ground-to-air (UHF). Task Group, COLLEGE EYE, COMBAT APPLE and Naval Forces.

(2) Point-to-point (HF/SSB). C-130E aircraft, COLLEGE EYE and Navy Command and Control Ship.

(3) Point-to-point (DCS). NMCC, CINCPAC, 7AFCC, 7/13AFCC, alternate TACC-NS and other elements of the SEA TACS.

g. Lessons Learned:

(1) To conduct such an operation, a computerized system is required to integrate (fuze) all sources of data and display them in real-time. Communications are extremely vital for positive control of similar types of operations. The use of an Airborne Command and Control platform, with the capabilities of the TACC-NS and operating in the vicinity of the operation, could have simplified the communication links, improved detection capabilities and provided positive radar control of the entire force. The number of elements could have been reduced, thus minimizing the risks involved in using a multiple element Command and Control System.

(2) The lack of airborne MIGs simplified our problem. However, airborne MIGs could have amplified our deficiencies; i.e., lack of an airborne radar capable of detecting airborne targets over a land mass. Complete reliance on a "cooperative" enemy [redacted] is

a risky business. For a smaller operation, not requiring the extensive use of other sensor systems, a helicopter borne radar (similar to the one now undergoing testing) accompanying the Task Group could have satisfied the Command and Control requirements. In addition, communication procedures should be coordinated with in-country forces in sufficient time to introduce them into the training program.

2. Airborne Radar Platform:

a. Two EC-121T airborne radar platforms (COLLEGE EYE) were scheduled to operate over the Gulf of Tonkin. The aircraft departed Korat RTAFB on time and all equipments were brought to an operational level prior to passing DaNang. The primary aircraft broke an oil line and lost #2 engine while proceeding up the Gulf of Tonkin. It returned safely to DaNang. After reaching altitude in the Gulf of Tonkin, #2 aircraft experienced IFF/SIF equipment failure and was unable to receive IFF/SIF returns at extended ranges. A spare unit was installed, however, with negative results. Without the IFF/SIF capability, the platform operated primarily as a MIG warning agency and a radio-relay. Voice contact with the MIG CAP was impossible, the normal 7th Air Force MIG warning procedures would have been utilized in the event MIGs became airborne; i.e., range and bearing from Hanoi (BULLS EYE).

b. A post flight inspection of the defective IFF/SIF equipment on #2 aircraft revealed no defective equipments. While the aircraft was on station, interference was encountered on the IFF/SIF frequencies. Prior and during the duration of the interference, IFF/SIF returns could not be reliably received beyond 30-40 miles. When the aircraft departed the station, the interference disappeared. On the next flight, with no

maintenance performed, the system was again checked, and the system was operational. There is no adequate explanation for the interference or lack of IFF/SIF returns at the time of the writing of this report. It must be noted, however, that the Navy was jamming NVN radars at this time.

c. Lessons Learned. Complete reliability on non-radar equipments and a "cooperative" enemy for detecting and tracking aircraft is a high risk. An airborne radar capable of overland operation would reduce this risk considerably. In addition, an airborne platform capable of fusing all source data would greatly reduce the reliance on a long-haul sophisticated communication system and the number of command and control elements involved in this operation.

3. Radio Relay Aircraft:

a. Radio-relay aircraft were operational over the Gulf of Tonkin during the entire period of the operation. It was planned to add four additional UHF channels to the existing four channels for a total of eight channels. The aircraft was designed (Group A) for eight channels; however, their normal day-to-day operation only required four channels. When queried prior to this operation, Headquarters Strategic Air Command (SAC) personnel advised the additional equipments were in Southeast Asia; however, the in-country personnel had no knowledge of their location. This change in capability required the increasing of the number of users on the existing four channels and prevented COMJCTG from monitoring all of the discrete frequencies of the various elements of the supporting force. Because of the phase-down of the Southeast Asian conflict, airborne radar platforms were returned to the CONUS and the digital relay equipments required to link these aircraft with the TACC-NS had to be reinstalled in the aircraft. To insure compatibility of the newly installed equipments, several airborne tests were required prior to the operation.

b. Lessons Learned. Authorized [redacted] components of in-being systems should be retained and be available to the user for short notice requirements.

