

D702672

K717.0413-219  
c.3

DECLASSIFIED BY AF/HOH  
IAW E.O. 12958 (AMENDED)  
DATE: 20080718  
APPROVED FOR  
PUBLIC RELEASE

PROJECT  
**CHECO**  
SOUTHEAST ASIA  
**REPORT**

**VIETNAMIZATION OF THE TACTICAL  
AIR CONTROL SYSTEM (U)**

CLASSIFIED BY Hq 7AF/CHECO  
SUBJECT TO GENERAL DECLASSIFICATION  
SCHEDULE OF EXECUTIVE ORDER 11652  
AUTOMATICALLY DOWNGRADED AT TWO-YEAR  
INTERVALS. DECLASSIFIED ON 31 DEC 2004

K 717.0414-49  
c. 3

XXE 1284 174

DTIC<sup>®</sup> has determined on 

Month	Day	Year
10	22	2008

 that this Technical Document has the Distribution Statement checked below. The current distribution for this document can be found in the DTIC<sup>®</sup> Technical Report Database.

- DISTRIBUTION STATEMENT A.** Approved for public release; distribution is unlimited.
- © COPYRIGHTED.** U.S. Government or Federal Rights License. All other rights and uses except those permitted by copyright law are reserved by the copyright owner.
- DISTRIBUTION STATEMENT B.** Distribution authorized to U.S. Government agencies only. Other requests for this document shall be referred to controlling office.
- DISTRIBUTION STATEMENT C.** Distribution authorized to U.S. Government Agencies and their contractors. Other requests for this document shall be referred to controlling office.
- DISTRIBUTION STATEMENT D.** Distribution authorized to the Department of Defense and U.S. DoD contractors only. Other requests shall be referred to controlling office.
- DISTRIBUTION STATEMENT E.** Distribution authorized to DoD Components only. Other requests shall be referred to controlling office.
- DISTRIBUTION STATEMENT F.** Further dissemination only as directed by controlling office or higher DoD authority.
- Distribution Statement F is also used when a document does not contain a distribution statement and no distribution statement can be determined.*
- DISTRIBUTION STATEMENT X.** Distribution authorized to U.S. Government Agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with DoDD 5230.25.

**PROJECT**  
**C**ontemporary  
**H**istorical  
**E**xamination of  
**C**urrent  
**O**perations  
**REPORT**

**VIETNAMIZATION OF THE TACTICAL  
AIR CONTROL SYSTEM (U)**

**23 SEPTEMBER 1974**

**CHECO/CORONA HARVEST DIVISION  
OPERATIONS ANALYSIS OFFICE  
HQ PACAF**

Prepared by:

Captain Joseph G. Meeko, IV  
Project CHECO 7th AF

**UNCLASSIFIED**  
DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS PACIFIC AIR FORCES  
APO SAN FRANCISCO 96553



PROJECT CHECO REPORTS

The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in USAF airpower being employed to meet a multitude of requirements. These varied applications have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, operational data and experiences have accumulated which should be collected, documented, and analyzed for current and future impact upon USAF policies, concepts, and doctrine.

Fortunately, the value of collecting and documenting our SEA experiences was recognized at an early date. In 1962, Hq USAF directed CINCPACAF to establish an activity which would provide timely and analytical studies of USAF combat operations in SEA and would be primarily responsive to Air Staff requirements and direction.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet the Air Staff directive. Based on the policy guidance of the Office of Air Force History and managed by Hq PACAF, with elements in Southeast Asia, Project CHECO provides a scholarly "on-going" historical examination, documentation, and reporting on USAF policies, concepts, and doctrine in PACOM. This CHECO report is part of the overall documentation and examination which is being accomplished. It is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM when used in proper context. The reader must view the study in relation to the events and circumstances at the time of its preparation--recognizing that it was prepared on a contemporary basis which restricted perspective and that the author's research was limited to records available within his local headquarters area.

*Robert E. Hiller*

ROBERT E. HILLER  
Assistant for Operations Analysis  
DCS/Plans and Operations

[REDACTED]

DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS PACIFIC AIR FORCES  
APO SAN FRANCISCO 96553



REPLY TO  
ATTN OF XOAD

23 September 1974

SUBJECT Project CHECO Report, "Vietnamization of the Tactical Air Control System"

TO SEE DISTRIBUTION PAGE

1. Attached is a SECRET document. It shall be transported, stored, safeguarded, and accounted for in accordance with applicable security directives. Retain or destroy in accordance with AFR 205-1. Do not return.

2. This letter does not contain classified information and may be declassified if attachment is removed from it.

FOR THE COMMANDER IN CHIEF

A handwritten signature in cursive script, reading "V. H. Gallacher", is written over the typed name.

V. H. GALLACHER, Lt Colonel, USAF  
Chief, CHECO/CORONA HARVEST Division  
Ops Anal, DCS/Plans and Operations

1 Atch  
(S) Project CHECO Report,  
"Vietnamization of the Tactical  
Air Control System," 23 September  
1974

# UNCLASSIFIED

## DISTRIBUTION LIST (U)

### 1. SECRETARY OF THE AIR FORCE

- a. SAFAA . . . . . 1
- b. SAFLL . . . . . 1
- c. SAFOI . . . . . 2
- d. SAFUS . . . . . 1

### 2. HEADQUARTERS USAF

- a. AFNB . . . . . 1
- b. AFCCS
  - (1) AFCCN . . . . . 1
  - (2) AFCVC . . . . . 1
  - (3) AFCHOS . . . . . 2
- c. AFCSA
  - (1) AF/SAG . . . . . 1
  - (2) AF/SAMI . . . . . 1
- d. AFIGO
  - (1) AFOSI/IVOA . . . . . 3
  - (2) IGS . . . . . 1
- e. AFIS
  - (1) INDOC . . . . . 1
  - (2) INZA . . . . . 1
  - (3) INTX . . . . . 1
  - (4) INAKB . . . . . 1
  - (5) INYXA . . . . . 1
- f. AFODC
  - (1) AFPRC . . . . . 1
  - (2) AFPRE . . . . . 1
  - (3) AFPRM . . . . . 1
- g. AFDP . . . . . 1
- h. AFRD
  - (1) AFRDP . . . . . 1
  - (2) AFRDQ . . . . . 1
  - (3) AFRDQPC . . . . . 1
  - (4) AFRDR . . . . . 1
  - (5) AFRDQL . . . . . 1

### i. AFSDC

- (1) AFLGX . . . . . 1
- (2) AFLGF . . . . . 1
- (3) AFLGT . . . . . 1
- (4) AFLGY . . . . . 1

### j. AFXO

- (1) AFXOD . . . . . 1
- (2) AFXODC . . . . . 1
- (3) AFXODD . . . . . 1
- (4) AFXODL . . . . . 1
- (5) AFXOOG . . . . . 1
- (6) AFXOSL . . . . . 1
- (7) AFXOOSN . . . . . 1
- (8) AFXOOSO . . . . . 1
- (9) AFXOOSS . . . . . 1
- (10) AFXOOSV . . . . . 1
- (11) AFXOOSR . . . . . 1
- (12) AFXOOSW . . . . . 1
- (13) AFXOOSZ . . . . . 1
- (14) AFXOXAA . . . . . 6

### 3. MAJOR COMMAND

#### a. TAC

#### (1) HEADQUARTERS

- (a) XPSY . . . . . 1
- (b) DOC . . . . . 1
- (c) DREA . . . . . 1
- (d) IN . . . . . 1

#### (2) AIR FORCES

- (a) 12AF
  - 1. DOO . . . . . 1
  - 2. IN . . . . . 1
- (b) USAFSOF (DO) . . . . . 1

# UNCLASSIFIED

- (3) WINGS
  - (a) 1SOW(DOI) . . . 1
  - (b) 23TFW(DOI) . . . 1
  - (c) 27TRW(DOI) . . . 1
  - (d) 33TFW(DOI) . . . 1
  - (e) 35TFW(DOI) . . . 1
  - (f) 366TFW(DOI) . . . 1
  - (g) 67TRW(DOI) . . . 1
  - (h) 316TAW(DOX) . . . 1
  - (i) 317TAW(DOI) . . . 1
  - (j) 474TFW(DOI) . . . 1
  - (k) 463TAW(DOX) . . . 1
  - (l) 58TAC FTR TNG  
WG . . . . . 1
  - (m) 354TFW(DOI) . . . 1
  - (n) 314TAW(DOI) . . . 1
- (4) TAC CENTERS, SCHOOLS
  - (a) USAFTAWC (IN) . . . 1
  - (b) USAFTFWC (DR) . . . 1
  - (c) USAFAGOS (EDA) . . . 1
- b. SAC
  - (1) HEADQUARTERS
    - (a) XPX . . . . . 1
    - (b) LG . . . . . 1
    - (c) IN . . . . . 1
    - (d) NR . . . . . 1
    - (e) HO . . . . . 1
  - (2) AIR FORCES
    - (a) 2AF (IN) . . . . . 1
    - (b) 8AF (DOA) . . . . . 2
    - (c) 15AF (INCE) . . . . . 1
- c. MAC
  - (1) HEADQUARTERS
    - (a) DOI . . . . . 1
    - (b) DOO . . . . . 1
    - (c) CSEH . . . . . 1
    - (d) MACOA . . . . . 1
    - (e) 60MAWG (DOI) . . . . . 1
  - (2) MAC SERVICES
    - (a) ARRS (XP) . . . . . 1
- d. ADC
  - (1) HEADQUARTERS
    - (a) DOA . . . . . 1
    - (b) DOT . . . . . 1
  - (2) AIR DIVISIONS
    - (a) 25AD (DOI) . . . . . 1
- e. ATC
  - (1) DOSPI . . . . . 1
- f. AFSC
  - (1) HEADQUARTERS
    - (a) XRP . . . . . 1
    - (b) SDA . . . . . 1
    - (c) HO . . . . . 1
    - (d) ASD (RWST) . . . . . 1
    - (e) RADC (DOT) . . . . . 1
    - (f) ADTC (CCN) . . . . . 1
    - (g) ADTC (DLOSL) . . . . . 1
    - (h) ESD (YWA) . . . . . 1
    - (i) AFATL (DL) . . . . . 1
    - (j) ESD (XRP) . . . . . 1
- g. USAFSS
  - (1) HEADQUARTERS
    - (a) AFSCC (SUR) . . . . . 2
- h. USAFSOS
  - (1) HEADQUARTERS
    - (a) ESD . . . . . 1
- i. PACAF
  - (1) HEADQUARTERS
    - (a) IIN . . . . . 1
    - (b) XOEA . . . . . 2
    - (c) CSH . . . . . 1
    - (d) DC . . . . . 1
    - (e) LG . . . . . 1
    - (f) XOAD . . . . . 6

# UNCLASSIFIED

- (2) AIR FORCES
  - (a) 5AF
    - 1. CSH . . . . . 1
    - 2. XP . . . . . 1
    - 3. DO . . . . . 1
  - (b) T3AF(CSH) . . . . . 1
  - (c) 7AF/OLAA(CHECO) 2

- (3) AIR DIVISIONS
  - (a) 313AD(DOI) . . . . . 1
  - (b) 314AD(XP) . . . . . 1
  - (c) 327AD(IN) . . . . . 1

- (4) WINGS
  - (a) 8TFW(DON) . . . . . 1
  - (b) 56SOW(WHD) . . . . . 1
  - (c) 388TFW(DO) . . . . . 1
  - (d) 405TFW(DOI) . . . . . 1
  - (e) 432TRW(DOI) . . . . . 1
  - (f) 1st Test Sq  
(DA) . . . . . 1

## j. CINCUSAFE

- (1) HEADQUARTERS
  - (a) DOA . . . . . 1
  - (b) DOLO . . . . . 1
  - (c) DOOW . . . . . 1
  - (d) XP . . . . . 1

- (2) AIR FORCES
  - (a) 3AF(DO) . . . . . 1
  - (b) 16AF(DO) . . . . . 1

- (3) WINGS
  - (a) 401TFW(DCOI) . . . . . 1
  - (b) 513TAW(DOI) . . . . . 1

## 4. SEPARATE OPERATING AGENCIES

- a. DMAAC/PR . . . . . 1
- b. 3825 Acad Svs Gp
  - (1) ACSC-DAA . . . . . 1
  - (2) AUL/LSE-69-108 . . . . . 2
  - (3) HOA . . . . . 2
- c. ANALYTIC SVS, INC. . . . . 1
- d. AFAG(THAILAND) . . . . . 1
- e. AFFDL/PTS/CDIC . . . . . 1
- f. USAFA/DFSLB . . . . . 2

# UNCLASSIFIED

## 5. MILITARY DEPARTMENTS, UNIFIED AND SPECIFIED COMMANDS, AND JOINT STAFFS

a.	COMUSJAPAN/J3 . . . . .	1
b.	CINCPAC (J301) . . . . .	2
c.	CINCPACFLT (Code 332) . . . . .	1
d.	COMUSKOREA (ATTN: J-3) . . . . .	1
e.	COMUSMACTHAI/MACTJ3 . . . . .	1
f.	COMUSTDC (J3) . . . . .	1
g.	USCINCEUR (ECJB) . . . . .	1
h.	CINCLANT (CL) . . . . .	1
i.	CHIEF, NAVAL OPERATIONS . . . . .	1
j.	COMMANDANT, MARINE CORPS (ABQ) . . . . .	1
k.	DEPARTMENT OF THE ARMY (ASM-D) . . . . .	1
l.	JOINT CHIEFS OF STAFF (J3RR&A) . . . . .	1
m.	JSTPS . . . . .	1
n.	SECRETARY OF DEFENSE (OASD/SA) . . . . .	1
o.	USREDCOM (ATTN: RCJ3) . . . . .	1
p.	CINCAL (J2) . . . . .	1
q.	MAAG-CHINA (MGOT-LA) . . . . .	1
r.	U.S. DOCUMENTS OFFICE, HQ ALLIED FORCES NORTHERN EUROPE . . . . .	1

## 6. SCHOOLS

a.	Senior USAF Representative, National War College . . . . .	1
b.	Senior USAF Representative, Armed Forces Staff College . . . . .	1
c.	Senior USAF Rep, Industrial College of the Armed Forces . . . . .	1
d.	Senior USAF Representative, Naval Amphibious School . . . . .	1
e.	Senior USAF Rep, U.S. Marine Corps Education Center . . . . .	1
f.	Senior USAF Representative, U.S. Naval War College . . . . .	1
g.	Senior USAF Representative, U.S. Army War College . . . . .	1
h.	Senior USAF Rep, U.S. Army C&G Staff College . . . . .	1
i.	Senior USAF Representative, U.S. Army Infantry School . . . . .	1
j.	Senior USAF Rep, USA JFK Cen for Mil Asst . . . . .	1
k.	Senior USAF Representative, U.S. Army Field Artillery School . . . . .	1
l.	Senior USAF Representative, U.S. Liaison Office . . . . .	1
m.	Senior USAF Rep, U.S. Army Armor School, Comd and Staff Dept . . . . .	1

# UNCLASSIFIED

## TABLE OF CONTENTS (U)

	<u>Page</u>
LIST OF FIGURES . . . . .	x
ABOUT THE AUTHOR . . . . .	xi
FOREWORD . . . . .	xii
CHAPTER	
I. INTRODUCTION: 1960s . . . . .	1
Tactical Air Control Center . . . . .	1
Direct Air Support Centers . . . . .	2
Tactical Air Control Parties . . . . .	8
Control and Reporting Centers . . . . .	10
II. VIETNAMIZATION: 1970-1971 . . . . .	12
Vietnamization of TACS . . . . .	12
Tactical Air Control Center . . . . .	14
Direct Air Support Centers . . . . .	14
Tactical Air Control Parties . . . . .	15
Air Liaison Officer . . . . .	16
Forward Air Controller (FAC) . . . . .	23
FAC Aircraft . . . . .	27
III. GROWING PAINS: 1971-1972 . . . . .	30
Air Ground Operations School (AGOS) . . . . .	30
Tactical Air Control System . . . . .	31
Air Operations Command . . . . .	32
Direct Air Support Centers . . . . .	33
Tactical Air Control Parties . . . . .	34
Air Liaison Officer . . . . .	35
Forward Air Controller . . . . .	38
Visual Reconnaissance . . . . .	39
IV. NORTH VIETNAMESE INVASION: 1972 . . . . .	43
Summary of the Offensive . . . . .	43
Military Region I . . . . .	44
TACS in MR I . . . . .	44
The Brookbank Report . . . . .	45
Military Region II . . . . .	46
TACS in MR II . . . . .	46
Military Region III . . . . .	48
TACS in MR III . . . . .	48

# UNCLASSIFIED

	<u>Page</u>
V. AFGP OBSERVES IMPROVEMENTS . . . . .	51
Intelligence Problems . . . . .	54
MRC-108 Communications Jeeps . . . . .	59
FAC Aircraft . . . . .	60
VI. IMPEDIMENTS TO VIETNAMIZATION . . . . .	62
The Language Barrier . . . . .	62
The VNAF Standard of Living . . . . .	66
VNAF Leadership . . . . .	70
VII. CONCLUSION . . . . .	72
APPENDIX . . . . .	74
FOOTNOTES . . . . .	97
GLOSSARY . . . . .	105

# UNCLASSIFIED

## LIST OF FIGURES (U)

<u>Figure No.</u>		<u>Page</u>
1.	Tactical Air Control System (Circa March 1968) . . . . .	3
2.	TACS Main Elements (Circa August 1968) . . . . .	4

# UNCLASSIFIED

## ABOUT THE AUTHOR (U)

(U) Captain Meeko received his commission in the USAF upon graduating from Officer Training School at Lackland Air Force Base (AFB), Texas, in August 1964. Since that time, he has served as a War and Contingency Plans Officer and an Executive Support Officer at Wiesbaden Air Base (AB), Germany, and as Chief of the Message Management and Communication Management Branches at Headquarters (Hq) Strategic Air Command (SAC), Offutt AFB, Nebraska. In 1971 he completed a Master's Degree in Philosophy at the University of Southern California through AFIT. He graduated from Squadron Officer School in 1972. Captain Meeko is presently an Assistant Professor of Philosophy at the United States Air Force Academy.

# UNCLASSIFIED

## FOREWORD (U)

(U) This report describes the "Vietnamization" of the Tactical Air Control System (TACS) in the Republic of Vietnam (RVN), with primary emphasis on the 1970-1972 time period. Vietnamization, in this context, means self-sufficiency in maintaining the territorial integrity and level of security that had been jointly achieved by the RVN and its allies, principally the United States.

(U) As U.S. ground forces withdrew in 1969 and into the 1970s, U.S. air power came to play an increasingly important role in the war. Though the Vietnamese Air Force (VNAF) was, in many respects, already an effective fighting force, it did not yet have the expertise nor the equipment to fully and independently operate the TACS. Thus, the Vietnamization of the TACS received great emphasis in early 1970.

(U) This report summarizes TACS Vietnamization during the 1960s and describes and evaluates subsequent efforts from 1970 to the end of 1972. Special emphasis is placed on TACS effectiveness during the North Vietnamese invasion of RVN in the Spring of 1972.

[REDACTED]

CHAPTER I

INTRODUCTION: 1960s (U)

(S) The Tactical Air Control System (TACS) was introduced into South Vietnam in December 1961.<sup>1</sup> Although the Vietnamese Air Force had organized an Air Tactical Command in 1956 to provide operational command and control, it was not until 1961 that the VNAF used tactical air power to combat Viet Cong insurgents. The TACS in the Republic of Vietnam included centralized control, a rapid and widespread communications network, and the ability to react instantaneously to any new threat by diverting aircraft from one sector to another.