4. [redacted] over the Gulf of Tonkin for the entire period of the operation. An Airborne Mission Coordinator, fully cognizant of the entire operation, was available aboard this aircraft to assume control of the operation in the event that the TACCNS became inoperative. COMBAT APPLE performed as expected and had direct secure UHF communications with COMJCTG. In addition to its normal functions, it monitored the Task Group's FM frequency and relayed pertinent information to COMJCTG. [redacted]

A backup RC-135M was also launched with an Alternate Airborne Mission Coordinator on board, and flew a southern COMBAT APPLE orbit.

5. Mission Control Messages.

18 Nov 70 A message was hand carried to CTF-77 that provided rules of engagement and coordinating procedures.

182030Z Red Rocket One message from JCS, "Final go."

182225Z COMJCTG advised CTF-77, "NCA approval received."

182355Z COMJCTG advised COM7AF, "NCA approval received."

190911Z COMJCTG advised CINCPAC and NMCC that the Task Force was ready. Also advised that a delay due to weather was possible.

200310Z COMJCTG advised CTF-77 of a "preliminary go."

200856Z COMJCTG advised CINCPAC and NMCC of "final go" decision and that the operation would be advanced 24 hours.

200926Z COMJCTG advised CTF-77 of "final go" decision.

201345Z COMJCTG advised NMCC and CINCPAC he was in position at his Command Post at the Tactical Air Control Center - North Sector, Monkey Mountain, RVN.

6. Pertinent Activity Report Messages:

COMJCTG advised the NMCC and CINCPAC of the following information:

171030Z	COMJCTG was in place at Takhli RTAFB.
172000Z	Task Group arrived at Takhli RTAFB.
201545Z	C-130E #1 off Takhli at 1532Z.
201625Z	C-130E #2 off Takhli at 1613Z.
	HH-3 off Udorn at 1618Z.
	HH-53s off Udorn at 1618Z.
201704Z	HC-130s and A-1Es off on time.
201743Z	Situation satisfactory.
201823Z	Navy diversion launched.
201827Z	Refueling complete.
201840Z	Task Group crossed NVN border at 1838Z.
201908Z	Situation satisfactory.
201928Z	MIG threat.
201929Z	Landed in the objective area safely.
201932Z	MIG threat all clear.
201935Z	Situation satisfactory.
201950Z	All aircraft departed objective area.

202015Z Task Group crossed Laos border (egress).

202027Z SAR effort required. F-105 down.

202035Z Possibly negative PWs. Leaving TACC-NS for Udorn.

210215Z NMCC provided with "Initial Summary of Operations."

PART II

SECTION K

(N O T U S E D)

PART II

SECTION L

(N O T U S E D)

PART II

SECTION M - SECURITY

1. Planning:

a. On 10 August 1970, the Security Staff Section was organized with one USA Area Intelligence/Counterintelligence Officer, Chief of Section, one USAF Counterintelligence Officer (Special Agent) from the Office of Special Investigations (OSI) and one Hq USAF officer from the Directorate of Operations with the responsibility of Operations Security and Cover and Deception. This minimal staffing for security planning and operations complied with the strict compartmentation procedures established and maintained throughout all phases of the operation. The Security Staff performed the unique and complex role of supervisor/operator over a broad area in a limited time frame without additional Special Agent support for counterintelligence operations or enlisted intelligence administrators. Advanced security planning began on this date and immediate security and counterintelligence measures and procedures were instituted. An access list was established and subsequently maintained of all personnel who had been provided knowledge of the essential elements of the project. The authority for disclosure and dissemination of classified information pertinent to the operation was established. All personnel assigned to the project on a permanent or temporary basis were given a thorough security briefing. Procedures for safeguarding classified information and material were published and disseminated in a letter of instruction and briefed to all personnel. The procedures outlined individual responsibilities; classification and marking; control of defense information and material; transmission, storage and security of working areas and containers; and destruction of classified material. Security Control Officers, Top Secret and alternate Top Secret Control Officers and Couriers were formally appointed for all locations and properly instructed in their duties relating to accountability, identifiability, reproduction, dissemination, storage, and destruction. Security clearances of the project personnel were verified and files and dossiers reviewed as appropriate. Selected working and storage areas were subjected to a technical

security survey and secured against espionage, unauthorized disclosures, or access by unauthorized personnel.

b. Oral security debriefings were prepared with appropriate wording, and security termination and debriefing certificates prepared for the period up to redeployment and upon termination of the operation.

c. A cover and deception plan was developed and credible cover stories were utilized as required in coordinating activities within DOD (Annex M to COMUCTG OPLan).

d. The Security Staff also developed the Counterintelligence Annex to the COMUCTG OPlan which tasked organizations to provide specialized assistance in collecting information concerning possible organized threats to the mission of the project.