Tactical Air Control Center (U)

(S) Centralized control of tactical air power in RVN was provided by the Tactical Air Control Center (TACC)\* located at Tan Son Nhut Air Base, RVN. Its specific functions included:<sup>2</sup> (U)

- (S) . Planning, coordinating, and directing in-country tactical air operations.
- (S) . Publishing fragmentary orders.
- (S) . Directing, monitoring, and diverting offensive and defensive aircraft as necessary.
- (S) . Establishing policies and procedures governing the operations of the TACS.

United States Air Force and VNAF personnel jointly manned the TACC positions as far as Vietnamese manpower and skill development would allow;

---

\*Until 1965 it was called the Joint Air Operations Center (JAOC).

Parallel development was the guideline for growth. This principle offered two advantages: first, it allowed for expansion of the USAF effort (if required later); and second, it provided the VNAF with a workable system<sup>3</sup> which they could operate when USAF assistance was withdrawn.

#### Direct Air Support Centers (U)

(S) To assist the TACC in managing air power, a Direct Air Support Center (DASC) was also established in each of the four Corps Tactical Zones (CTZs).<sup>\*</sup> (See Figures 1 and 2.) Each DASC was responsible for the employment of air forces committed to its CTZ. The DASC provided quick reaction to any change in the enemy threat by diverting aircraft from a pre-planned target to an immediate target. The DASCs in RVN, however, differed in two important respects from the USAF DASC guidelines contained in Air Force Manual (AFM) 2-7. First, the DASCs were not mobile; they were fixed installations in bunkers and concrete buildings jointly manned by USAF and VNAF personnel. The United States Marine Corps (USMC) also helped man the DASC in I CTZ. Second, there was no airlift function<sup>4</sup> in any of the DASCs.

(S) Each of the four DASCs had been partially Vietnamized by 1968, though the degree of VNAF control varied among them. In August, 1968, the DASC in CTZ I (I DASC) was divided into two separate DASCs. I DASC became solely a VNAF facility dedicated to the support of the I Corps forces

---

<sup>\*</sup>Subsequently, there were also two special mission DASCs. DASC Alpha supported U.S. Field Force I in the Army of the Republic of Vietnam (ARVN) II Corps and DASC Victor supported USMC actions in ARVN I Corps.

**TACTICAL AIR CONTROL SYSTEM**  
(CIRCA MARCH 1968)

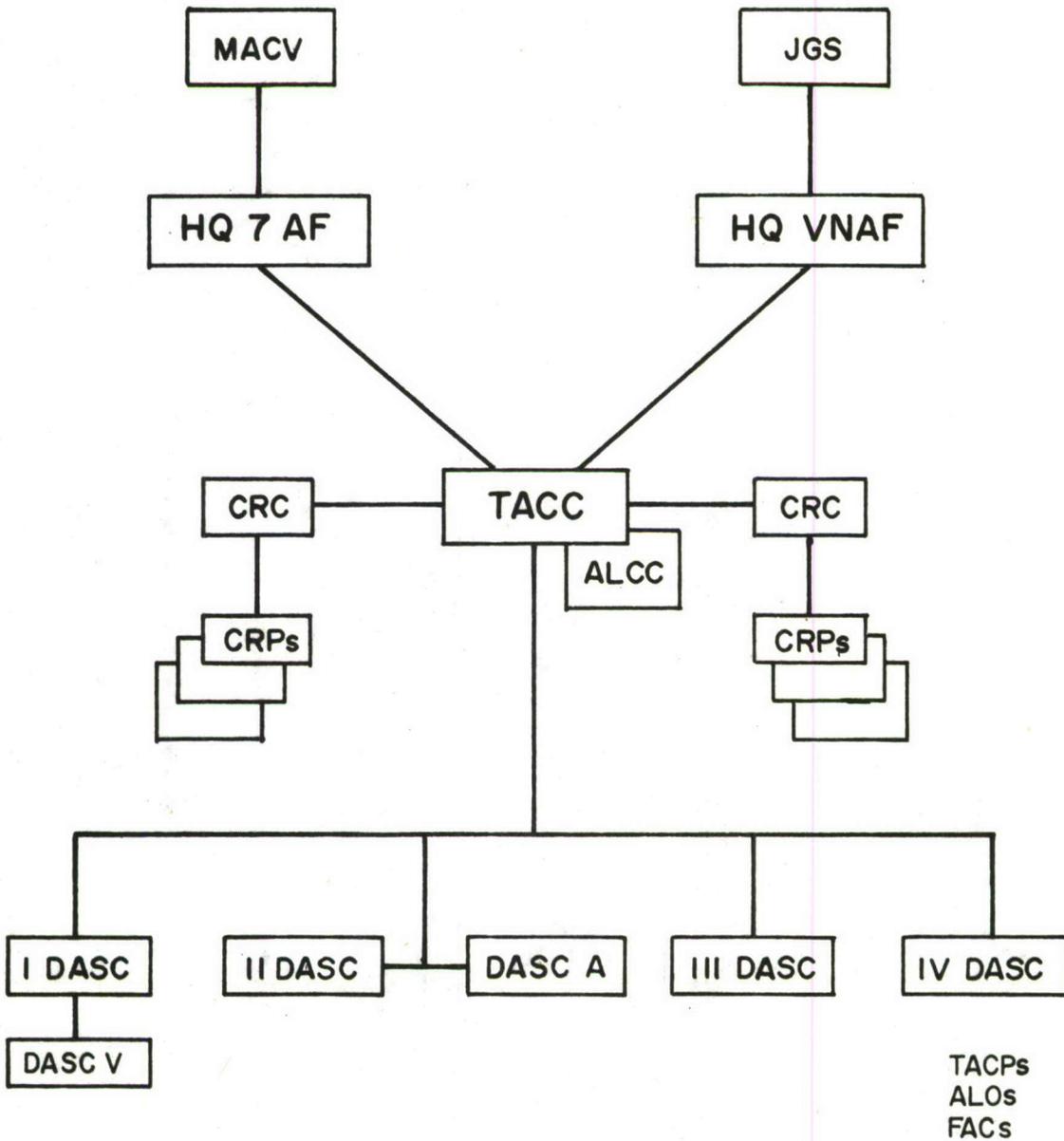


Figure 1

**UNCLASSIFIED**  
**TACS MAIN ELEMENTS**  
**(Circa August 1968)**

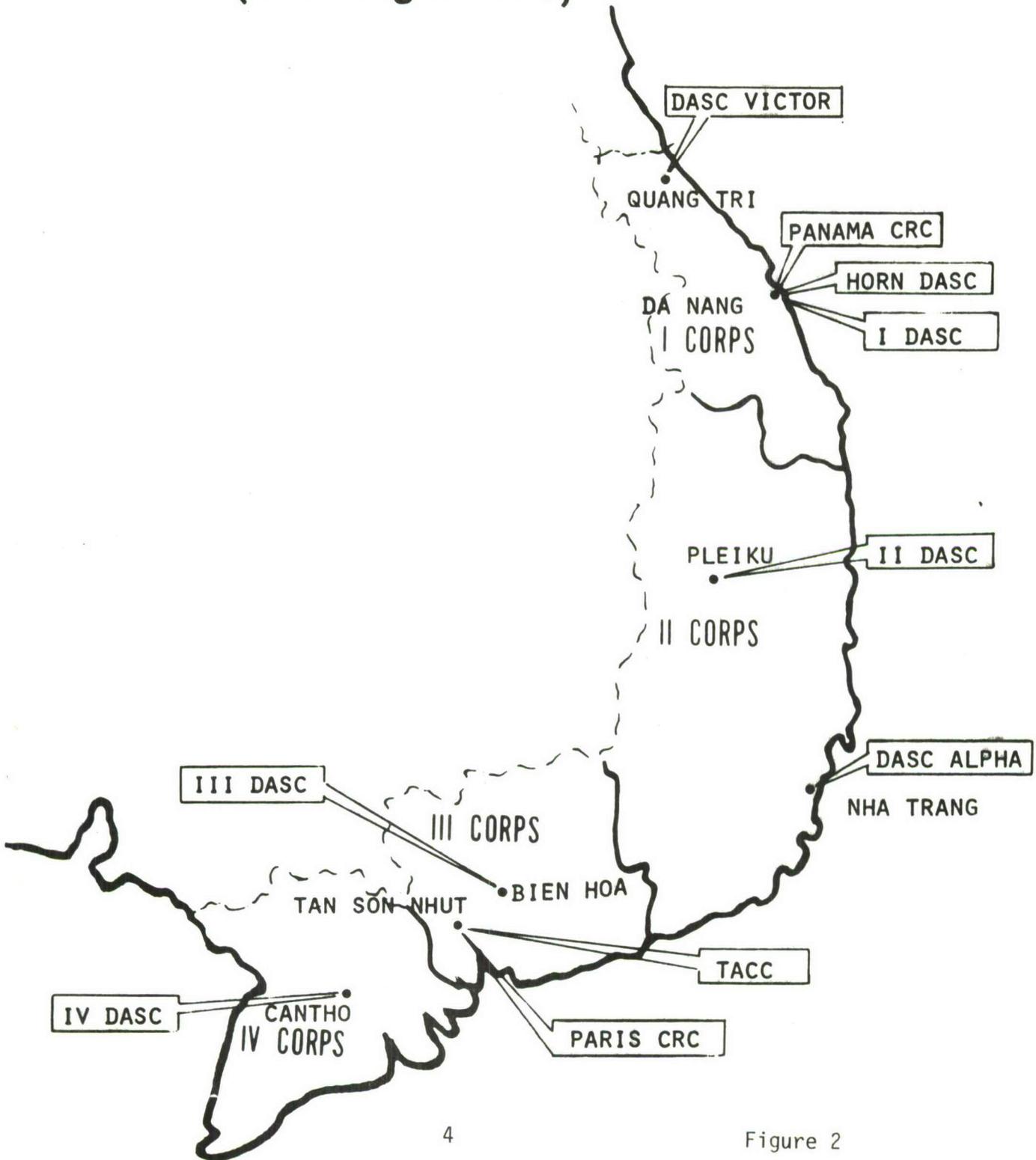


Figure 2

[REDACTED]

of the Army of the Republic of Vietnam, with USAF operations advisors and the USAF ARVN Liaison Officer team remaining in the I Corps compound to "provide advisory services and air support as required. . . ." <sup>5</sup> The new DASC at Camp Horn (Headquarters for the III Marine Amphibious Force) became the senior USAF/USMC/Korean DASC in I Corps and carried the designation Horn DASC. Victor DASC\* at Quang Tri became subordinate to Horn DASC. This separation of VNAF from American air control led to a drop in I DASC activity because of the few VNAF aircraft in I Corps. This enabled the USAF advisor and his assistants to devote more time to improving the skills of the VNAF personnel handling DASC operations. <sup>6</sup>

(S) DASC Vietnamization in CTZ II was similar to that which had occurred in CTZ I. The II DASC was a joint USAF/VNAF operation located at Pleiku with Americans handling USAF tactical air power and Vietnamese controlling VNAF forces. In August 1965, the USAF activated DASC Alpha at Nha Trang to handle the massive influx of USAF air power along the coast, especially at Tuy Hoa, Nha Trang, Cam Ranh Bay, and Phan Rang. DASC Alpha was an all-USAF operation, with little advisory responsibility since it directly supported Allied operations. However, the physical split of the two DASCs in the same CTZ created some confusion with communications and with determination of responsibility. As a result, the DASCs were reorganized in April 1969. All USAF elements were consolidated at DASC Alpha, with the

---

\*Victor DASC was originally established in March 1968 to provide more responsive air support to U.S. forces in the northern provinces of I Corps. It was downgraded to a TACP during 1969, and was reestablished in January 1971 to support RVNAF operations in Laos during Lam Son 719.

[REDACTED]

exception of one officer and a few enlisted personnel who remained at II DASC in a purely liaison capacity. Although the II DASC was now a VNAF organization, this did not change the primary mission of II DASC. It retained the responsibility for supporting ARVN units in II CTZ, but the ability of the II DASC to meet its support responsibilities was degraded because of limited VNAF capabilities. By July 1969, about 50 percent of DASC Alpha's tactical air support operations were executed for ARVN units. <sup>7</sup>

(S) The III DASC was located at ARVN II Corps Headquarters near Bien Hoa Air Base. Although it was a joint VNAF/USAF operation with a VNAF DASC Director and a USAF Deputy Director, the latter controlled the air war in III Corps.\* Tan Son Nhut and Bien Hoa Air Bases were two of the busier airfields in the world. In addition to heavy military usage, there was also a large amount of civilian air traffic. These factors, combined with the heavy civilian population in III Corps, made it the most difficult DASC to operate and, therefore, it was largely in USAF hands throughout the 1960s. <sup>8</sup>

(S) The IV DASC, located at Can Tho, was unique in that it was primarily a Vietnamese operation from the beginning of the conflict. The IV CTZ military force makeup was almost exclusively ARVN with supporting USAF tactical air stationed outside MR IV. IV DASC thus became the focal point of the program to move VNAF personnel into key positions in the TACS and eventually have them assume complete responsibility for its operation. This program was aided by the presence

---

\*This was probably due to the extremely congested air space in III Corps.

[REDACTED]

of effective VNAF tactical air support. A significant amount of the overall support in the area came from the VNAF 74th Tactical Wing flying A-1s out of Binh Thuy. This unit proved to be very effective in support of ARVN ground operations and was recommended for a Presidential Unit Citation for the period 1 July 1966-30 June 1967.<sup>9</sup>

(S) The IV DASC, however, had some coordination and communications problems; i.e., on occasion, both U.S. and VNAF fighters (each accompanied by their own FACs) arrived simultaneously at a target. This occurred because USAF DASC personnel controlled USAF air and VNAF personnel controlled VNAF air. Not being aware of the other group's actions, both USAF and VNAF DASC personnel responded to the same request.<sup>10</sup>

(S) To preclude this confusion, a program was initiated in 1969 to make the Vietnamese in IV CTZ self-sufficient in the operation of their TACS. The first stage in this process was to physically collocate the USAF and VNAF at every level ". . . locate them so they can hold hands with each other."<sup>11</sup>

(S) After collocation, the next step was to integrate the communications system. By using common channels for both USAF and VNAF operations, all DASC personnel had to communicate with the TACC in English. This was not an unreasonable requirement inasmuch as all VNAF DASC personnel could speak at least some English. An unexpected problem arose at that point: VNAF officers were initially reluctant to take over a job that they had long observed but had never done alone. Thus, a great deal of diplomacy had to be exercised on the part of USAF officers. The IV DASC duty

[REDACTED]

officer stated, "They had to be reassured every step of the way, and repeatedly, on their ability to use English, their knowledge of the job, etc."<sup>12</sup> Another significant step in the Vietnamization of DASC IV was the development of bilingual DASC forms. This had two important consequences. First, the forms assured understanding and coordination between USAF and VNAF personnel. Second, they were designed so that Vietnamese was the primary language with English in parentheses. The status boards and other displays were also changed to a bilingual, Vietnamese-first format. These<sup>13</sup> were important visible signs of the shift to VNAF operation.

(S) The training of new VNAF personnel at DASC IV was accomplished by Vietnamese. This immediately impressed on the new officers that the VNAF was in charge, and helped them begin with a sense of responsibility and accomplishment.<sup>14</sup>

(S) The success of this Vietnamization program led to rapid assumption of complete VNAF control of tactical air support of ARVN units in IV CTZ by April 1969. Complete turnover of all DASC functions to the VNAF, except<sup>15</sup> exclusively USAF operations, took place by January 1970.

#### Tactical Air Control Parties (U)

(U) The next subordinate component of the TACS below the DASC level was the Tactical Air Control Party (TACP). The TACPs were located with ground units down to the battalion level and provided the link from the Army commander to the DASC for acquisition of supporting air power. TACPs normally consisted of Air Liaison Officers (ALOs), FACs, and radio operators and equipment.

[REDACTED]

(S) Efficient TACP operation was vital to the VNAF strike capability. However, several important factors limited TACP capabilities, especially the ALO and FAC functions. These factors were: (U)

- (S) . Relative inexperience at the outset in FAC/ALO operations. VNAF FAC/ALO officers lacked confidence in themselves and were lightly regarded by ARVN commanders.
- (S) . VNAF practice of siphoning off personnel for other priority positions.
- (S) . Input of USAF personnel to key positions to assist in development, and Vietnamese over-reliance on these personnel.
- (S) . Critical shortages in material and aircraft, plus the impact of direct USAF expansion and participation in the conflict after 1965.

(S) Typically, the VNAF FAC during the mid 1960s was usually inexperienced. Assigned to a liaison squadron, he was often a new pilot fresh from initial flying training. About 20 percent of a new SVN pilot's time was spent in training. The remainder of the time he deployed to operating locations in the provinces for two to three weeks each, and was under the operational control of the province chief. Largely unsupervised, he usually did not attend daily intelligence briefings or ARVN planning meetings, nor was he at one deployment site long enough to become familiar with the area or develop rapport with the ARVN component he was supposed to be supporting. As soon as a pilot accumulated 500 to 1,000 hours, he was usually sent to the continental United States (CONUS) for advanced training.

(S) By May 1968, few changes had been made to improve the VNAF FAC/ALO capability. Reports from advisory teams throughout the country revealed that the same types of problems and conditions had made the entire VNAF FAC/

ALO program quite ineffective. Even IV Corps was not immune. Problems identified in the reports included general lack of ARVN support, dependence on USAF/United States Army (USA) fuel and parts, language barriers, and short tours (often only two weeks at an operating site). Also, ALOs were mostly non-rated observers rather than experienced pilots with a good understanding of ordnance and aircraft capabilities.

(S) In summing up the ALO/FAC program, the Chief of the Air Force Advisory Group (AFGP) wrote in October 1968 that: <sup>17</sup> (U)

(S) The VNAF ALO/FAC program is one of the most difficult to administer. Shortages of personnel and material resources, competing priority programs, and successive years of expansion of the VNAF have made it difficult to hold to the time-phased objectives. While the shortage of communications equipment is a pacing factor, the demands for personnel and the limited air frame resources are also significant factors which retard the development of an effective VNAF ALO/FAC capability. Additionally, the VNAF ALO/FAC must compete with an established USAF self-supporting ALO/FAC system provided ARVN ground combat forces. VNAF has found it difficult to obtain the JGS [Joint General Staff]-directed support from ARVN forces essential to the accomplishment of the ALO/FAC mission.

#### Control and Reporting Centers (U)

(S) The actual control of aircraft enroute to and returning from the target was a task of the Control and Reporting Centers (CRCs) and their supporting radar installations. The first CRC in RVN became operational in October 1961 at Tan Son Nhut Air Base with the call sign "Paris." By January 1962 a Control and Reporting Post (CRP)\* was installed at Da Nang.

---

\*A CRP provides radar control and surveillance within an assigned area of responsibility. It is subordinate to, but capable of assuming CRC functions in an emergency. The CRP does not have the authority to scramble alert aircraft or divert airborne aircraft as does the CRC.

[REDACTED]

After this facility was moved to Monkey Mountain and equipped with a large, high performance radar, it became an operational CRC in February 1964, with the call sign "Panama." Also, the VNAF moved a radar from Tan Son Nhut to Pleiku to be manned and operated as a CRP by the VNAF with the call sign "Pagoda" (later renamed "Peacock").<sup>18</sup> By 1964 two additional CRPs were operating--"Pyramid" at Ban Me Thout and "Paddy" at Can Tho.

(S) From the beginning, both USAF and VNAF personnel manned the CRCs and the CRPs with USAF personnel controlling U.S. tactical air power and the Vietnamese controlling their own aircraft. This parallel manning sometimes led to confused command lines. For example, at Paddy CRP no one was specifically designated as the CRP commander.<sup>19</sup> In 1964, U.S.-trained VNAF controllers, most of whom spoke English, were manning radar scopes on a 24-hour-a-day basis. However, USAF personnel maintained all radars and other equipment.

(S) While the VNAF was small and had relatively light responsibilities, they had an effective aircraft control and reporting ability. After the escalation of the war in 1964-1965 and the subsequent enlargement of the VNAF, the TACS experienced severe growing pains. Training and expertise in the VNAF simply could not keep pace with the demands created by the rapid expansion of the war. Consequently, the USAF primarily conducted the air war. Training of VNAF TACS personnel was relegated to second place behind the USAF's urgent operational need to control air power. The next five years saw little real growth of the VNAF TACS. It was not until the withdrawal of American forces became a likely precursor to a cease-fire that the USAF emphasized Vietnamization of the TACS.

[REDACTED]

CHAPTER II

VIETNAMIZATION: 1970-1971 (U)

(U) In the previous administration, we Americanized the war; in this administration, we are Vietnamizing the search for peace.

(S) When the President of the United States spoke these words on 3 November 1969, he was announcing a new direction in the war effort-- major American involvement was going to end. The U.S. was going to train and equip RVN forces to assume the complete combat role and win their own peace.  
20

(S) The basic guidelines and plans for Vietnamization had been drawn up in 1968 and 1969. Initially, USAF planners estimated that it would take five years to make the VNAF strong enough to fight independently; but, in April 1969 the Secretary of Defense directed that the schedule be accelerated and completed by December 1971. Thus, USAF and VNAF planners tried to channel their efforts in three directions: (1) accelerate VNAF self-sufficiency by early unit activation and transfers, (2) move training from the United States to Vietnam, and (3) improve the VNAF's equipment.  
21

Vietnamization of TACS (U)

(S) The VNAF TACS was a long way from self-sufficiency in 1969. Control of the air war was largely a USAF responsibility, primarily because most of the tactical air sorties were flown by USAF aircraft. The VNAF was expanding rapidly in numbers of personnel and aircraft, so experienced pilots and technicians were critically needed to fill training and supervisory roles in functions deemed more important than the TACS. Therefore,

[REDACTED]

during the late 1960s, the VNAF relied on USAF TACS personnel to control tactical aircraft operations. While some TACS functions (notably the TACC and DASCs) were turned over to the VNAF in 1971, they were unable to direct either VNAF tactical aircraft effectively or direct USAF strike support aircraft. Major problem areas were: (1) the VNAF refusal to delegate authority for ordering air strikes; (2) the inexperience of key personnel (especially the ALOs and the FACs); and (3) inadequate equipment due to primitive equipment capabilities and improper maintenance on the O-1A FAC aircraft.<sup>22</sup>

(U) Both the Air Force Advisory Group (AFGP) and the VNAF recognized the problems and tried to establish procedures to correct them. In May 1970, the VNAF published a new TACS directive which provided for "flexibility and centralized control through the TACC."<sup>23</sup> During the same month the AFGP established a new TACS Advisory Support Division (TASD), created specifically to help upgrade the VNAF TACS.<sup>24</sup> Nevertheless, in August 1971 one senior U.S. officer described the relationship between the various elements and users of the VNAF TACS as ". . . a nightmare to the American mind."<sup>25</sup> Within a Military Region (MR)\* the VNAF flew missions against targets selected by the ARVN commander, approved by the province chief, and fraggged by the DASC. If more tactical air support were needed in one MR than the assigned Air Division (AD) could provide, sortie requests were sent through the DASCs and the TACC to the Joint General Staff. If the JGS approved the request, they directed another AD to provide the

---

\*The four Corps areas of SVN were redesignated Military Regions by President Thieu in July 1970.

[REDACTED]

needed sorties. The TACC then fraggged and controlled these sorties. This procedure was time consuming, which increased the possibility of the ARVN losing battles and men, or of the enemy escaping.

#### Tactical Air Control Center (U)

(S) In June 1971 USAF and VNAF terminated joint control of the TACC. After that date, the VNAF controlled VNAF air assets, and the 7AF TACC controlled USAF air assets. The VNAF TACC then reported directly to the commander of the VNAF Air Operations Command (AOC), who also held the title of TACC Director. The AFGP did not assign any USAF advisors directly to the TACC "in view of the highly independent nature of the AOC incumbent commander and the anticipated difficulty of getting an AFGP advisor/counterpart established and accepted. . . ." <sup>27</sup> Instead, the AFGP provided advisors at a lower level.

(C) While the VNAF TACC had no USAF advisors, the director did permit the AFGP to provide a training program for his personnel. For example, in mid-1971, the 505th Tactical Control Group began a program to train six VNAF officers and airmen in the air defense function of the TACC (although the program was hampered by an unsatisfactory matrix for TACC communications). Also, the USAF continued to maintain liaison in the VNAF TACC through a duty officer and non-commissioned officer (NCO).

#### Direct Air Support Centers (U)

(C) The DASCs were the most self-sufficient link in the VNAF TACS. The VNAF assumed responsibility for the DASCs located in each of the four MRs by August 1971, although I DASC had not originally been scheduled

for transfer until December 1971. A USAF detachment in each DASC, however, continued to provide command and control of USAF tactical aircraft supporting the ARVN. Each USAF detachment had a minimum of 18 personnel: a commander, four duty officers, four operations NCOs, five radio operators, an intelligence officer, an intelligence NCO, and two administrative personnel.<sup>29</sup> These personnel were used only for liaison, monitoring, and controlling USAF tactical aircraft supporting U.S. forces. The VNAF, however, was clearly responsible for the DASCs.

#### Tactical Air Control Parties (U)

(C) By 1969, the weakest link in the VNAF TACS was the TACPs. The 66 TACPs were deployed at Corps, Division, Brigade, Battalion, and Sector\* level. Most were USAF operated with a USAF field grade ALO assigned who was FAC qualified. The VNAF ALO on the other hand was usually a non-rated observer. As a result of USAF urging, the VNAF attempted to upgrade the VNAF TACP capability by publishing the VNAF FAC/ALO upgrading plan in March 1969, and VNAF Operations Plan (OPLAN) 69-14 in May 1969. The first plan specified the functions the ALO should perform, and the second plan transferred operational control of the TACPs from the DASCs directly to the TACC. This second plan also prescribed TACP location and equipment requirements, and established a procedure for identifying and assigning

---

\*For radar control purposes, SVN was divided into sectors, each sector containing a large, high performance radar at its CRC. Radar coverage within each sector was also augmented by smaller radars at CRPs and Forward Air Control Posts.

[REDACTED]

qualified ALOs and FACs to fill the TACP requirements with more competent  
30  
personnel. Neither plan brought quick results.

(C) Serious problems continued to plague the VNAF TACPs. The senior USAF officer at II DASC complained in January 1971 that there were no land-line communications between the DASC and TACPs, and from the Division TACP to subordinate TACPs. II DASC OPLAN 70-2 had called for such com-  
31  
munications links. He also reported that ARVN was not providing support for the TACPs. There were critical shortages of electrical power and TACP radios. At the same time, the senior USAF officer at I DASC reported a shortage of qualified VNAF TACP personnel and poor VNAF maintenance of  
32  
generators and communications equipment. USAF advisors also noted problems regarding scheduling of duty periods and job coverage by VNAF super-  
33  
visors:

(C) . . . During weekends and holidays there is an obvious and definite decrease in VNAF present for duty strength and a loss of capability to perform the mission. Job performance drops off sharply when key supervisors are off duty and absent on leave, pass, or TDY (Temporary Duty). This is a result of marginal manning, poor scheduling, and the assumption that USAF personnel on duty will provide job coverage during the absence of VNAF personnel. At times during the Tet Holiday there were no VNAF personnel on duty in most activities.

Air Liaison Officer (U)

(C) As the link between tactical air power and the ARVN ground commander, the ALO plays a vital role in the TACS. As the VNAF FAC/ALO  
34  
upgrading plan recognized, the ALO had to: (U)

- 
- (C) . Be capable of planning and directing tactical air operations.
  - (C) . Have a complete knowledge of aircraft capabilities, types of ordnance, and their effectiveness.
  - (C) . Obtain complete intelligence information on targets from sources including VNAF/USAF intel sources, FAC visual reconnaissance and debriefings, and ARVN intelligence sources.
  - (C) . Attend ARVN ground commanders meetings to understand current operations and needs.
  - (C) . Brief FAC aircrews on weather, targets, location of friendly forces, and daily call signs and codes.
  - (C) . Evaluate FAC training and performance.
  - (C) . Coordinate and process strike requests, both preplanned and immediate.
  - (C) . Advise the ARVN commander on bomb damage assessment (BDA).

(C) As mentioned above, VNAF OPLAN 69-14 established TACP location, manning, and equipment requirements. With regard to the ALOs it specified that 125 personnel would be needed. Of 96 then assigned, all were observers. The future structure of the ALO Force, however, was to be 28 fighter pilots (22 percent of the force), 10 transport pilots (8 percent), 25 liaison pilots (20 percent), 16 helicopter pilots (13 percent), and 46 observers (37 percent). Almost all of the TACP chiefs would be fighter pilots, observers, or liaison pilots, with the other ALOs assigned as assistants. The type of assistant depended upon the type of ARVN or Marine Corps Unit supported; for example, a transport pilot as assistant for an airborne

[REDACTED]

unit and a helicopter pilot for airmobile units. All ALOs were to serve one-year tours and then return to the cockpit.

(C) By October 1969, the VNAF had identified 29 pilots for assignment as ALOs. These were all excess pilots from transport and liaison squadrons. The plan specified that before these pilots could serve as ALOs they had to complete the month-long Air Ground Operations Course.

(C) OPLAN 69-14 also specified that ARVN would provide TACPs logistic support to include:

- (C) . Housing and office space
- (C) . Aircraft revetments, petroleum, oil, and lubricants, and white phosphorous smoke rockets.
- (C) . Guards for the airfield.
- (C) . Transportation (jeeps).
- (C) . Electric power source.

Unfortunately the plan was not carried out. It called for the qualified ALOs to be in place by December 1969, but complaints continued to pour into Hq 7AF detailing the many shortcomings in the Vietnamization of the ALO function.

(C) The "heart of the problem" was that the VNAF lacked sufficient personnel qualified to be ALOs. In November 1970, VNAF agreed that ALO positions should be filled with rated Colonels at the Corps level and rated Lt Colonels at the Division level. However, the VNAF assigned officers at Division level who were Captains who:

(C) . . . have never flown a fighter aircraft and have never qualified as a FAC. Therefore due to his low rank and inexperience the VNAF ALO has contributed

[REDACTED]

very little to the ARVN Division Commanders' war effort and to the effectiveness of the VNAF. . . . What the VNAF does not seem to fully realize is the tremendous importance of the experienced and higher ranking ALO as the one person who can establish harmonious ARVN/VNAF relationships and obtain the effective use of VNAF TACAIR.

The VNAF was not able to place personnel of the required experience level into the ALO positions due to a critical need for experienced personnel to fill supervisory positions in the rapidly expanding force structure. The junior grade officers (mostly observers and usually pilot training failures) were being taught the mechanics of the job. Nevertheless, without the wide knowledge of tactical air operations necessary to be useful to the ARVN commander, they were not able to gain his confidence and function effectively as the key individuals in making the best possible use of airpower in support of the ARVN.

(C) Meanwhile, the AFGP was trying to make the USAF ALO Advisory effort more responsive to the needs of the VNAF ALO system. Five weeks before assuming the USAF ALO Advisory responsibility in January 1971, the Chief of AFGP sent a letter to his Advisory Team detailing rank structure and responsibilities of ALO Advisors. The letter stated:

(C) The AFGP JTD (Joint Table of Distribution) will provide for a Lt Col Corps ALO and Division ALO Advisors in the grade of Major. Until the JTD is changed 7AF will be attempting to fill the ALO advisor positions with experienced field grade ALOs wherever possible.

(C) However, as 7AF withdrew from the TACS and AFGP took on the responsibility of providing ALO Advisors, the requirement to retain fully qualified USAF ALOs as advisors was "neglected." Thus, the USAF

[REDACTED]

compounded the problem of inexperienced VNAF ALOs by assigning USAF Captains with no in-country or O-1 FAC experience as Division ALO Advisors or failing to promptly fill other ALO Advisor positions as they became vacant. <sup>43</sup> When fully qualified U.S. field grade officers were assigned as ALO Advisors, often the advisor, rather than the VNAF ALO, became the Staff ALO of the ARVN Division Commander. Referring to the four USAF ALO Advisors in MR IV, <sup>44</sup> one report stated:

(C) Each of them feel [sic] that the present VNAF ALOs have absorbed as much benefit from the advisors as is possible, given their limited experience, rank, and authority. The advisors are in some cases a liability, since the ARVN commanders are prone to rely on the ALO advisors for advice/assistance instead of on the assigned VNAF ALO.

By April 1971, however, the Chief of the AFGP reported to General Lucius D. Clay, Jr., 7AF Commander, that he was "satisfied that we now have Gen Minh's (and his staff's) attention on the seriousness of this ALO/FAC problem and that they were working on it." <sup>45</sup> In this case the "staff" was Colonel Uoc, the VNAF TACC Commander. He screened the records of 28 experienced Majors assigned throughout the VNAF, and recommended that some of them be assigned as MR and Division ALOs. <sup>46</sup> Because there were 125 VNAF ALO positions, assigning a "few Majors" would not solve the VNAF ALO problem, but it was an "improvement." Concurrently, 7AF directed the 504th Tactical Air Support Group (TASG) to fill ALO advisory positions with USAF ALO/FACs who had "at least three months of SEA experience." <sup>47</sup>

(S) Fortunately, the AFGP was also able to assign a USAF ALO Advisor to work with Col Uoc. The VNAF requested that Lt Col Marland O. Marshall



be assigned as an advisor to the senior VNAF ALO on the AOC staff. Lt Col Marshall had extensive experience and background in the field including an assignment as USAF ALO Advisor to IV Corps Commander. He had a close working relationship with the VNAF which he had developed during three tours in RVN. The AOC eventually requested that Lt Col Marshall return to Vietnam in Military Assistance Advisory Group (MAAG) duty ". . . so that his knowledge and experience could continue to be of benefit to the VNAF." 48

(C) Although the ALO situation was improving somewhat, complaints about both USAF and VNAF ALOs continued to be made. One ALO advisor was openly critical of the USAF ALO Advisor system: 49

(C) The Air Force recognized that the VNAF ALO system was weak, so positions were created for ALO advisors, but without detailed planning. The USAF ALO advisors assigned had limited background experience in air/ground operations and no source of information on the structure and the composition of the VNAF ALO system. They were sent to the field with little guidance, little training and almost no support. The [U.S.] Army advisors, expecting a full-fledged USAF ALO with a full tactical air control team, were disheartened to learn the ALO advisor was little more than a warm body. This caused a great deal of resentment which further hampered the ALO advisors.

In this report from MR IV (where Vietnamization had supposedly been completed in August 1970 ) the ALO Advisor discussed other factors which had led to misunderstandings between military services. In his view, "the system has worked, but . . . there is considerable lack of mutual understanding. . . ." 51 A major hindrance was the failure of Division Commanders to use the VNAF ALO as a member of his staff. Because the ARVN Commander did not value his advice, the ALO did not have an office in the Army Tactical Operations Center (TOC) (the usual location for a



[REDACTED]

TACP). Obviously, this precluded the VNAF ALO from giving the ARVN commander timely briefings on airpower, munitions, weather, or intelligence, and "contributed materially to the frequently excessive reaction times to immediate air requests."<sup>52</sup> Moreover, since the ALO was often unqualified and provided no real assistance, the ARVN commander frequently declined to give the ALO logistical support. Thus, the VNAF ALO was diverted from his combat support duties to do such things as finding housing "which was generally poor and too far from his place of duty in the ARVN Headquarters."<sup>53</sup> Then because the VNAF ALO was not performing his combat support duties, it became "extremely difficult if not impossible for the ALO advisors to identify weaknesses and assist the ALO in correcting them."<sup>54</sup> The USAF Deputy Director of II DASC addressed the same problems:<sup>55</sup>

(C) The extended period of time required to establish recognition and good rapport between the VNAF ALO and his ARVN ground unit commander and his staff is the largest single factor in the Vietnamization program.

Chances for rapport to develop were continually weakened by the VNAF transfer of ALOs. For example, the turnover of ALOs was so great in MR II that in February 1971, only 16 of 30 authorized were assigned and three of those 16 were on TDY out of MR II. The USAF advisory team chief in MR II assessed the impact of the turnover as follows:<sup>56</sup>

(C) Each VNAF ALO must, in effect, earn his own acceptance and recognition by his performance on the job. The process must be repeated with each incumbent. Withdrawal of an incumbent negates all progress made to date in this area.

**[REDACTED]**

Thus, without confidence in his ALO, the ARVN ground unit commander frequently relied upon the U.S. Army's air assets for ground support, further weakening the need for an ALO. This failure to work at developing a reasonable air/ground system was cause for increasing concern as U.S. forces continued to withdraw. The MR II USAF Advisory Team Chief continued:

(C) If we wait until US Army assets are withdrawn it will cause a very hazardous situation. In the event of a major action by the enemy, the ALO system could fail or be so inefficient that the ARVN would lack critical air support and suffer a needless loss of lives.

#### Forward Air Controller (FAC) (U)

(C) Problems with the VNAF FAC function seriously hampered efficiency of the TACPs. In May 1971, the Deputy Director of I DASC reported: "VNAF FAC capability remains poor. This is the weakest link in the Vietnamization of the tactical air control system in MR I." Forward Air Controller problems also plagued the other MRs.

(C) A case in point: in 1969, the 112th Liaison Squadron, located at Bien Hoa AB in MR III, had only 19 of 30 authorized aircraft assigned. These included 12 O-1s and seven U-17s. Three of the O-1s were deployed on 15-day rotation to Tan Son Nhut to fly visual reconnaissance (VR) missions around Saigon. Another O-1 was deployed on a 15-day rotation to Tay Ninh City to fly all types of operational missions--VR, FAC, air cover, and combat observation. One U-17 was deployed to Ban Me Thuot on 30-day rotation in support of ARVN special forces. The Squadron deployed a minimum of three or a maximum of five O-1s, daily, either to three ARVN

[REDACTED]

divisions or to the Tay Ninh Military Sector.\* One to three U-17s were kept on ground alert either to carry VIPs or to conduct a special VR sortie. One O-1 and one U-17 were used for training missions, one O-1 was a fragged VR/FAC sortie, and the remaining aircraft flew liaison sorties.

(C) The squadron sporadically met its flying commitments due to a shortage of pilots (only 34 of 45 authorized were assigned). There was, however, a surplus of non-rated observers in the squadron. As previously mentioned, virtually all the pilots were recent graduates of basic pilot training, either from the CONUS or the VNAF pilot school at Nha Trang. The pilots were technically qualified to fly the O-1, but they did not perform forward air control duties. This was done by the non-rated observer flying with the pilot. The FACs had difficulty in visually locating targets (almost all of which were selected by other agencies). This was due to two factors: (1) VNAF FACs did not fly long enough in any one area to become thoroughly familiar with it, and (2) the FAC often was given only the coordinates of a target. This was insufficient information (especially in wooded areas), because the FAC needed to know both the location and type of target for which he was looking.

(C) The fact that the O-1 pilot was "little more than a taxi driver" for the observer FAC considerably weakened the effectiveness of forward air control. As one Advisory Group letter pointed out:

---

\*While away from Bien Hoa, the crews were expected to obtain their own meals on the economy.

[REDACTED]

(C) The pilots feel no compulsion to assure FAC mission success and as a result, target marking with rockets is almost non-existent. After targets are marked the pilot has a tendency to get as far from the scene as possible and no one actively controls the following strike. . . . Throughout the program there is a lack of motivation for the mission and a minimum of capability.