2. Training:

a. Actual preparations for opening and securing working and training locations at Eglin AFB were initiated well in advance of the actual start of training. The Washington planning location was secured. All working and training areas at Eglin AFB were secured, appropriate technical security surveys were conducted and a security guard from the USA Special Forces was posted at the Army component maximum security building and, when required, at the controlled access points to the field training site. A counter-intelligence study was conducted which indicated that no known Communist Party (CP) USA members reside in the ten counties of Florida which surround Eglin AFB and no CP sympathizers or active CP supporters were known to be in the area. Operational data for Eglin AFB and the surrounding area was collected and analyzed. A survey of the field training site, Range C-2, at Eglin AFB was conducted prior to construction of the Son Tay POW training complex by examining the area from the ground and the air, and by checking maps, airline schedules, flying charts, satellite orbiting schedules, local military and civilian traffic habits, and fishing and hunting regulations. All security clearances of key personnel were verified and the files and dossiers reviewed as required. All newly assigned personnel were given a thorough security

briefing and personnel departing the project, either permanently or temporarily, were given a thorough oral debriefing and required to execute a security termination and debriefing certificate.

b. Once actual training began, planned early warning measures for ascertaining unauthorized disclosures and possible espionage activities were initiated. They consisted of the employment of unwitting informants, systematic elicitation of civil population and military personnel, monitoring news media, analysis of intelligence reports, and screening of civilian labor and vendors. Limited counterintelligence support was obtained through liaison with OSI, USA counterintelligence organizations, Security Police, and local civilian authorities. Extensive cover and deception measures were used in the actual construction of the mock-up of the POW camp. Walls of buildings were simulated by the use of panels of target cloth stretched between upright poles. Trees were simulated by tall poles with pennants attached. Some buildings were outlined in two dimensions by stakes and narrow tape. Only portions of the three prison walls were erected, again by using panels of target cloth stretched between upright poles. The field training site containing the prison mock-up was cleared by the Security Guard prior to each training period and the area was secured from outside ground observation continually during use. The Security Staff Section conducted systematic and periodic surveys of the field training site as well as all other working areas and locations for adherence to security requirements and regulations as well as to ascertain security by observation.

c. All operations, ground and air, were observed by the Operations Security Officer to determine if significant intelligence was being revealed by the manner in which training was being accomplished. Patterns of ground activity, aircraft flight composition and tactics, as well as ground-to-ground, ground-to-air, and air-to-air communications were monitored and analyzed to insure that security was being maintained. Personnel from the

USAF Security Service provided continuous radio and telephone monitoring and analyzing services from training through redeployment. The periodic reports submitted by this group assisted the Security Section in assessing the security status of the project and in recommending improved security measures to the COMJCTG. Weekly training schedules were developed within the context of maximum operations security. Specific actions were taken to maintain the security of JCTG training by monitoring and analyzing pertinent intelligence information and by the application of prompt corrective actions when required. Counterintelligence psychological operations utilizing rumors, timely disclosures of false and/or misleading information, deceptive documents, photographs, maps, charts and diagrams were conducted to insure the security of the training.

d. As the training progressed, elements of the actual mission were disclosed to operating personnel through the use of cover stories and deception so that mission knowledge was systematically developed. This technique contributed significantly to security and integrity while maintaining high morale within the force.

e. On 2 September 1970, the Security Staff Section discovered the possibility of a significant unauthorized disclosure of classified information by a former member of the feasibility study group and the Security Section was directed to conduct a preliminary administrative inquiry which was concluded on 21 September 1970. During this period, the individual suspected of the violation was thoroughly debriefed and personnel suspected of being recipients of the information were located and all determined to be highly responsible military personnel with Top Secret clearances. Through discreet elicitation, they were queried as to the extent of their knowledge of the project and through the disclosure of deceptive information convinced the project was designed for special operations in the Middle East.