The VNAF never abandoned the two-man crew concept for the O-1, but it did realize that its FAC program needed upgrading. VNAF OPLAN 69-14, published in May 1969, recognized that O-1 crews required area familiarity and stated, "It is expected that aircrews will be assigned to fly regularly in a given detachment area for a minimum of three months.<sup>61</sup> This time frame was not met; two years later, in July 1971, U.S. advisors were still complaining that VNAF FACs suffered from area unfamiliarity, and were not performing visual reconnaissance in their areas of responsibility.

(C) Other serious problems hampered VNAF FAC effectiveness. In July 1970, the AFGP Director of Operations expressed concern that 21.6 percent of the FAC-type sorties flown by the VNAF were "administrative flights," which did not directly contribute to the war effort.<sup>62</sup> Then, on 21 August of the same year, there were 10 "NO FAC"\* incidents reported. These failures of FACs to be on station were attributed to inclement weather, fuel shortages, or radio-out problems. These FAC aborts were causing concern because they resulted in fighter sortie loss.<sup>63</sup> Writing nearly a year later, the USAF

---

\*Attack aircraft were unable to deliver their ordnance due to the fact a scheduled FAC was not on station.

[REDACTED]

Deputy Director of I DASC attributed the continued incidence of "NO FACs"  
64  
to VNAF FAC reluctance to control air strikes:

(C) Frequently, they claim excessive cross-wind, radio failure, or weather in the target area as the reason for not putting in an air strike. A check of the existing weather frequently has failed to substantiate the claim of excessive cross-wind or weather in the target area.

As long as the USAF FACs would back up the VNAF FACs, the latter were willing to let the Americans take the risk. This still provided excellent support for the ARVN, but for the VNAF FACs this "of course does nothing to expand their expertise or maintain proficiency, and in fact is detrimental to the Vietnamization program."  
65  
The same source observed that "the best technique is to put more pressure on the VNAF to perform the mission by refusing to back them up . . . except in very serious situations."

(C) The lack of "pressure" on the VNAF FACs seriously detracted from their effectiveness in other ways. Theoretically, the liaison squadrons exercised command and control over the FACs when they were deployed to Forward Operating Locations (FOLs) such as an ARVN unit airfield. Under these circumstances the liaison squadrons were too far removed from the FAC to adequately supervise him, so the FAC's failure was not completely due to a lack of training or expertise. As one study comments, "FACs are generally well-qualified and do a good job of placing aircraft provided they are given adequate direction."  
66  
For TACS to operate properly, the ALO should exercise command and control over FACs deployed to support  
67  
his units. One senior USAF advisor observed:

[REDACTED]

(C) Control (of the TAC) by the ALO is an absolute necessity. The ALO at each FOL is the only contact between the ARVN ground unit commander and the FACs. The control of FAC activities, i.e., preplanned/immediate air strikes, scheduled VR, convoy cover . . . can only be exercised through VNAF ALO. This control must be acknowledged and accepted by the commander of each observation squadron. . . .

The ALOs, however, were not in a position to exercise control over the FACs--the FAC frequently outranked the ALO. Also, since the ALO could not provide areas for the crews near the TOC, he could not brief or debrief them. These conditions contributed significantly to the frequently excessive reaction times to immediate air requests. <sup>68</sup>

(C) Occasionally VNAF observers were used as interpreters with USAF FACs flying OV-10 aircraft, but the results were mixed. For example, during LAM SON 719, conducted in Laos during March and April 1971, those observers who were able to work "significantly contributed to the support of the ARVN troops." Many observers suffered air sickness in the relatively high performance\* OV-10, and were consequently unable to communicate with ARVN ground commanders. "Late shows" and "failures to show" for missions also <sup>69</sup> persistently hampered air support operations.

#### FAC Aircraft (U)

(C) The most serious equipment problem facing the VNAF TACS in 1970 <sup>70</sup> was the shortcomings of the O-1A aircraft, especially its radio gear. At that time about one-half of the VNAF O-1 aircraft were A models and

---

\*As compared to the O-1 and O-2.

[REDACTED]

the rest were the preferable\* E or G models. The radio gear in the O-1A was "not compatible with present operational concepts. Specifically, the number of channels, output, and lack of VHF capability are primary operational deficiencies."<sup>71</sup> A I DASC letter written in January 1971 discussed:<sup>72</sup>

(C) Neither the air-to-air nor the air-to-ground communications are acceptable for combat purposes. This equipment has low power which results in short range. There is also a frequency incompatibility between ground radio sets and airborne sets. . . . These sets are difficult to maintain since the supply system can't respond to equipment that is no longer in the Air Force inventory.

(C) The communications equipment needed by the O-1A was the ARC-51B, ARC-131, and the ARC-134 radios. A Combat Required Operational Capability (Combat ROC), Class V Modification, was approved by the Combat ROC Review Board on 16 October 1971.<sup>73</sup>

(C) Another weakness of VNAF O-1A aircraft was a lack of instrument lighting for night operations and Tactical Air Navigation (TACAN) for navigational positioning. Further, the flight instruments were of the vacuum/suction type gyros and were subject to tumbling with high angles of bank. Combat ROC projects had also been approved by October 1971 to rectify these deficiencies. Ironically, at this same time, USAF had more than 65 FAC aircraft as non-operational aircraft (NOA),\*\* "all of which are more effective for combat than the O-1A."<sup>74</sup>

---

\*The E and G models, besides containing better communications equipment, incorporated structural improvements.

\*\*NOA--Also, not otherwise assigned, i.e., possessed but not used while in status.

[REDACTED]

(C) The AFGP finally negotiated an agreement with the Department of the Army to provide the VNAF with replacement aircraft for the O-1A. The Army was to deliver a total of 213 O-1E/G aircraft to the VNAF through FY 75. The first delivery of 32 aircraft was in June 1971. The first transferred aircraft were all remaining 7AF O-1E/Gs. The O-1E/Gs were not strictly replacements for the O-1A, but they were programmed to meet O-1A attrition and VNAF expansion needs.<sup>75</sup>

(C) Thus, the principal weaknesses in the VNAF TACS at the beginning of the Vietnamization program were: (1) the lack of VNAF appreciation of the important role of the FACs and ALOs, (2) the personnel selected as FACs and ALOs, and (3) inadequate and poorly maintained equipment--especially the O-1A aircraft.

[REDACTED]

[REDACTED]

CHAPTER III

GROWING PAINS: 1971-1972 (U)

(C) The greatest single impediment to developing a viable VNAF TACS was the Vietnamese lack of understanding of the uses and limits of TACAIR. While the misunderstanding existed at all levels in the Republic of Vietnam Armed Forces (RVNAF), it was particularly damaging at the working level--the FAC, the ALO, and the ARVN Division staff. The problem was serious at the headquarters staff level, too.

(C) The VNAF needed more than technical training--they needed specific education and experience in: (1) the uses and limits of airpower, (2) the need for close cooperation and support between air and ground forces, and (3) the development of abilities needed to make the TACS effective.

Air Ground Operations School (AGOS) (U)

(C) The USAF decided in early 1971 that the best way to educate the VNAF in TACS was to establish an Air/Ground Operations School in RVN. In the summer of 1971, NVAF sent the initial cadre, headed by Colonel Thon, to the USAF Air Ground Operations School (AGOS) at Hurlburt Field, Florida. After training them, the AGOS instructors provided the Vietnamese with problem folders of instructions and extensive 35 millimeter (mm) slides to help them establish their own air/ground operations school. <sup>76</sup> Later that year the VNAF established two AGOSs, one for senior officers at Tan Son Nhut AB, and one for liaison pilots (O-1s), FAC/observers, and ALOs at Nha Trang.

[REDACTED]

(C) An Air Force AGOS team visited the VNAF facilities in January 1972, and generally praised the way the Vietnamese were running the school. They did, however, note these problems:

(C) The establishment of the AGOS at Tan Son Nhut . . . for the senior officer orientation course seems to somewhat fragment the training effort. The team recommended that the Senior Course include several blocks of training for close air support mission planning. There is an assumption that all VNAF/ARVN senior officers fully understand all the factors that must be considered for fire support planning. This may be a bit presumptuous. . . .

#### Tactical Air Control System (U)

(C) The cumbersomeness of the VNAF TACS at this time confirmed the USAF analysis. For example, from the beginning the VNAF TACS lacked centralized scheduling of assets. When the VNAF took over operation of its own TACC in the summer of 1971, and the DASCs in each MR during the fall of that same year, the DASCs continued to frag their own air sorties with little centralized direction.

(C) The VNAF TACS also lacked mobility and flexibility in allocating air resources. Incredibly, all TACAIR resource allocation was being done entirely by ARVN planners. This came about because the Tactical Air Support Management Division (TASMD) was the agency at the JGS with the greatest authority over VNAF operations. It was staffed entirely by ARVN officers.

The VNAF was:

(C) . . . aware of its lack of overall representation at JGS. Desiring to provide only qualified officers at that important level of command, VNAF Headquarters prefers vacant JGS air staff positions rather than assign average or below average officers. At present,

[REDACTED]

the VNAF believes capable officers are needed more desperately in the squadrons and divisions to handle urgent problems of activation and training associated with the rapid VNAF buildup.

Thus, the ARVN-dominated JGS unrealistically restricted the transfer of VNAF aircraft or personnel assets from one MR to another. The JGS would not approve inter-regional use of TACAIR, even for immediate requests, without the concurrence of the ARVN Corps Commander of the region in which the aircraft were based. For example, in September 1971, because of an increased threat in MR I, the VNAF tried to deploy six A-1 aircraft to Da Nang AB, but JGS disapproved the transfer stating that there was sufficient air coverage in that area.<sup>80</sup>

(C) As more senior officers attended the AGOS, they began to see the need for increased TACS responsiveness and mobility. By November the JGS approved plans to allocate a fixed number of VNAF TACAIR and gunship sorties in support of Cambodian ground forces on a regular basis. The JGS also gave the TACS greater authority by letting them control VNAF TACAIR supporting Commando Hunt VII, the dry-season interdiction campaign at the end of 1971.<sup>81</sup>

#### Air Operations Command (U)

(C) The VNAF Air Operations Command was also improving the scheduling of air assets. In January 1972, VNAF was using as much as 50 percent of its FAC resources in orbiting over ground operations. The rationale was to have them "there" in the event the ground commander decided he needed air support. Although he routinely used artillery, the ground commander

virtually never asked the FAC to help him adjust artillery fire. By March,

83

however, the AOC was using its FACs more effectively:

(C) VNAF FACs are assigned two or three proposed target areas. The FAC reconnoiters each target and if it merits an air strike the controlling DASC scrambles the required number of sorties. This is a marked improvement over the previous concept of target preplanning with fighters on the way as soon as the FAC confirmed adequate target Wx [weather]. With the new alert concept, more responsibility is placed on the FAC and more fighters are available to strike lucrative and fleeting targets. . . .

#### Direct Air Support Centers (U)

(C) The VNAF DASCs continued to have difficulty fragging and managing their TACAIR resources. One problem was their lack of knowledge of helicopter operations. In January 1972, the AFGP observed that "an urgent need exists to assign VNAF helicopter pilots to the DASC/Corps TOC as assistant ALOs to help frag and manage VNAF rotary wing aircraft."<sup>84</sup>

(C) Another criticism of the DASCs concerned their inflexibility during rapidly changing emergency situations--once they had fragged missions for the day, they were reluctant to change their plans. If the DASC wanted to get TACAIR from another military region, it had to be coordinated by so many elements of command that the tactical opportunity was often lost. Yet another detractor from DASC effectiveness was the inability to communicate directly with the VNAF FACs and fighter/bombers. The DASCs had to have requests relayed through the closest CRC. An example of the shortage of equipment was provided by II DASC, which was operating with only two high frequency (HF) single side band radios. The II Corps ALO advisor reported that the DASC needed an ultra high frequency (UHF) radio (GRC-27), a

[REDACTED]

frequency modulated (FM) radio (PRC-77), and a B-8/B-9 rectifier along with  
85  
65 feet of coaxial cable in order to directly communicate with the FACs.

To make the VNAF DASCs mobile and more closely aligned to the DASC concept contained in the U.S. Air Force Manual 2-7, Tactical Air Force Operations-- Tactical Air Control System (TACS), the Advisory Group placed MRC-108 radio jeeps at each DASC to enhance communications. The radio jeeps could be  
86  
deployed to tactical areas if conditions warranted.

Tactical Air Control Parties (U)

(C) The AFGP conducted a survey of VNAF TACPs in March 1972 and  
87  
reported: (U)

(C) Ninety percent of the 60 VNAF ALOs commanding TACPs are capable of working with little or no advisory support. Ten percent or seven ALOs need advisory support. The Air Force Advisory Group has 18 ALO advisors in three MRs assisting VNAF ALOs. . . . Approximately 95 percent of the TACPs have adequate communications equipment although some is quite limited in range and duration of operation. Five percent need extensive radio repairs. Facilities at FOLs for FAC support are adequate at 33 of the 39 FOLs in-country. Five locations need improved crew quarters and other facilities and one FOL lacks airfield security.

(C) The findings of this survey, however, were not substantiated by highly critical reports submitted almost simultaneously by USAF ALO advisors. Criticisms of the VNAF TACPs by the ALO advisors noted marginal to poor ARVN support, including ground power maintenance, lack of jeeps, meals, and housing. Although VNAF PLAN 69-14 had been coordinated with the ARVN high command and specifically provided these support requirements, the plan was not given to ARVN field commanders or province chiefs. The plan was also too vague; for example, ". . . at Gia Ngia (in MR II) housing is provided

[REDACTED]

the VNAF but it is without electricity, running water, toilet facilities,  
and adequate furniture."<sup>88</sup>

Air Liaison Officer (U)

(C) Many of the same problems reported in the 1970-1971 time period continued to plague the VNAF ALO function. ALO Advisor reports between December 1971 and April 1972 contained numerous accounts of ALO shortages, inexperience, low rank, lack of initiative, and lack of supervision. ALO advisors also stated that the ALOs did not participate in ARVN planning meetings, briefings, or ordnance and target selection. Nor did ALOs manage FAC flying time. Most ALOs concurred with one ALO advisor who wrote in his End of Tour (EOT) Report that, "In effect, he [the ALO] was nothing more than a glorified scheduling officer."<sup>89</sup>

(C) One of the ALOs singled out for criticism was Capt Tu, the 3d ARVN Division ALO. On 12 December 1971 Capt Tu's ALO Advisor, Major Schuster,<sup>90</sup> wrote to the I Corps ALO Advisor:

(C) a. The VNAF ALO, Capt Tu, attends the nightly briefing on a sporadic basis. He contends that there is no reason for him to attend since all questions concerning air are addressed to the G-3.

(C) b. The ALO continues to spend 2-3 days in Hue each weekend.

(C) c. The VNAF ALO is present in the TOC infrequently. Although his duty officers appear competent I feel he could be much more effective if he took a more active interest in supervising the daily operation.

Major Schuster's next weekly report continued to criticize Capt Tu:<sup>91</sup>

[REDACTED]

(C) . . . The VNAF ALO continues to be absent from duty for extended periods of time. The latest absence covered a period of approximately four days from Friday through Monday.

(C) . . . During the past week the 2d Regiment scheduled an Air Mission Commanders [AMC's] briefing to coordinate a combat assault of two battalions into field positions north and northwest of Firebase Fuller. Since this was the first operation of any magnitude that the 3d Division had organized on its own it was particularly significant. I immediately requested that the VNAF ALO be required to attend. The G-3 advisor informed that the Division G-3 had requested the ALO to attend the briefing. On the day of the AMC's briefing the VNAF ALO was in Hue and was represented by the TACP duty officer. . . . This is a perfect example of this officer's apparent unconcern about 3rd Division affairs. . . .

Major Schuster, in his EOT Report on 18 March 1972, again criticized Capt Tu for refusing to help him educate the 3d ARVN Division staff in ground air operations. He also singled out lack of command and control by the VNAF ALO as the "single most critical problem" in the support of 3d ARVN Division.<sup>92</sup>

(C) Not all VNAF ALOs, however, were as ineffective as Capt Tu. The VNAF had, in fact, some competent ALOs, especially among those who held the rank of Major. The Corps-level ALOs were all Majors and seemed to have been regarded highly. One advisor remarked that there was "no problem of ALO planning at Corps level," and on another occasion the same advisor commended the "excellent supervisory work of Major Luyen, III Corp ALO."<sup>93</sup> There were also some effective Captain ALOs. Capt Diep,<sup>94</sup> the 23rd Division ALO, was described by his advisors as "flawless:"

[REDACTED]

(U) He has provided all the VNAF Tactical Air requested and it has been on time and on target. . . . I have received several good comments from the U.S. Army advisors and the Division Staff.

Nevertheless, because he was a Captain and all the ARVN staff were Lt Colonels, Capt Diep was not included in any of the planning. Lt Col Heap,<sup>95</sup> the ALO Advisor, tried to overcome the rank problem:

(C) . . . I have tried desperately to change this attitude. I know the ARVN staff personally. I have promoted tennis matches with the ARVN G-3 and the VNAF ALO. The result of my efforts has been a good friendship between the ARVN and the ALO, but when the plans meetings and social functions are held I got the invitation, but not the VNAF Captain ALO. The same problem exists in the provinces--we have VNAF Lts with a Regional Forces staff of all Majors.

Lt Col Heap went on to assess the impact of the rank problem:

(C) . . . Unlike the U.S. forces the Vietnamese do not respect the position but do the rank. If there is ever to be harmony between the ARVN and the VNAF, this rank disparity must be recognized and corrected.

At the time he wrote this, Lt Col Heap noted that of the 13 ALO authorizations for the 23d Division, only nine ALOs were assigned. Of these, two were Captains and seven were Lieutenants.

(C) Despite the overwhelming problems of ALO rank and inexperience, the AFGP did make some progress toward increasing the viability of the VNAF ALO. In February 1972, Lt Col Huffman, Chief of the AFGP's Tactical Air Control Systems Division, wrote to his ALO Advisors, ". . . much progress has been made in the ALO Advisory effort. ARVN and U.S. Army advisors are beginning to discover that the VNAF ALO is the key to the air request system." The letter went on to enumerate some actions which would help improve the ALO function:<sup>96</sup>

- [REDACTED]
- (C) . VNAF Headquarters was publishing an ALO Standard Operating Procedure.
  - (C) . JGS had officially approved VNAF Regulation 69-14 which addresses ARVN support requirements for ALO/FAC FOLs.
  - (C) . 7AF was developing an Air Munitions Guide, and it would be distributed to all VNAF ALOs.

Forward Air Controller (U)

(C) Several serious problems continued to detract from FAC effectiveness. One of the more crucial areas of concern was the lack of control of the FAC by the ALO when the former deployed to a forward operating location. One ALO Advisor described this weakness as "the largest obstacle [in the TACS] to better response and results."<sup>97</sup> The FAC, deployed beyond the direct control of his Squadron Commander and forced to search for his own meals and housing, was often not on friendly terms with either the ALO or the ARVN staff. Capt Cavanaugh, the ALO Advisor for the 25th ARVN Division,<sup>98</sup> summarized the problem:

(C) The FACs in the 112 Squadron are just not responsive to the needs of the ARVN soldier in the field. The FAC can work in a different AO of each division and for a different division on successive days. He has no real association with the people in the fox-holes in one area for one division. In short, we need to increase the FACs' level of caring in an upward direction. The ALO cares, but he is nothing more than a duty officer and a radio operator under the present system. As long as FACs can sit at Tay Ninh and play heavily at card games, make their own flying schedule, and not answer to the Division ALO, the system is not desirable.

Other advisors wrote similar complaints about the FACs, emphasizing that they "lack initiative," depart late in the morning, or do not show at all

[REDACTED]

during the day. One advisor noted, "the FAC situation has become worse as far as responsiveness to the troops on the ground." The most obvious solution to the supervision of the FACs was to locate them permanently with the ARVN Divisions in the field. This was practically impossible, however, because most FACs held second jobs in the large cities (especially Saigon, Da Nang, and Nha Trang) to supplement their low military pay.<sup>99</sup>

Visual Reconnaissance (U)

(C) In January 1972, Colonel Barr, the AFGP Director of Operations, identified the lack of VR as "the single greatest problem in VNAF ALO/FAC operations."<sup>100</sup> One of the ALO Advisors observed, "Visual Reconnaissance still looms as the biggest problem the ARVN forces face. As U.S. assets withdraw, no workable VR system has yet been employed to beef up the declining targeting situation."<sup>101</sup>

(C) The VNAF FACs did not fully understand the essential need for an effective VR program. Lt Col Frymire, the ALO Advisor in II Corps, described the VNAF attitude toward VR as inefficient and impractical:<sup>102</sup>

(C) The VR mission is the last in priority; therefore, good, well planned VR programs are non-existent. The VR missions being flown are flown without any planning or briefings, and generally with the attitude that there is nothing else to do.

When the VNAF did plan a VR mission, the FAC pilots who flew it failed to understand what to do with their information. Describing one such mission, Lt Col Frymire noted, "Unfortunately there was no post-mission debriefing by the various military organizations to discuss and resolve problems or revise and develop future plans."<sup>103</sup> Usually ARVN requests for FAC

[REDACTED]

VR were ignored by liaison squadrons, even when the DASCs fragged them. For example, in MR I the 3d ARVN Division asked for 35 VR sorties (five each day) during the second week in December 1971. Although fragged by the DASC, none were flown.<sup>104</sup> Soon ARVN stopped asking for VR because their requests were ignored.

(U) Since USAF ALO Advisors continued to demand VR, the VNAF put pressure on their tactical wings to provide it. For example, the VNAF fragged the wing supporting the 25th ARVN Division to fly one VR mission per day. After 40 days, "not one piece of intelligence was gathered by the FACs flying this mission."<sup>105</sup>

(U) The VNAF also directed that a comprehensive briefing/debriefing program for FACs be established. One advisor, trying to evaluate the briefing program, went on missions and asked for a briefing. The advisor reported that his request "was a subject for laughter."<sup>106</sup> The advisor then encountered heavy anti-aircraft artillery (AAA) in an area not posted as hostile. When he brought this information back, no one was interested in taking debriefing notes. This advisor used such incidents as evidence that "many of the programs the advisors come up with that are approved by VNAF and ARVN receive the whitewash treatment at the working level."<sup>107</sup>

(S) These conditions served to render FAC sortie/flying hours summaries virtually worthless. While the AFGP was publishing reports showing that some 76 percent of the flying hours done by VNAF O-1 aircraft during the first four months of 1972 were visual reconnaissance flights, reports from ALO Advisors were warning that the figures were seriously debased.

[REDACTED]

One advisor observed that "forty percent of the flying time for the men and aircraft at Tay Ninh is logged as VR to and from Bien Hoa. This was not actually VR, but ferry time." <sup>108</sup> Since higher headquarters was usually satisfied with the liaison squadron if it reported substantial flying time, the squadrons reported the flying time whether they flew the missions or not: "To cover themselves, flying time as well as actual sorties are in some cases fabricated in their log books at the end of the day." <sup>109</sup> Another advisor reported: <sup>110</sup>

(S) In my estimation the flight book for the past 14 days is a fabrication. The overlogging of time is nothing new in our working problems, but some gross overlogging is taking place. As a result the aircraft are going into periodic maintenance much sooner than needed. Overlogging hurts the VNAF. In fact it degrades their real capabilities.

Another advisor stated that he had never seen a VNAF FAC on a VR mission call for an immediate air strike. A contributing factor may have been that the FAC was not using binoculars. Observing this procedure one <sup>111</sup> advisor wrote:

(S) I have personally flown over 80 FAC missions and can attest to the fact that the FAC who performs VR . . . without using binoculars is virtually wasting his time.

(C) Nevertheless, by March 1972, the VNAF VR program was beginning to make progress in MRs II and III. On 24 March, a week before the North Vietnamese launched their massive Spring offensive, Major McElroy in AFGP (DOT) reported that in MR II "the FACs continue to gather substantially more intelligence by visual reconnaissance missions than is normal." <sup>112</sup> In the same letter, Major McElroy observed that in MR III VR:

[REDACTED]

(C) . . . requests from the ARVN have increased. VR briefings and debriefings are being conducted by intelligence personnel, resulting in significant intelligence data.

The VR program in MR I was still poor, and this factor played a crucial role in the RVNAF defeat at Quang Tri.

[REDACTED]

CHAPTER IV

NORTH VIETNAMESE INVASION: 1972 (U)

Summary of the Offensive (U)

(S) The long-expected enemy offensive began on 30 March in MR I and quickly spread throughout RVN. The North Vietnamese Army (NVA) and Viet Cong (VC) had attacked in all military regions by the end of the first week of April. In MR I, enemy forces, operating at will, overran several fire support bases (FSBs), including bases where U.S. advisors were present. After the first week of heavy fighting, attacks decreased as the enemy consolidated and prepared for further offensive action. Despite massive air strikes on enemy positions, Quang Tri City fell by the end of April. In the western highlands of MR II, the Communist forces launched attacks in Kontum province on 31 March, and continued to increase their activity with an estimated troop strength of 20,000 to 25,000. In MR III, Loc Ninh fell into enemy hands on 7 April, and attacks on An Loc increased. Enemy activity increased in the southern Delta region of RVN as some Communist forces infiltrated from Cambodia, and others moved out of the U-Minh forest area. In sections of MR IV, the enemy had complete freedom of movement as RVNAF forces were withdrawn to assist Government forces in critical situations in MR III. Because no significant population centers were threatened in MR IV, USAF and VNAF tactical air was concentrated in the other three MRs.



Military Region I (U)

(S) The enemy launched a two-pronged drive (south across the Demilitarized Zone [DMZ], east from Laos) into Quang Tri Province with an estimated 25,000 to 30,000 troops, half of which crossed the DMZ. The enemy force included nine infantry and three artillery regiments, supported by elements of two tank battalions. The attack produced the heaviest fighting since Tet 1968. Initially, enemy artillery barrages were directed against virtually every friendly strong point south of the central and eastern DMZ. Subsequently, heavy ground assaults, supported by enemy armor, forced the ARVN to abandon one position after another as both sides suffered heavy casualties.

(S) The enemy launched his offensive under the cover of bad weather, which initially restricted USAF and VNAF tactical air efforts. Friendly airpower was successful in helping to repulse attacks on Quang Tri City for several weeks. However, when the 3d ARVN Division broke and ran, tactical air alone was not able to stop the enemy. Both Dong Ha and Quang Tri fell to the enemy, enhancing Communist plans to establish a Viet Cong "provincial capital" at Quang Tri. The ARVN and RVN Marines eventually regained the ruined city after a costly two and one-half month struggle.\*

TACS in MR I (U)

(S) Progress in Vietnamization and continued U.S. redeployments resulted in the VNAF flying and directing the majority of the missions in MR I in early 1972. Large scale USAF support of the Vietnamese in MR I ended in

---

\*See CHECO Report, The 1972 Invasion of Military Region I, for a detailed account of the battles.



[REDACTED]

September 1971. The last USAF FACPs closed in November and December, and the last USAF ALO became the ALO Advisor to the 3d ARVN Division. FAC responsibilities also shifted to the VNAF in December. <sup>113</sup> Thus, that part of the TACS formerly used by U.S. forces to coordinate air and ground operations in MR I was eliminated.

(S) However, since large scale USAF TACAIR was reintroduced in MR I during the offensive, it was necessary for the TACS to become an American operation. When the offensive began, Vietnamese ground units continually requested air support from the ARVN 3d Division Headquarters. Although the VNAF deployed a full squadron of A-1 aircraft from Bien Hoa AB to Da Nang to reinforce their efforts, the scale of the invasion was more than the weak VNAF TACS could handle. As a consequence, 7AF reintroduced American tactical air control in MR I almost immediately.

#### The Brookbank Report (U)

(C) Major David A. Brookbank was the ALO Advisor to the 3d ARVN Division at the time of the North Vietnamese invasion of MR I. The VNAF TACP at Quang Tri almost immediately collapsed, and Major Brookbank assumed ALO duties. He became the ALO and air operations officer to "everybody in the world." <sup>114</sup> According to U.S. Marine advisors working near him, he "single-handedly directed air strikes in support of the 3d ARVN for three days going almost continuously without sleep." <sup>115</sup> His special report on the "VNAF TACS and the Fall of Quang Tri" describes in detail the events leading up to the fall of Quang Tri, and presents a careful analysis of the performance of the VNAF TACS. (See Appendix, p. 74.)

[REDACTED]

Military Region II (U)

(S) Enemy activity increased in the central highlands and coastal areas of MR II. North Vietnamese Army forces placed a high priority on road interdiction to reduce ARVN mobility. This also forced Kontum and Pleiku defenders to place heavy reliance on airlift. If the enemy could capture Kontum and Pleiku, he would have, in effect, split RVN in two. The first sapper attacks on Dak To airfield were repulsed on 14 April; however, Communist forces attacked several FSBs and overran FSB Charlie on Rocket Ridge (the strategic high ground south of Dak To). The brunt of the major offensive in the highlands began 23-24 April, and by the end of the month the enemy controlled Dak To, Rocket Ridge, and most of Route 14 north of Kontum City.\* The enemy launched major attacks on Kontum on 14 and 24 May, but was repulsed; in large measure, friendly success was attributable to the efficient use of tactical air. The enemy completely abandoned his offensive in MR II in July.

TACS in MR II (U)

(S) Unlike the situation in MR I, there was still an American TACS in MR II at the time of the Spring Invasion. II DASC was supposed to have been completely Vietnamized by June 1972, at which time the USAF DASC was to close. Although the Americans were already acting primarily as advisors, their presence in II DASC and the existence of USAF TACPs resulted in close coordination of VNAF and USAF TACAIR.

---

\*For a complete account of these battles, see CHECO Report, Kontum: Battle for the Central Highlands.

[REDACTED]

(C) The VNAF TACS displayed considerable flexibility and effectiveness in MR II. In May, a squadron of A-1s deployed to Pleiku AB from Bien Hoa AB. On 14 May, when the enemy attacked Kontum City, the A-1s, along with VNAF A-37s and USAF F-4s, combined with the 23d ARVN Division to decisively repel the invaders. Effective VNAF communications equipment played a key role. Lt Col Doty, II Corps ALO Advisor, later wrote: 116

(C) While in the Kontum area, we were witness to a spectacular air power demonstration lasting better than two hours. Initially, F-4s were working south and north of Kontum with VNAF A-1s holding high and dry. When these F-4s completed their strikes, the VNAF FACs entered the area with A-1s (VNAF) working south and A-37s (VNAF) working northwest. At this time additional F-4s arrived and worked northeast of Kontum. During the entire time the western sector was bombarded by ARVN artillery. It was a classic example of the effective employment of combined air power and artillery resources. It was a thing of beauty.

On 16 May, Lt Col Doty further wrote:

(C) We received a report yesterday of an incident demonstrating very effective coordination between USAF and VNAF FACs over Kontum. The VNAF FAC had run out of rockets so the USAF FAC entered the area, marked the target for the VNAF FAC and departed. The VNAF FAC then conducted the airstrike with VNAF A-1s. Again, this shows the importance of effective communications in accomplishing military objectives.

Furthermore, the II Corps ALO Advisor stated:

(C) The importance of the FM radio installed in the VNAF DASC was vividly demonstrated yesterday. A VNAF FAC on a VR mission north of Polei Kleng spotted two enemy tanks. With the present FM capability he was able to call directly to the DASC and requested air support. A flight of A-1s was launched immediately and arrived in the target area within minutes. This again proves that effective communications between the DASC and airborne FACs is essential for the effective employment of air power.

[REDACTED]

Within its limited resources and experience the VNAF TACS in MR II performed outstandingly. John Paul Vann, Senior U.S. Advisor in MR II, stated, "In the defense of Kontum the VNAF has been magnificent." 117

Military Region III (U)

(S) The Communist forces had also planned to establish a Viet Cong provincial capital at An Loc. Loc Ninh, just north of An Loc on Route 13, fell after two days of major ground attacks. The enemy then interdicted Route 13 in several places south of An Loc. Resupply of An Loc was difficult because the enemy forces had moved heavy AAA into the area. President Thieu ordered An Loc held at all costs. ARVN units in the area were reinforced by both the 1st Airborne Brigade and the 21st ARVN Division from the lower Mekong Delta. The enemy failed to take An Loc despite a siege that lasted more than two months.\*

TACS in MR III (U)

(S) Like the situation in MR II, there was still an American TACS in MR III at the time of the Spring Invasion. The primary function of the USAF III DASC personnel was to advise the VNAF DASC members and to eventually turn over all DASC responsibility to them. The presence of Americans in the DASC facilitated positive control of USAF tactical air supporting the defense of An Loc.

---

\*For a detailed description of the battle see CHECO Reports: The Battle of An Loc, 5 Apr-26 Jun 72, 31 Jan 73, and Airlift to Besieged Areas, 7 Apr-31 Aug 72, 7 Dec 73.

[REDACTED]

(S) During the April through June siege, An Loc was cut off on all sides by the enemy; therefore, USAF and VNAF TACAIR sorties were trying to work in a small area surrounding the city. This effort was complicated by the presence of both USAF and VNAF gunships as well as B-52 operations. Command and control in this area was weakened by the congestion and was further weakened when all of the VNAF TACC hot line voice circuits to the DASCs and Air Division command posts went out of service due to a massive cable failure on Tan Son Nhut AB.

(S) Heavy AAA and the SA-7 missile posed a serious threat to friendly aircraft, especially to the VNAF A-1s and A-37s. Nevertheless, "continued tactical air strikes kept the VC/NVA from maintaining the momentum necessary to overrun the defenses. Time after time, tactical air stopped tanks, destroyed supply vehicles, and repelled invaders." <sup>118</sup> The squadrons of VNAF A-37s deployed to Bien Hoa AB from Nha Trang AB were among the most effective tactical aircraft used in the battle for An Loc. USAF reports concerning the battle continually referred to the effectiveness of USAF FACs, but there was no mention of the use of VNAF FACs.

(S) The performance of the VNAF TACS during the Spring Invasion demonstrated that it was not yet self-sufficient. MR I was the only one of the three regions experiencing major attacks where the TACS had been completely turned over to the VNAF. Failure to accomplish VR missions, FAC and ALO inexperience or incompetence, and VNAF/ARVN lack of cooperation contributed significantly to the fall of Quang Tri. On the other hand, there were some notable incidents of bravery and professionalism by many

[REDACTED]

VNAF pilots and FACs, particularly in the other two military regions. In  
119  
June 1972 the AFGP offered this appraisal of the VNAF TACS:

(S) The primary objective continues to be to create a strong, centralized, flexible, and self-sufficient VNAF TACS. The vehicle used to accomplish this goal is a personal, one to one, ALO to advisor relationship at the Corps and Division level. The VNAF TACS in MR IV is self-sufficient. VNAF ALOs in MR III are approaching self-sufficiency as they have been functioning well with a minimum of supervision during the present NVA offensive. The situation in II Corps continues to make steady progress as ARVN/VNAF coordination and ALO liaison efforts have started to produce effective results. MR I has been identified as the area requiring the most concentrated advisory effort. ALO advisors could be pulled out of MR III with little degradation in military effectiveness. MRs I and II continue to require advisory attention and are fully manned by AFGP at this time.

[REDACTED]

CHAPTER V

AFGP OBSERVES IMPROVEMENTS (U)

(U) The present crisis has done much to weld effective ARVN-VNAF cooperation and gain acceptance for the under-ranked and relatively inexperienced VNAF ALO.120

(C) One of the more important aspects of the North Vietnamese Invasion was the role airpower played in stopping the enemy. Both the VNAF ALOs and the ARVN commanders saw the impressive results of a closely controlled TACAIR as a complement to the ground commanders' artillery. In May 1972, the AFGP sent observers to evaluate the VNAF TACS in action at 121 Lai Khe,\* Bien Hoa AB, and Da Nang. They reported:

(C) At Lai Khe and Bien Hoa excellent coordination and rapport was observed in tactical operations between the ARVN and the VNAF. Areas of operations were assigned for all tactical requirements through the Fire Support Coordination Center (FSCC) at Lai Khe which, in turn, coordinated for all air operational requirements through the Direct Air Support Center (DASC) at Bien Hoa. To attain efficient and effective control of tactical air, specific areas were assigned for tactical use by ARVN artillery, U.S. tactical air and VNAF tactical air. These areas could be changed within minutes, as the tactical or weather situations required by simple coordination procedures developed by the FSCC and the DASC. The two coordination centers (ARVN/VNAF) worked in complete harmony with excellent results obtained between both air and ground force operations. At Da Nang the Direct Air Support Center (DASC) moved its operational support to Hue while a monitor and skeletal staff remained at Da Nang. The move was made so that direct air support could be more easily provided and coordinated with the ARVN Tactical Operations Center (TOC) which had also moved to Hue. The DASC (Forward) at Hue is now fully manned and operational except for teletype service.

---

\*Located northwest of Saigon, Lai Khe was the center for controlling the defense of An Loc.

[REDACTED]

The field trips were beneficial. It was gratifying to observe that tactical flexibility and coordination is being developed between the ARVN and the VNAF and that progress is being accomplished in this area of the Vietnamization program.

The Advisory Group also received observations from ALO Advisors concerning  
122  
a substantial increase in ARVN and VNAF understanding and coordination:

(C) Much of this has been accomplished through advisory efforts, but both the ARVN and VNAF have come to the realization that better cooperation and resultant effectiveness is necessary to meet the threat of the present NVA offensive. In MR II, cooperation and understanding is being created between ARVN and VNAF by a daily frag meeting held to discuss the results and scheduling of air operations. Besides the obvious benefit of providing coordination for the Direct Air Support Center activities, it brings the VNAF and ARVN together to discuss their mutual problems and creates an atmosphere of joint responsibility.

Another example of the developing rapport between the ARVN and VNAF was a party held at II Corps Headquarters in July to commemorate the VNAF anniversary. All VNAF and ARVN field grade officers in MR II and their advisors were invited. MGen Toan, ARVN II Corps Commander, addressed the gathering.

123  
AFGR summarized his speech as follows:

(C) Highway 14 was opened yesterday. This victory was brought about by the efforts of all military in MR II, including ARVN, Armor, Ranger, Air Force, etc. . . . Today is also the birthday of VNAF, and I would like to greet your 17th birthday. I take this opportunity to say some words to the VNAF. In the past, small incidents between VNAF and ARVN have grown to large misunderstandings, and some high ranking officers on both sides have been disturbed. Today I clearly say to you that we forget all of the past and I hope all of us will unite in one block to get more victories in MR II.

Col Truong, 2d Air Division Commander, responded:

(C) As the representative of all VNAF in MR II, I thank you, General, for this meeting in recognition of our 17th birthday. I promise to make every effort to get better results from our Air Force. I take advantage of this opportunity to present to you, General, the difficulties we have now and will have in the future. Some facts are that 18 months ago we were only 3,000 VNAF in MR II; today we are over 12,000. This year we will increase to over 15,000. And we are to receive yet another 200 aircraft. With this rapid development of our Air Force, there are not enough specialists, and those we have are very inexperienced. This creates a great deal of trouble in our maintenance. We are exerting every effort to improve this situation, but it will be a long time before it is better. We ask you sincerely to try to trust us, and we hope in the future that together we will get more victories for MR II.