3. Theater Coordination. A counterintelligence study was conducted to assess the insurgent threat to the USAF bases in Thailand. It was determined that no hostile threat existed to the bases that were scheduled to be used in Thailand and that no known hostile agents were in the Takhli RTAFB area. A system was established to alert the Security Staff Section if MACTHAI/JUSMAG, Controlled American Source (CAS) in Bangkok, and/or OSI in Thailand received any information concerning a possible hostile threat to the bases in Thailand. The OSI in Bangkok was requested to provide technical security surveys at the appropriate sites at Takhli RTAFB and Udorn RTAFB. Secured facilities at Takhli RTAFB were obtained to billet and brief operational personnel.

4. Deployment:

a. In the period immediately preceding and during deployment, the Security Staff Section increased their security and counterintelligence measures and psychological operations. A credible cover story was developed to show the force moving to Norton AFB for an advanced phase of mobility training, testing, and evaluation. This cover story was utilized to prevent espionage or sabotage from interfering with the movement of the force to Takhli RTAFB, to insure the element of surprise, and to deny information regarding the movement, its purpose, implications and organization. The Security Staff Section also acted in an advisory capacity in the preparation of the deployment schedule. The section conducted surveys and inspections, recommended measures for maximum secrecy, and provided instructions to unit personnel concerning movement security. The section observed the move to prevent, report, and investigate security violations and other security threats, and to initiate corrective action.

b. The following additional movement security measures were implemented:

(1) False information was disseminated designed to deceive or mislead as to the actual intentions of the move.

(2) Identifying marks and insignia were removed from clothing and equipment.

(3) Surveillance of areas and facilities which personnel frequented during off-duty hours was increased.

(4) Material and equipment was crated, covered, and guarded to conceal identity and provide protection from unauthorized disclosure.

(5) Physical security hazards at Takhli RTAFB and Udorn RTAFB, Thailand, were evaluated.

(6) Curfew hours and restrictions were established.

(7) Security guards were posted at aircraft containing classified equipment and loading areas.

(8) Departed areas were examined to insure no information of intelligence value had been left behind which might disclose the destination, identity, and mission of the force.

(9) A stay-behind support group occupied the facilities formerly used by the operational force and continued deception activities utilizing telephone and radio communications and personnel movement. Joint Army and Air Force training continued but on a reduced scale.

c. Upon departure from Norton AFB, another cover story was developed to indicate the force was continuing mobility training to test and evaluate human fatigue factors in relocating to SEA. This cover story was disseminated during debarkation at Elmendorf AFB and at Takhli RTAFB.

d. All military personnel participating in the mission and Thai nationals at Takhli RTAFB and Udorn RTAFB were given appropriate cover stories or security briefings.

e. A technical security survey was conducted at Takhli RTAFB and Udorn RTAFB and secure working areas were established and maintained. Counterintelligence inspections were conducted to insure that all personnel were practicing the highest degree of security.

5. Employment. During employment of the force, the Security Staff Section continued to maintain the secure working areas at Takhli RTAFB and Udorn RTAFB to insure that all personnel practiced the highest degree of safeguarding classified information and material, particularly in handling, transmitting, storage and destruction. Strict radio silence was maintained during refueling and ingress, and electromagnetic emission control procedures were practiced throughout the mission.

6. Redeployment. During this phase of the operation, the Security Staff Section continued to implement the established security procedures developed during the planning phase. Pertinent movement security measures were again used. Security briefings were given to the aircrews flying redeployment missions and actions taken to prevent unauthorized press releases.

7. Post Operational Activities:

a. All JCTG personnel were given a thorough oral debriefing and subsequently executed a security termination and debriefing certificate. Secure working areas at Eglin AFB were established as necessary for the post operational activities. Additional civilian administrative personnel were obtained for the preparation of the after action report. Security clearances of these civilians were verified and they were given security briefings and debriefings upon conclusion of their participation in the operation. The Security Staff Section continued to implement safeguarding procedures for classified information and material developed during the operation, and to advise the JCTG staff personnel in classification management.

b. The Security Staff Section was directly responsible for the planned and systematic establishment and maintenance of the maximum secrecy of the operation. This accomplishment was a significant contribution to a successful mission, which was carried out with complete surprise and resulted in the safe return of all air and ground personnel.