(U) As a result of CSAF interest in the matter, the AFGP took some important steps to improve the advisory effort. The importance and prestige of TACS was emphasized by upgrading the senior TACS advisor position in each military region from Lt Colonel to Colonel. This enabled the Advisory Group to resolve Vietnamese interservice command and control problems on a much higher level in command structures. Unit and division commanders were then permitted to consider joint problem areas before they degenerated into serious conflict. More ALO advisors were also assigned. Four "highly qualified and experienced field grade officers" arrived in RVN on 14 June 1972, and AFGP assigned them as advisors to the VNAF ALOs at ARVN Division headquarters.

(U) The new advisors are former Forward Air Controllers or ALOs, and are graduates of the USAF Air Ground Operations School. This additional advisory effort will improve the effectiveness of the VNAF ALOs and

[REDACTED]

provide significant improvements to the VNAF Tactical Air Control System at the important juncture of ARVN-VNAF coordination.

Although there is no evidence that the VNAF substantially improved the ALO rank problem, the AFGP did try to improve their expertise. Many experienced ALOs were being reassigned to operational duties, and their replacements were often ill-trained. The Advisory Group, therefore, arranged for new ALOs to attend the AGOS at Tan Son Nhut for initial refresher/training  
127  
sometime between September and November 1972.\*

(U) Another important milestone in making the ALO a more effective advisor to the ground commander was the publication of the ALO Advisors VNAF Air Request Guide in April 1972. The AFGP Staff Digest described  
128  
the pamphlet:

(U) This guide consists of 6 pages measuring 5 x 8 inches. The first printing is excellent, and we anticipate the Guide will see extensive use in the field. Briefly, the Guide consists of a glossary of tactical air strike terms and abbreviations, a list of VNAF ALO duties, and air request forms for close air, helicopter, and medevac support. The Guide is the product of eight weeks of intensive work and cooperation by AFGP at the request of . . . ALO Advisors. Several copies have been given to the VNAF with a recommendation for translation and adoption for VNAF and ARVN use.

#### Intelligence Problems (U)

(U) To correct the VNAF TACS' poor intelligence gathering and  
129  
dissemination techniques, the AFGP organized an Intelligence Mobile Advisory Team (IMAT) in April 1972. This action was in response to:

---

\*The AGOS curriculum had been enhanced in May with the arrival of a USAF film, Tactical Air Control Party, SFP 1330.

[REDACTED]

(1) the neglect of VR in MR I, and (2) the untimely intelligence information which hampered the 3d VNAF Air Division's support of the An Loc operations:  
130

(U) Lai Khe is presently the center for controlling the defense of An Loc. Located there is the 5th ARVN Division TOC, III Corps Forward TOC, TRAC\* Forward, III DASC Forward and 3rd Air Division Forward. Each of these units has an intelligence element and receives some form of intelligence input separate from the others. The timely dissemination of information to the other units has become a problem. VNAF had been briefing aircrews without the most current information.<sup>131</sup>

The AFGP representatives brought all of the intelligence affairs together and helped to establish a central point at Lai Khe where the most current data could be visually displayed. During the second week in May, the AFGP sent the IMAT to the VNAF 3d AD Intelligence at Bien Hoa, which also aided the flow of intelligence data concerning the An Loc operation. The most important development to come from the visit was the decision to translate the AFGP hand-held camera briefing into Vietnamese for presentation by 3d AD intelligence personnel.

(C) While the AFGP had been trying for some time to improve VNAF VR through use of hand-held cameras, the program had encountered some obstacles which advisory personnel were trying to overcome:  
132

(C) Of the original 30 cameras made available to the VNAF, only 15 were serviceable. At present, there are 30 additional cameras in the USAF inventory that are projected to be turned over to VNAF in the future.

---

\*TRAC--Targets Research and Analysis Center.

[REDACTED]

Funds are available to purchase additional cameras to provide a planned inventory of 64.

A supply source and distribution procedures were also established to provide camera film to the field.

(C) The IMATs also visited Nha Trang, Da Nang, Phan Rang, and Pleiku between April and August of 1972. The problems they uncovered were such things as:

- (C) . No intelligence situation rooms where the ARVN G-2 or VNAF intelligence personnel could brief/debrief aircrews. This particularly hampered the effectiveness of VR flights.
- (C) . No FAC Daily Intelligence Summary (DISUM) was used in briefing aircrews, even when FAC DISUM was available.
- (C) . Since there was no situation room, there were no wall charts for visual display of ground fire and order of battle information.
- (C) . Reporting of BDA and aircraft battle damage information was slow or neglected.
- (C) . VR operations were not being coordinated with ARVN G-3.
- (C) . The FAC DISUM program was largely ineffective (especially in MR I). No intelligence personnel are assigned to FOLs.
- (C) . What little intelligence information was available for the aircrews was being provided by the VNAF ALOs. But the ALOs were neither trained to provide intelligence nor to conduct intelligence oriented briefings or debriefings of VNAF FAC aircrews.

Through the visits and efforts of the IMATs these problems began to be corrected. In addition to the already mentioned improvement in ARVN/VNAF relations and the AGOS refresher training for ALOs, the AFGP also negotiated

[REDACTED]

an increased flow of intelligence information to the VNAF. Both 7AF and the VNAF augmented the DASCs with intelligence officers. The AFGP also recommended to VNAF that it assign intelligence NCOs to each ALO function to provide assistance in FAC briefing/debriefing. In II Corps, the ARVN G-2 agreed to: (1) joint briefing and debriefing of VNAF/ARVN VR missions flown in II Corps and (2) the use of the G-2 darkroom to process VNAF hand-held camera photography. Additionally, the AFGP obtained copies of two movies on NVA/VC AAA weapons and 122mm rockets. 133

(C) These films are being reproduced and will be forwarded along with a translated script to each VNAF operational intelligence office. The 122mm rocket film describes the rocket, its capabilities, and use. It will provide VNAF aircrews information on countering the 122mm rocket threat. The AAA film provides excellent information on all major AAA weapons available to the NVA/VC, stating firing characteristics, flash signatures and other prominent recognition features.

(C) By August, the IMAT began to report some encouraging results from their visits. For example, their report on Phan Rang AB noted that: 134

(C) Excellent coordination has been established between ARVN G-2, Regional Forces and VNAF, with an exchange of information conducted on a daily basis. Development of the intelligence graphic displays, located in Wing Headquarters, is complete. Order of Battle, SA-7 high threat areas, and current operations are being posted. Intelligence provides, on a daily basis, a local/country-wide intelligence briefing to the Commander and his staff. Action is being taken to secure an aircrew briefing/debriefing facility on the flight line, and to increase an aeronautical chart stock. The intelligence personnel assigned to the 92d Wing reflect a positive, "can do" spirit and a high degree of professionalism.

(C) The AFGP also sent a team to investigate the VNAF VR program. The study group reaffirmed what the ALO Advisors had been complaining about for

[REDACTED]

over a year--that the FACs had not been flying VR missions. A contributing factor to this was built-in rigidity of the VNAF Daily Air Activities Report  
135  
(DAAR):

(C) Missions flown for Combat Observation of Battlefield (COB), Convoy Escort (CE), Coastal Surveillance (CS), and Artillery Adjustment (AA) are reported as VR because the DAAR does not provide for reporting of these missions. Although some VR does take place during the course of these missions, the study group is recommending the DAAR be changed to reflect specific missions, including VR.

(C) Nevertheless, the VNAF FACs, at least in some military regions, were making rapid strides in VR improvement. After visiting Pleiku AB in  
136  
late July, the IMAT reported that:

(C) Results of this indicate significant progress is being made in all areas of intelligence operations. A visual reconnaissance (VR) map of MR II, at a scale of 1:50,000, has been constructed in the intelligence briefing/debriefing area. About one fourth of this map has been covered with acetate and significant intelligence information annotated. Each annotation of struck targets gives the coordinates, date struck, crew designation and BDA in detail. It also reflects a history of intelligence operations information throughout MR II, allowing the intelligence function to keep track of all struck targets, VC/NVA concentrations, and friendly operations.

Though some aircrew debriefings were still being conducted by telephone, the debriefings were improving. Aircrews were briefed weekly and given  
137  
daily intelligence updates:

(C) Information concerning high threat areas, SA-7 operating areas and hot items are given to each squadron daily and posted on their bulletin boards. Aircrews have recently been shown AAA, 122mm rocket and E & E (Escape and Evasion) films. The working relationship among the 72nd Wing intelligence, II DASC

[REDACTED]

and ARVN II Corps G-2 Air has improved significantly with the cross-feed of information now moving easily among all functions. The USAF Chief of ALO Advisor at II DASC is impressed with the manner in which information is now being passed.

(U) In September 1972 the AFGP conducted an ALO Advisor Conference at Tan Son Nhut AB. The participants noted significant improvements in the VNAF TACS:  
138

(U) It is apparent from this conference that the VNAF, with concentrated advisory effort in certain areas, can become self-sufficient in this function in the very near future. The VNAF TACS has demonstrated rapid improvement in the last four months. . . .

MRC-108 Communications Jeeps (U)

(C) The MRC-108 radio jeep is the only equipment that meets all the requirements for rapid deployment and reliable communication necessary to control of the tactical air situation as it develops. Our failure to provide them with this equipment will result in the VNAF always being there too late and without the capability necessary to provide the tactical air support required by the highly mobile ARVN ground forces. 139

(C) Under the VNAF Improvement and Modernization Program, USAF had programmed each DASC and 31 of the TACPs to receive the MRC-108 radio jeep. However, by July 1972, the VNAF possessed only 17 of these jeeps, and many of these had maintenance problems. The ALO Advisor to III Corps wrote in January 1972, "The biggest problem in [the air request system] has been the maintenance of the MRC-108 palletized radio equipment." 140  
141 Another ALO Advisor reported:

(C) The HF is inoperative and must be returned for repairs. The old HF works but only for short periods. The pallet is used only rarely in order to preserve

[REDACTED]

the radios and generators. A VNAF maintenance system is mandatory for the old and/or new radios.

In addition to palletized radios being in poor condition, one advisor reportedly had the jeep flown to Bien Hoa by helicopter for repairs. "An inspection revealed a cracked engine block; two dead batteries, an inoperative fuel pump, and the radiator was pushed in." <sup>142</sup> The advisory reports contained many similar instances of abuse and lack of maintenance on the MRC-108 system. The advisory group initiated a maintenance training program for the palletized equipment under the guidance of the 505th Tactical Control Maintenance Squadron, but there were no reports of significant improvement in this area.

#### FAC Aircraft (U)

(S) In November 1972, the AFGP asked permission to transfer 35 O-2 aircraft to the VNAF. With the withdrawal of U.S. forces, 7AF recognized that the VNAF needed a higher performance FAC aircraft than the O-1E/G or U-17 for certain missions. The performance of these aircraft was unsatisfactory for FAC and VR operations in the highlands and in areas of high threat from ground defenses. To counter this threat, the VNAF had been forced to use the A-37 as a FAC aircraft. This had caused a degradation of the combat air support mission in MRs I and II. In its <sup>143</sup> rationale for the transfer of O-2s, the AFGP wrote:

(S) Of greater significance is the potential the O-2 possesses for increased operational capability. Its greater range, airspeed (150 KTAS [Knots True Airspeed] vs 100 KTAS for the O-1), loiter time and load carrying capacity would enable the VNAF to cover MRs I and II with less aircraft.

[REDACTED]

The Commander-in-Chief, Pacific Command, quickly approved the exchange of the O-2s for O-1s on a one-for-one basis. Seventh Air Force set up an O-2 school at Tan Son Nhut AB to train VNAF pilots, and 38 pilots were trained by February 1973. At the same time, the AFGP established a maintenance school for 60 technicians at Tan Son Nhut AB. <sup>144</sup>

(S) Although the Advisory Group had worked hard to provide the training, education, and equipment needed to make the VNAF TACS self-sufficient, the success or failure of these efforts was to rest on other factors often overlooked by USAF managers.

[REDACTED]

CHAPTER VI

IMPEDIMENTS TO VIETNAMIZATION (U)

(C) . . . General Clay is concerned about our evaluation of the VNAF and its ability to take over the air war after we leave. He thinks our normal measurements may be incomplete or even biased by our optimistic conviction that Vietnamization must be successful. For these reasons he has asked me to solicit your help in assessing our progress in Vietnamization at the working level. . . .<sup>145</sup>

(C) When Brigadier General Moore wrote this letter in July 1971, he was expressing a concern reflected in few other official documents from the Vietnamization era. Most reports were optimistic, emphasizing equipment turnover schedules, number of personnel trained, facilities transferred, or aircraft sorties flown--all the usual measurements Air Force managers use to evaluate the success of a project. When a problem area did get mentioned, the explanation was usually that it was an equipment or training problem and that steps were being taken to train more people or acquire better equipment. While expertise and good equipment were essential to an effective TACS, another important ingredient for success was being overlooked. That ingredient was the Vietnamese environment.

The Language Barrier (U)

(C) In February 1972, Capt Cavanaugh, an ALO Advisor, reported the following: <sup>146</sup> (U)

(C) Since most of the advisors do not speak Vietnamese, know their customs, or were ever really prepared for

[REDACTED]

the advisory role, it is no wonder we have difficulty getting our point across to the VNAF. These jobs in the field should all be voluntary if possible and some orientation into Vietnamese life should be given.

(C) At the same time Capt Cavanaugh made the above criticism, the AFGP Staff Digest reported on the ALO Advisor Qualification Program. <sup>147</sup>

(C) The Air Liaison Officer Advisor Program, since its inception in 1970, has relied on officers already experienced in Tactical Air Control System procedures. They were qualified Forward Air Controllers and Air Liaison Officers. Many of these officers also had previous fighter aircraft experience. With a minimum of orientation, they were able to advise and assist the VNAF ALO and his staff at Corps and Division levels. The Advisory Group is now receiving replacement ALO Advisors direct from the CONUS (Continental U.S.) who have completed FAC training and attended the Air Ground Operations School at Eglin AFB. Upon arrival in theater, prospective ALOs advisors will checkout in O-1 liaison aircraft. These officers will also receive a thorough indoctrination at AF Advisory Group level and at ARVN Corps and Division level from US Army and Air Force advisory personnel before assuming their duties. This extensive orientation program is designed to familiarize the inexperienced ALO advisor in all facets of the VNAF Improvement and Modernization Program and thereby assure effective coordination with other advisory efforts when he assumes his duties. In this way, the AF Advisory Group will continue to provide ALO advisors who are fully qualified to advise and assist the VNAF ALO, and thereby develop a strong and flexible tactical air control system.

There was no mention in any of the AFGP Staff Digests that "thorough indoctrination" included training in the Vietnamese language or culture.

(C) Other ALO Advisors also complained that unfamiliarity with the Vietnamese language was hampering their ability to evaluate the VNAF TACS. In November 1971 the ALO Advisor for the 18th ARVN Division in MR III reported, "Briefings were conducted before and after each

[REDACTED]

mission, but it is difficult to determine the quality because of the  
148  
language difference. . . ." The ALO Advisor to III Corps expressed  
149  
a similar handicap in assessing ARVN/VNAF planning meetings:

(C) The Corps ALO attends the III Corps weekly planning sessions and from discussions, the advice of the ALO is frequently requested. I do not attend the briefings as I was informed that it [sic] was strictly for Vietnamese. With only Vietnamese present and no interpreters, it would be useless for me to be present. . . .

This failure to train advisory personnel in the Vietnamese language and  
150  
customs persisted until the final U.S. withdrawal from Vietnam.

(S) In a report entitled "Counterinsurgency Lessons Learned: July-December 1964," published in January 1965, the Hq Second Air Division (Operations Analysis) made observations concerning the training of USAF  
151  
advisory personnel:

(U) 1. SUBJECT: Vietnamese Language Proficiency.

(S) 2. BACKGROUND/DISCUSSION: One of the greatest shortcomings or handicaps confronting USAF personnel associated with the Vietnamese, is that they are not able to understand, read or speak the Vietnamese language. The same applies to the Vietnamese with respect to English, more seriously at lower echelons of command. At these levels, the Vietnamese officers are, as a rule, not as well educated and, as a consequence, less proficient in English than those officers at higher echelons. This communication problem seriously hampers the role of the advisor.

a. It is aggravated by the fact that the Vietnamese will listen to the advisor and shake their heads in agreement. The advisor, however, senses that he is not understood.

b. The American is, no less, in the same predicament. He likewise does not understand the Vietnamese and is reluctant to admit it. He is, therefore, placed in a position of pestering his counterpart to find out what is going on.

[REDACTED]

c. The lack of knowledge of the Vietnamese language, in particular by USAF members of AOC and the four ASOCs,\* has permitted the VNAF officers in these centers to conduct operations without USAF's knowledge, has frequently deprived USAF of important intelligence data, and has made combat reporting of VNAF activities exceedingly difficult.

(S) 3. CONCLUSIONS/RECOMMENDATIONS: The ability to communicate with the Vietnamese would be a great asset to Americans in the conduct of their mission. It is therefore recommended that consideration be given to provide Vietnamese language training to USAF personnel that are to work in the future with Vietnamese counterparts.

Precisely how many ALO Advisors had learned to speak Vietnamese on their own is not known. While many of the VNAF ALOs could speak English, some could not.

(U) In 1965 the Rand Corporation produced a study entitled "The American Military Advisor and His Foreign Counterpart," RM-4482-ARPA,\*\* which probed the motivational factors influencing the Vietnamese. In addition to addressing the language problems, the report offered in-depth analysis of other problems U.S. advisors encountered, i.e., the so-called "inscrutable oriental mind," the French influence on the Vietnamese military structure, the importance of family ties and ancestor worship, the apparent lack of a sense of time, apathy toward preventive maintenance, and taking daily siestas even while on military duty.

---

\*ASOC--Air Support Operations Center (referred to as Direct Air Support Center after 1965).

\*\*This report offers a comprehensive discussion of most of the problems encountered by USAF advisors, and the interested reader is encouraged to review it.

[REDACTED]

The VNAF Standard of Living (U)

(C) One of the most serious motivational factors affecting Vietnamese self-sufficiency was a totally inadequate military compensation structure. In response to complaints from advisors that their VNAF counterparts spent too much time away from the DASCs and TACPs, often failed to come to meetings, were never around on weekends, and resisted deploying to FOLs, the Advisory Group prepared a study on VNAF living standards in January 1972.

152

This study revealed that:

(C) Real wages of the military declined continuously from 1965 to 1971. Although the military received a small wage increase in November, the disparity between civilian and military wages remains large.

(C) Disparity between the consumer price index (CPI) and the military wage index increased each year. The military wage index for 1972 was projected to be 50 percent below the CPI. In contrast, civilian wages have kept pace with the CPI.

(C) VNAF members suffer from protein-deficiency, while the amount of rice in their diet is adequate, because of high prices they forego purchase of protein-rich foods.

(C) Compared to the civilian population VNAF members and their dependents receive excellent medical care.

(C) The need to supplement income by holding a second job or by sending the wife out to work is a direct result of low real income. Air bases adjacent to the population centers of Saigon, Da Nang and Nha Trang are preferred because job opportunities are more readily available. U.S. withdrawals severely reduced VNAF employment opportunities.

(C) A dependent shelter program for VNAF families was not progressing because of unavailability of construction

[REDACTED]

equipment, lack of a dedicated work force, and decreasing civil engineer manning.\*

(C) The VNAF standard of living received top-level USAF concern during the Spring Invasion in May 1972. Major General Bray, USAF Special Assistant for Vietnamization, wrote to the Chief of the Advisory Group:

(C) . . . General Lavelle expressed concern that the VNAF could not shift firepower geographically or apply it around the clock above the squadron level. This . . . is due in part to the fact that many of the VNAF, by necessity, have second jobs and would suffer financially if moved, even temporarily, from their home base. . . .

(C) In his reply to General Bray's letter, the Advisory Group Chief, Major General Jumper, noted that although military pay was the basic problem, the issue could only be placed in full perspective by examining the cultural environment of the Vietnamese. He addressed four specific aspects in his letter:

(C) a. The Family Unit. The typical Vietnamese family household of seven individuals includes parents, brothers, sisters, often grandparents, and of course the individual's own wife and children. The broad composition of this basic family unit adds two unique ingredients to the family economic structure. First, all members who are able, normally generate income and contribute to the group survival. The "military sponsor" is not the sole contributor. Secondly, because of the Asian cultural tradition of close family ties, PCS [Permanent Change of Station] movement of the military member often results in a move for the entire family. The consequence of this uprooting is severe economic hardship through loss of family non-military income until new means of income are established. This has the greatest impact on married enlisted men and junior officers and often a PCS can be

---

\*For more complete coverage of the topics summarized here, the reader may wish to review the referenced study, which is on file at the USAF Archives at Maxwell AFB, Alabama, on CHECO microfilm roll S-820, frame 105.

[REDACTED]

economically devastating to the family. Senior officers are generally not similarly affected as many are independently wealthy, come from wealthy families, or have outside sources of income. Although many VNAF families are separated by PCS of the military member, it is an unacceptable penalty to Vietnamese family integrity and a morale factor of great significance.

(C) b. Traditional Family Commitments. Status virtually demands that VNAF members above the rank of Sergeant own at least a small motorcycle. The estimated percentage of vehicle ownership in the VNAF is approximately 70%. While the cost of a small Honda may be inconsequential in many societies, it is indeed a major and unavoidable expense in this society. Family commitments for burial sites and elaborate, symbolic religious markers often result in long term indebtedness.

(C) c. Moonlighting. A recent study entitled Living Standards in the Vietnamese Air Force briefly discusses off duty employment. The study indicates that 25.9% of 1,083 VNAF individuals surveyed moonlight to some extent, suggesting that this factor may not be as important as the "other" income provided by the other family members. It is impossible to accurately assess the impact of moonlighting on job effectiveness. The wide variations in availability and type of employment, hours worked, salaries and individual differences preclude a meaningful statistical analysis. My personal opinion is that moonlighting is practiced by more than 25.9% of the VNAF personnel; however, because of personal pride, the possibility of criticism, or the loss of face, the true extent of moonlighting is not really known.

(C) d. Cost of Living. At this point we quickly zero in on the pay deficiencies of the VNAF airmen. The average airmen's salary is \$17.28 (US). The monthly cost of feeding one individual on the Vietnamese economy is \$15.00 (US). This leaves a balance of \$2.28 (US) for housing, clothing, burial commitments, transportation, and to feed the other members of the household! The case of the single airman is less severe inasmuch as his subsistence costs are only 30% of his average salary. Nevertheless, he also incurs many of the costly family obligations previously mentioned. It is not difficult to perceive that the average Vietnamese airman and junior officer must rely on other sources of income merely to

[REDACTED]

meet the cost of the absolute necessities. Because of the instability of income from moonlighting and other family members, financial distress is a common occurrence. One cannot escape the conclusion that improved pay for the VNAF is a must.

Improving pay for the VNAF was not easily done, as General Jumper  
155  
observed:

(C) Obviously, the magnitude of pay increase required to bring the military in line with the civilian working class is beyond the capability of the GVN [Government of Vietnam]. Furthermore, since the military represents approximately 15% of the overall work force, a sharp rise in military pay would only contribute to the great inflation spiral being encountered at this time. Also, under the current military structure I see no way the VNAF pay alone can be raised without reforms in the overall RVNAF pay schedule. It is only fair, however, to try to resolve the inequities militating against an individual's welfare while performing unusual and hazardous duties for his Government. I feel that the most opportune and immediate possibility of increasing pay, without upsetting economic stability would be to include VNAF tactical units and direct supporting elements in the relatively new Provisional Special Allowance (4,500 Piasters). . . .

Including VNAF tactical units under the provisional special allowances would not be enough to adequately compensate the VNAF and eliminate the need to hold second jobs. As the U.S. military forces withdrew, a prime source of second jobs disappeared. Therefore, widespread looting and graft were commonplace as USAF turned equipment and supplies over to the VNAF.

(U) The low VNAF standard of living and the extramilitary interests had a deleterious effect upon the individual's job efficiency, integrity,  
156  
and his unit's operational requirements.

[REDACTED]

(U) Though an operational emergency may require the unit to send one or several individuals on a short-notice assignment to another base, the subjects may resist this transfer because of their business dealings. Obstructionism is especially acute if the individual is currently engaged in a business negotiation. Naturally, he will place the welfare of his family ahead of the unit's operational requirements; feeding his family is his first priority. Furthermore, the necessity of an officer supplementing his income naturally leads him into the dangerous "gray-area" of corruption and black marketeering. It is assumed that most officers at the headquarters level have a far greater capacity to capitalize upon their official positions than do officers in subordinate units, where time-off is liberally given. Thus, moonlighting may have a considerable effect upon one's professional performance and integrity.

157

The same report went on to observe:

(U) Because of the requirement that no officer undertake menial tasks when seeking off-duty employment, most officers send their wives to work. In addition, many USAF advisors have been informed, by their counterparts, that a large number of officers receive stipends either from their families or from wealthy benefactors. One VNAF officer remarked that the average officer is unable to feed his family for a period greater than 10-15 days per month on a military salary.

(U) Since their plight is even more precarious, enlisted personnel are virtually compelled to moonlight. This necessity precludes many supervisors from scheduling twenty-four hour operations and, thereby, deriving maximum efficiency from their manpower resources.

#### VNAF Leadership (U)

(S) In late 1971, Headquarters Military Assistance Command, Vietnam, initiated a project to assess the leadership of the Vietnamese armed forces. At that time, senior officers in Seventh Air Force and the Advisory Group rated VNAF leadership at the top as "good, perhaps better than we expected considering the massive expansion of VNAF in little over a year."

158

[REDACTED]

(S) The same assessment cautioned against rating the VNAF leadership on purely "western standards." Because of the different standards for leadership in the Vietnamese cultural milieu, factors which Westerners might consider to be vital in making good leaders in the USAF might be considerably less important in a military service that promotes its officers on friendship rather than on merit.

159

(S) Loyalty in Vietnam, for example, is still largely to individuals rather than to a set of principles, or a constitution, la patria or some other intangible base. Vietnam, as a nation, has had no opportunity to develop a sense of nationalism, thus loyalty to the nation is not yet the motivating force it is or at least used to be in the U.S. or U.K. [United Kingdom]. . . .

(S) As an example of Oriental philosophy affecting thinking of VNAF leadership, I can cite the attempt to develop four air forces, one in each MR, rather than one with strong central direction. Having convinced the VNAF that their prime mission is support of the ground forces, we are now having trouble explaining that the limited VNAF assets must be centrally controlled so that JGS can mass air power as needed, regardless of basing locations. In my opinion, the apparent willingness of top VNAF commanders to accept the "warlord" concept is a weakness, and indicates a failing to appreciate the necessity for central planning for the use of air assets.

[REDACTED]

CHAPTER VII  
CONCLUSION (U)

(C) Despite a host of problems, the VNAF TACS did evolve into a workable system by the time of the cease-fire. On balance, the Advisory Group had done a remarkable job of training and educating the VNAF in tactical air control functions and concepts, especially in view of the limited amount of time they had to do the job and the number of obstacles to be overcome. Moreover, the VNAF TACS had an adequate supply of modern equipment and a promise of continued Military Assistance Program aid.

(C) In the writer's opinion, however, if the VNAF TACS is to remain viable, improvements of the following shortcomings must continue to be made:

(C) 1. The Vietnamese inclination to ignore the need for preventive maintenance, especially of communication and radar equipment.

(C) 2. The assignment of non-rated junior officers as Air Liaison Officers and Forward Air Controllers.

(C) 3. The failure to replace or punish officers who demonstrate inefficiency or cowardice, because these officers have friends or relatives in high places.

(C) 4. The failure to adequately compensate military members, thus promoting corruption and operational standdowns through absenteeism.

(C) 5. The failure to streamline procedures for authorizing missions, thus losing the opportunity to improve response time to ARVN immediate air requests on a regular basis.

**CONFIDENTIAL**

In summary, this conclusive verity was noted by a U.S. military observer in 1970, "In the final analysis, esprit [de corps] and dedication to the job is largely a Vietnamese problem, and therein lies the primary test of Vietnamization."<sup>160</sup>

**CONFIDENTIAL**

[REDACTED]

APPENDIX\*

The following is a verbatim excerpt from a Special Report by David A. Brookbank, Major, USA, 3rd ARVN Division ALO Advisor -  
Subject: VNAF TACS and the Fall of Quang Tri, dated 31 July 1972.

1. (C) Introduction. The duties of Advisor to the VNAF ALO of the 3rd ARVN Division were assumed on 6 March 1972. This report covers the period 6 Mar thru 1 May 72. Because of the large number of critical events contained, this report will be divided into four distinct periods or phases. Each phase will be handled chronologically and summarized individually. Following the chronological report is a section devoted to effective tactics used against the NVA and a summary dedicated to the analysis of major problems in the tactical air control system (TACS) observed at Quang Tri. After the conclusion, an appendix containing a list of US Army/USMC advisors and USAF TACP personnel is presented.\*\* The gravity of the situation on 1 May necessitated the destruction of all USAF records and logs. It must be understood that most dates and time periods can only be approximate.

2. (C) Phase I (6 Mar - 30 Mar 72). The time period just prior to the NVA invasion, presents an overview of major problems and typical situations encountered in the ALO advisory effort for the 3rd ARVN Division at Quang Tri. Throughout this period a concerted effort was made to improve all areas of VNAF support. The most critical areas addressed were involvement of the VNAF ALO in ARVN division staff planning, improvements required in VNAF FAC performance, and increasing VNAF helicopter supply responsiveness to ARVN needs. Each of these problem areas were to be major contributors to the decreased effectiveness of the VNAF TACS during the critical periods to follow. Some of the factors that should be taken into consideration is that the VNAF completed assumption of TACP operational responsibilities in I Corps as recently as only three months prior to the NVA invasion. The 3rd ARVN was a "new" division and liaison problems had not been completely resolved. Additional handicaps were present at Quang Tri. VNAF ALOs in general do not have the rank necessary to command instant respect. Therefore a long time period has to elapse before the senior ARVN staff and the ALO can merge into an effective operational team. There is a recognized need for VNAF officers to "moonlight" in order to subsist in the civilian economy. Therefore some VNAF personnel are absent from their post for a few days at a time in order to take care of family requirements.

\*See Glossary for explanation of acronyms not defined in this Appendix.

\*\*That list has been omitted from this extract.

[REDACTED]

a. The VNAF ALO. Capt Tu's performance did not come to expected standards during critical periods of battle. Although the ALO was not invited to participate in some ARVN planning sessions, on other occasions when Capt Tu was requested to attend he would not. The necessary working relationship had not been generated by the start of the invasion between the ARVN staff and the ALO. Advisory efforts were made more difficult as Capt Tu could speak very little English. However, use of an interpreter was not very successful either. A major problem occurred in getting the ALO to establish proper and firm operational control and supervision over FAC activities. VNAF FACs are capable of heroic performance of duty as I have personally witnessed. However, they must be properly led. Since the ALO, Capt Tu, has not flown operationally for over two years he was handicapped in any efforts to establish proper controls or rapport with VNAF FACs. The ARVN staff did not exert any influence in support of the ALO nor did they insist on the initiation of an effective visual reconnaissance (VR) program.

(1) An ALO should be encouraged to fly and maintain a current and constantly updated concept of operational problems and situations. It is also important for an ALO to brief and/or debrief FACs on critical missions. As the representative of the VNAF the ALO must not allow air support procedures and schedules to become fixed and inflexible. Capt Tu never attained these necessary operational aspects vital to an effective ALO.

(2) The TACP at the 3rd ARVN Division had a MRC-108 radio jeep. These jeeps had just been turned over to the VNAF recently and training in proper care and maintenance was neglected during their deployment to the field. Insuring the filters stayed clean in the high dust environment was a constant problem. TACP operations were limited to daylight hours with personnel present but sleeping during the night. It was extremely difficult to obtain TACP assistance when VNAF night flare ship support was required.

b. VNAF FAC Operations. Contributing to the surprise invasion of Quang Tri from the north was the absence of any intelligence inputs from VNAF FACs to the 3rd ARVN. It must be understood that this report does not reflect criticism on all VNAF L-19 pilots and observers. I have flown with several brave VNAF O-1 pilots and can attest to their courage. I feel that there is more of a breakdown in command and control effort brought about, perhaps, by the extended period of low activity prior to the NVA offensive. FAC missions needed to be closely monitored and aggressive measures should have been taken by the ALO to assure compliance with mission requirements. An ALO with the rank of Major or Lt Col that can and will demand, command and receive support from VNAF FAC units would go a long

[REDACTED]

way toward eliminating weaknesses in the VNAF TACS observed at Quang Tri.

(1) One of the areas to receive special advisor attention was visual reconnaissance (VR) of sensor activations in the northern I Corps sector. Sensor activations were given a routine non-flexible response consisting of a fixed number of artillery rounds fired. For example, two rounds of 175mm, six rounds of 155mm, or ten rounds of 105mm were expended at the site of each sensor activation. No attempt was made to confirm or pinpoint the source of these activations by VR. In cooperation with Army Advisors a program was suggested and did receive the cooperation of the 3rd ARVN Staff and VNAF ALO in an attempt to obtain VR of the significant sensor activity. Enroute to their assigned VR areas, the VNAF FAC was assigned one or two sensor activated areas to cover. This was one operation to which the VNAF ALO started to give some support. However, this program did not yield results because there was insufficient time available prior to the NVA invasion to develop proper operational response from the FACs to reporting requirements.

(2) This time period was one of no significant major enemy contacts. VNAF FACs with one or two exceptions made no intelligence reports. There were no supervisory efforts by the FAC detachment leader, ALO or ARVN staff to correct the situation. The ALO did not attempt to insure FAC compliance with fragged area coverage. On one occasion about 15-20 Mar, the ALO Advisor visited the Quang Tri Air Base to inquire into the whereabouts of FAC missions. There were gross differences between flying hours reported by the FAC detachment and flying times as reported by the pilots as well as the number of aircraft reported as airborne against the number observed on the ground. Later that day the Base Commander ordered that the base be closed to the ALO Advisor, and that all information requested must be processed by the VNAF ALO in the future.

(3) As ALO Advisor, two flights were made with a VNAF L-19 pilot to adjust Navy gunfire in the DMZ using the call sign of Wolfman 01. Of interest was the flight conducted on the morning of 30 Mar 72 between 0945 and 1200 hours. The mission covered the eastern part of the DMZ adjusting Naval gunfire (NGF) and 3rd ARVN artillery out of firebase Alpha.

(4) The flight was being conducted at 800-1000 feet under a low overcast ceiling when a squad of NVA infantry was spotted moving south. I took them under fire with a CAR-15, given to me by US Marines, while waiting for ARVN artillery and NGF to adjust their guns to the target. Return ground fire from many AK-47s was observed coming from both sides of the Ben Hai River. The VNAF aircraft just to the west later

[REDACTED]

reported no significant activities or sightings. This may be considered as an indication of VNAF FAC performance although circumstantial. US FACs, US Marines, and US Advisors when on a mission of this type never failed to spot bunkers, trails and even troops in the open. Regardless of US mission sightings the standard VNAF FAC VR reports produced no significant results.

c. VNAF Helicopter Operations. VNAF helicopter resupply lacked positive and responsive control supervision by senior VNAF commanders and/or the VNAF ALO. More than 20 helicopter resupply missions were flown and personally observed. There was an obvious general lack of support of the ARVN units and an almost complete disregard for the 3rd ARVN Commander's desires since many missions were terminated early incomplete. On several occasions prior to the invasion Gen Giai was forced to consider declaration of a Tactical Emergency when VNAF helicopters failed to resupply a firebase and isolated units in the field.

(1) Many helicopters were personally observed to quit flying at 1530 to 1600 hours. One of the reasons given was that the crews received very little money for extra work. This was stated by one of the helicopter pilots. On many missions, tons of supplies left on the field at La Vang had to be reloaded on trucks and transported back to warehouses when ten more sorties by the slicks would have eased existing emergency resupply conditions at forward bases and might have effectively bolstered the front line soldiers morale and willingness to fight at the start of the offensive.

(2) On 14 Mar a general staff meeting of the complete Command Staff was held discussing general plans for the coming year. The Commanding General warned the staff not to expect complete support from the VNAF. The staff was instructed to plan all operations and resupply by ground transport avoiding dependence on air resupply. A multitude of factors were mentioned by the Commander in support of this decision ranging from soldiers dying in the field waiting for MEDEVAC, TAC emergency required for resupply of units, lack of information from L-19 sorties and finally a lack of visible professionalism in the VNAF ALO and his duty officers. This ARVN statement on VNAF support was not entirely unjustified and is mentioned only to indicate the pressures exerted on the VNAF ALO position.

d. Summary. This time period 6 Mar - 30 Mar can be characterized by a low level of activity and relatively ineffective performance on the part of the VNAF ALO, VNAF FACs and helicopter operations. The most serious and obvious flaw in the VNAF structure at Quang Tri was the lack of command leadership whether it be attributable to the ALO or FAC and/or helicopter

[REDACTED]

detachment commanders. There was a definite lack of senior ranking command supervision of any major VNAF operations conducted for the 3rd ARVN in this time frame. These conditions were tolerated without effective attempts to find a remedy by senior ARVN staff, VNAF commanders and the AFGP. Helicopter resupply missions were insufficient and seldom completed while FAC operations were ineffective and limited in type and length of area coverage.

3. (C) Phase II (30 Mar - 6 Apr). At 1200H, 30 Mar 72, the entire 3rd ARVN Division area of operations (AO) was attacked by NVA forces consisting of three NVA Divisions supported by heavy artillery and tanks. All fire bases came under heavy attack using conventional war tactics unseen before in South Vietnam. I remained at the 3rd ARVN Tactical Operations Center (TOC), Quang Tri Combat Base (QTCB), from 1230 on 30 Mar until 4-6 Apr. In the first five or six days most firebases and the QTCB reported receiving thousands of incoming rounds of 130mm artillery and 122mm rockets. At the start of the battle weather conditions were marginal. Within 24 hours the entire battle area was completely unworkable for FACs and close air support. The adverse weather was a major factor in the initial success of the NVA offensive. The only usable air power was ARC LIGHT, Combat SKYSPOT (CSS), and LORAN bombing. I was immediately drawn into a situation where I became the ALO and air operations officer to "everybody in the world." Because of the seriousness of the situation and the need for immediate action, I processed requests from all units in coordination with G-3, G-3 air, and other US Advisors. I processed and coordinated many simultaneous requests for CSS interdiction and close air support missions against enemy strong points. The L-19s and VNAF helicopters were flown out of Ai Tu Air Base at Quang Tri to Phu Bai on the evening of 31 Mar because of the heavy artillery striking the field. The runway was shelled heavily the next day and rendered unusable. This separation of aircraft from the division undoubtedly caused many problems in coordination but the fact remains that the VNAF FACs did not fully support the 3rd ARVN. No visible effort was made by the VNAF ALO to correct this situation. It was at this point that the TACS seemed to become an American operation at least until the initial thrust was contained.

NOTE: In respect to VNAF TACP personnel, Capt Ba, a duty officer, is an amiable person who would cooperate with me when Capt Tu was not around. I believe Capt Ba has the capability to emerge as a good ALO with some assistance. He was willing to cooperate and would furnish information on VNAF operations. Capt Dinh the other duty officer present on 30 Mar, left early as I was advised that he had been reassigned to another unit. The VNAF TACP, after relocating in the Citadel at Quang Tri, did operate at Quang Tri, did operate at times in an efficient

[REDACTED]

manner particularly when Capt Tu was not around. In addition to Capt Ba there was a 1st Lt out of IV Corps and another junior duty officer 1st Lt in the TACP who performed satisfactorily. In the final analysis it must be understood that the VNAF TACP had their good moments although they were never able to control the position of VNAF L-19s.

Fixed wing gunships, USAF "Specters" and USAF and VNAF AC-119s could not be used even when there was a break in the weather because of the SAM threat. A USAF "Stinger" AC-119, flew in support of firebase Sarge on 31 Mar but weather hampered any effective action. To my knowledge this flight was the last support given by these gunships in the 3rd ARVN AO. On 1 Apr because of intense rocket and heavy artillery fire, the 3rd ARVN Division relocated its headquarters to the Citadel at Quang Tri around 1800. A few Army Advisors and one senior ARVN representative along with the artillery fire support coordinator remained with the USAF and VNAF TACP in the Forward TOC. Under some extremely heavy barrage fire from 130mm and 122mm, US personnel would be too busy to be concerned with personal safety while some ARVN personnel would be huddled up so shaken they were unable to understand or perhaps incapable of comprehending the seriousness of the situation. Just after the ARVN staff had departed to set up the Citadel TOC, the remaining TOC officer was so disheartened he refused to give me a strike clearance at one time by asking "What's the use?" It was shortly after this that the VNAF ALO refused to accompany the Senior Army Advisor and me to brief Gen Giai on available air support. Most attempts to draw knowledge from him resulted in a blank look and withdrawal. It was shortly before 1900 on 2 Apr that the VNAF TACP packed up and disappeared with the VNAF ALO. About 5 Apr the VNAF TACP was discovered in the Citadel with their High Frequency set and portable FM gear. I was never able to find out where the MRC-108 pallet was taken.

a. On 1 Apr at 1900 the RVN Marines and their counterparts moved into the 3rd ARVN TOC Forward. Many hours of sheer frustration were spent in trying to explain to the USMC Advisors that their counterparts would have to originate all requests through their system and that I would follow up those requests through US channels. The number of Skyspot and LORAN requests submitted by the 3rd ARVN during the first days was astronomical. The first list which I passed to I DASC contained 100 targets. Most of these targets in my estimation were products of guess work and were not based on good intelligence.

NOTE: This reflects one of the most serious problems in the ARVN staff system. "Suspected enemy troop locations" seemed to be the most frequent target description. Before the

[REDACTED]

first one hundred targets were decoded at I DASC, all elements had already begun preparing another 100-200 SKYSPOT targets. Our attempts to explain the system and limitations were most futile until about mid-April when the ARVN were finally convinced that 20 SKYSPOT targets would not overload the system but that 100 certainly would. However, additional lists of 10 and 20 CSS targets continued to be requested on an immediate basis. Very few pre-planned sorties were requested for hard targets.

b. One of the most difficult problems at times was getting initial clearance, political and military, to strike immediate targets. Because of the distance between TOCs and communication problems I was unable to confirm whether half of the requested strikes were sent thru ARVN channels. I believe it possible and probably true that some requests were never forwarded thru ARVN channels resulting in some targets not being struck. The 3rd ARVN staff and US advisers at the Citadel would pass mission requests and intelligence over the secure net to the US Army TOC officer at QTCB who in turn would pass them on to the USAF TACP for relay to I DASC. One example of difficulties encountered occurred at 2300, 1 Apr. The freshly abandoned center bunker at firebase Charlie 2 was being used as the NVA command post for the entire attack at this time. Gen Giai and the senior advisor wanted this target destroyed as an absolute first priority. At the time I DASC seemed unresponsive to urgent requests for air support and seemed unaware of the seriousness of the situation. Continually pressed by 3rd ARVN as to the air strike frag status, CSS, I was unable to attain the information through the land line. Finally making contact with Ramrod, the ABCCC, we "blew our cool" and demanded the information go to the PACAF Commander-in-Chief. It's doubtful if the information got that far but Ramrod confirmed bombs on target less than 45 minutes later which ended a total delay of 7.4 hours from initial request. It should be noted that until this time most of the US personnel had gone without rest for up to 4 and 5 days. Several attempts were made the morning of 2 Apr to get from the forward TOC to Three Star Compound, which was the US billet, to retrieve the MRC-108 radio jeep. Heavy incoming artillery prevented all attempts. The MRC-108 at Three Star was hit by enemy fire and later destroyed by US demolition experts prior to the compound evacuation on 2 Apr. On the previous night the decision was made to evacuate Three Star since the 50 plus Americans there had virtually no protection against incoming artillery and were taking casualties. For air support coordination purposes, I was asked to select an LZ for a US Marine Group to land to secure protection and/or effect an evacuation. This plan was cancelled by higher

[REDACTED]

headquarters. The compound was evacuated by helicopter in the afternoon of 2 Apr and its personnel flown to La Vang and from there they were driven to the Citadel at Quang Tri. Because of the heavy artillery and occasional direct fire from unknown sources, USAF personnel were unable to dismantle the permanent radio antennas at the forward TOC. A new MK-151 jeep and radio pallet was requested from Da Nang to establish a TACP at the Citadel. The senior advisor paralleled this request thru the FRAC Commander. Around 5 Apr the jeep arrived and a mobile TACP was set up in the Citadel. Until this time USAF personnel remained at the Forward TOC. Around 2115 on 2 Apr a massive SAR effort was initiated by 7AF in the Cam Lo area. At first 7AF set up a no fire zone 27 km in radius which virtually covered the entire division AO. With three enemy divisions plus heavy artillery striking the AO, the 3rd ARVN was unable to return fire or request TAC air\* in the area. Some specific targets were struck after considerable delay in obtaining clearance. In my opinion this gave the enemy an opportunity unprecedented in the annals of warfare to advance at will. It was five days later before it was known that 100 TAC SAR support sorties were flown in the area and no intelligence was passed as to what was being accomplished. This operation cost the 3rd ARVN dearly in not being able to fire at known targets of urgent tactical importance. Although the "no fire" zone was later reduced to 5000m and then 2700m until the rescue was completed around 22 Apr, this particular area covered the center of the main NVA offensive thrust from the north at the Cam Lo River crossing.

NOTE: About four-five days prior to the termination of the Cam Lo SAR "no fire zone," I DASC informed me the rescue was complete and the SAR no fire zone was being maintained by higher headquarters in an attempt to induce large concentrations of NVA artillery, tanks and infantry to enter the zone, creating a more lucrative ARC LIGHT target. This trap by deception to my knowledge was never exploited by ARC LIGHT bombing. Another SAR no fire zone was further northeast near firebase Charlie 1 and QL 1 about 8km north of Cua Viet river. This route was heavily used by NVA tanks. US advisors on the bridge at Dong Ha could observe the tanks coming south but were unable to fire into the 7AF zone. After the zones were terminated, the enemy was already south of the Cua Viet and Mieu Giang rivers in strength.

c. On 4 Apr there was a "reported" short round at the mouth of the Cua Viet River striking a Vietnamese naval station

---

\*The author used several variants of this term in this report.

[REDACTED]

There were 7 tanks fording the river. A FAC was put on the target with NGF and later TAC air. Four tanks were destroyed with the other three in quick retreat to the north. Somehow a report got to I DASC that friendly troops were being killed and the strike was called off. I DASC later demanded a typed report ASAP. I had already checked with Sector TACP and RF/PF forces who stated that only one man was slightly wounded and that the probable cause of the casualty was from NVA tank fire and enemy artillery. Division and RF/PF forces stated the incident was of no concern. I did transmit a short summary of the incident by land line to the I DASC Director.

d. Summary Phase II: This phase of the battle for Quang Tri is marked by rapid total assumption of responsibility for TAC Air Control by US Advisors. This was caused by the inability and failure of the VNAF ALO to respond to the crisis. TAC air was severely hampered by bad weather with ARVN strike targeting of CSS/LORAN missions lacking in effectiveness and organization. Coordination of TAC air requests was hampered by initial separation of the TACP and clearance authorities. The 7AF SAR efforts had a serious impact on the effectiveness of defense efforts. Command concern and overreaction to unconfirmed reports of short round incidents in a full battle situation needlessly diverted efforts of advisors in a critical situation.

4. (C) Phase III (7 Apr - 25 Apr): This phase starts out with a lower level of activity than the preceding time frame. From 6 Apr, the TACP was operating mobile from an MK 108 jeep in the Citadel until a permanent TOC was built.

About 6 to 8 April requests were submitted for MK-36 antimagnetic mines to be seeded at four coordinates: YD 1195/4332; YD 2405/2623; YD 9842/5633; and YD 0575/4345. The first target was the only road network the NVA could move their tanks and trucks from the Ba Long Valley towards Mai Loc and Quang Tri. The intention was to get extensive mining in the area near firebase Holcomb. Good intelligence information had confirmed NVA utilization of this road. The second target was the bridge area near Camp Carroll just east of the Rock Pile on Route 9. The third area was in the vicinity of the Rock Pile where Route 9 turns east. If these areas had been interdicted effectively the ARVN might have been able to stop the enemy and their tanks.

b. The mobility of the US TACP was demonstrated at

[REDACTED]

night on 11 Apr, when the ARVN received intelligence from Corps that a sapper attack was to attempt to destroy the 3rd ARVN TOC in the Citadel. At 2000H ARVN staff officers and US Advisors deployed with supporting tanks and APCs to a far corner of the Citadel. Air support was directed from the hood of the jeep with Gen Giai, the Senior Advisor and staff present. The plan as effected would have allowed half of the staff of each section to survive if the attack had been made. The MK-108 jeep with radio pallet and supporting generators is an excellent system with two minor exceptions. The generators are quite noisy and there is no lighting system at the radio operators station for reading maps and logging information.

c. At this time while TAC air could be utilized in greater numbers and more effectively, the SAM threat was ever present resulting in several aircraft losses. During this time I attended the battle staff meetings conducted along with the Army Advisors. On only one occasion did my VNAF counterpart attend, although he was not only expected to attend but ordered at other times. A constant problem during this phase was coordinating boundaries of US and VNAF FAC responsibility and integrating NGF and ARVN artillery to achieve maximum effectiveness. In the early part of this phase when the anti-aircraft fire had not reached its peak intensity, the VNAF O-1s could be occasionally seen in their areas at altitudes between 6-7000 ft. The FAC responsibilities were divided into three areas. The Fast FACs would operate deep into enemy territory, US O-2/OV-10s would range forward of the battle front for close interdiction while the VNAF FACs were supposed to cover the front line trace Forward Edge of the Battle Area (FEBA) to control close air support for the ARVN. The VNAF FACs in my opinion failed miserably. Either they failed to go to their assigned areas or they would not make contact with the ARVN ground commander. Many outraged demands for US FAC coverage were received daily. The VNAF TACP would only report VNAF FAC positions as fraged while in actuality the FACs were orbiting well inside friendly lines and not making contact. It should be noted that the VNAF MK-108 jeep and radio pallet disappeared around 12 Apr and I was unable to learn from my counterpart its location. The radios had been rendered practically useless after VNAF personnel drove it through the Citadel under low hanging wires which damaged or broke the

[REDACTED]

antennas. Around 12 Apr Gen Hudson, 7AF, and Col Jansen arrived at I DASC. They visited Quang Tri and discussed the situation and coordinated future plans and priorities. At this time up to 300 TAC Air sorties were promised in support of the 3rd ARVN AO. NGF was to work north from the Cua Viet River inland 5kms. Any NGF further inland would be coordinated with "Trail Control," the US TACP. In conjunction with this fire, problems were encountered in controlling the artillery when Fast FACs were working the area. On 15 Apr Gen Hudson instructed Fast FACs to check in with the TACP. The Fire Support Coordination Center (FSCC) which had previously performed satisfactorily was becoming decreasingly effective under the strain of rapidly changing tactical situations. To the south of Cua Viet River NGF had to be coordinated with RF/PF forces and the 3rd ARVN. Because of the high density of TAC air, the difficulties in air strike and ARC LIGHT warning, coordination was very difficult. As long as the US artillery advisor was present or we could talk personally with the FSCC troops the situation was manageable.

d. In general TAC air was used effectively in close air support in the intensive anti-aircraft artillery and missile environment around Quang Tri. The intensity of AAA fire in this battle was unheard of in South Vietnam before the invasion and was reported by pilots to be of the same order of intensity as in the Hanoi area. US FACs did an outstanding job covering large areas and directing several strike sorties per flight in an extremely hostile environment. Hours were spent with the ARVN staff suggesting ordnance available and advising on its capabilities and uses. As soon as the ARVN staff were advised that CBU-55 was available at Da Nang, they were fragging them for use on suspected troop locations and ignoring many hard targets such as abandoned firebases, and bunker complexes being occupied and used by the NVA. During the time period, 12 to 14 Apr, some VNAF A-37s were fragged to strike abandoned firebases with CBU-55. This weapon is expensive and in short supply with the VNAF. FAC pilots cancelled several of the missions stating that the weather was bad. Since the TOC was within visual range of some targets it was obvious that conditions were sufficient for visual operations. Confirmation of weather conditions were checked with US FACs in the area who reported 5-7000' scattered. Throughout this period, I attempted to maintain some type of working relationship with my counterparts. On 13 Apr the 3rd ARVN Staff had plans for a counter-attack requiring coordination of US and VNAF FAC coverage. The VNAF ALO stated that he was unable to provide complete coverage as his FACs were limited to two missions of 2.5 hours duration. This would leave large parts of the AO without coverage. I drew up a plan for the ALO's use. It provided continuous FAC coverage from 0630 until 1900 with US FACs providing the needed

[REDACTED]

additional coverage. The plan utilized eight VNAF aircraft of which only four aircraft would be required to fly three times a day with a two hour turn-around. The ALOs response was an adamant "can not do" with a refusal to even forward the plan to the 1st Air Division for consideration. The ALO immediately discarded the plan. This lack of action and cooperation decreased further any ARVN willingness to work with the ALO. It was finally conceded that US FACs would have to be moved in to assume coverage closer to the FEBA. This permitted VNAF FACs to operate inside friendly lines out of ground fire. This plan did not work as VNAF FACs continued to avoid coverage of the FEBA by remaining well to the rear, flying at an estimated 6-7000 ft altitude where even Visual Reconnaissance (VR) is useless without binoculars. It is known that VNAF FACs refuse to use binoculars since they become airsick. Towards the end of this period US FACs had to assume responsibility for complete VR and close air support coverage of the FEBA. The VNAF A-1s were magnificent during this time frame up until they were deployed back to III Corps. The VNAF A-1s would contact the ground commander when necessary and work without the VNAF FACs with absolutely outstanding results. One pilot pressed his targets so close that he took 51 cal fire from a tank and lost his life. It is important to note that when other fighters were unable to strike because of weather that the A-1 close air support effectiveness was a most critical and valuable asset.

e. As the situation started to worsen after 15 Apr US Advisors were called in with increasing frequency on ARVN planning. In my opinion most of the ARVN plans would have succeeded had the ground commanders initiated action to take advantage of the massive air support provided. One demoralizing factor for US pilots and advisors was that some of the ground commanders refused to fire their mortars in fear of revealing their position. The ARVN would insist on complete destruction of the enemy by air. On one counter-offensive operation the ARVN were holding a bridge to the west of Quang Tri against enemy forces to the south on both sides of the river. US TAC air pounded the area within 300 meters of friendly troops continuously through the night. The preparation continued with increased intensity in the morning. At 0745 TAC air was terminated and NGF with ARVN artillery continued the preparation. In this action 4 to 7 enemy tanks were knocked out approaching the bridge. Observers at the FEBA stated that the enemy was withdrawing. After all this preparation the 3rd ARVN committed two companies of infantry and one tank troop against an estimated two regiments. Needless to say the counter-attack did not make much progress. A further example of improper exploitation was an operation of the 1st Armored BDE defending Dong Ha and the area to the west towards Cam Lo. The brigade

[REDACTED]

commander insisted that his brigade was not getting sufficient TAC air support or ARC LIGHTs and that he would not attack until B-52s bombed his front lines. The safety parameters for an ARC LIGHT were violated and the plan was for the brigade to retrograde prior to the ARC LIGHT strike. The brigade did not maneuver since the ARC LIGHT preparation was not approved. At one time the 3rd ARVN had a targeting plan that covered the entire area from Dong Ha south to Quang Tri and west to a line running south from the Rock Pile to the Ba Long Valley. The total number of target blocks in this plan numbered over 200. The idea behind this was to be able to request ARC LIGHT's by target number for any developing threat area. I witnessed ARC LIGHT targets being put on the map and then moved around "checkerboard" style in an effort to guess which targets might be approved by higher headquarters. This was almost impossible to determine since priorities shifted constantly, lists piled on top of lists, and then I Corps would also modify and reorder priorities. Most of the ARC LIGHT strikes were extremely effective due to the numerous concentrations of NVA. But, in my opinion, many targets were poorly selected and merely provided the NVA ready made fox-holes. The effectiveness of the B-52 strikes were not so much a function of planning but rather a product of not being able to miss hitting "a wave in the ocean." Many difficulties occurred in target lists submitted for LORAN/CSS missions. I have nothing but praise for Lt Col Tam, 3rd ARVN G-3, but he lacked able staff support. In the process of checking strike request it was found that some of the young lieutenants did not know the difference between headings of 315 degrees and 215 degrees for suggested run in headings. Many targets were submitted with run in headings directly over friendly positions that could have run parallel. Other times targets were submitted with the nearest friendlies noted as 1500 meters south but ARVN positions 300 meters northeast were forgotten. This problem required close advisory attention to prevent short rounds. Establishing priorities was another continuing problem. If the G-3 was trying to get some rest one of the Lieutenants would process strike requests on a first call, first priority basis, with no attempt at analysis. If one unit submitted their requests five minutes after the first they got the remaining priority. The last units had no chance to get a strike for their priority target even though a division faced them. Repeats would be made for the same target by two different units or two targets within 100 meters. The system of paralleling requests through ARVN and then US communications channels resulted in several compromises of codes. The ARVN would state that their list went through coded. After the list was forwarded coded through US channels it would be found that the ARVN list had been uncoded resulting in a compromise of the code. Constant US Advisory efforts eventually solved this problem. Another problem was

**CONFIDENTIAL**

in convincing the ARVN staff that remote suspected troop locations, troops in the open, and moving tanks were the worst possible targets to frag for a SKYSPOT because of the changing nature of the target, the limited availability of radar, and the amount of time required to process the mission.

f. During the latter part of this time frame the area of friendly control continued to shrink slowly under continued NVA pressure. Gen Giai and Col Chung of the 3rd ARVN would call US Advisors into the War Room, indicate the new reduced FEBA and order that strikes were cleared on anything outside the trace. In the last days the trace would decrease several times a day. In coordination with Gen Hudson and Col Jansen at I DASC a new and effective system of FAC coverage was established over Quang Tri around 22 Apr. The area was divided into four sectors; IN, 1E, 1S, and IW which would have specific working frequencies for fighters. The FACs would be advised of air strikes in their immediate area and in the event of CSS or ARC LIGHT warning a specific safe holding area could be designated. However, in a few isolated instances air strike warnings were not received, resulting in bomb drops thru FAC and fighter patterns.

g. Frequent attempts were made during the week of Apr 17 to get proper L-19 support. It was stated to me by VNAF TACP personnel directly, with an interpreter in front of witnesses, that VNAF L-19s would not fly north of the Cua Viet River as there were no friendlies on the ground to rescue the pilots if they were shot down. This included L-19 coverage of the FEBA to the west as witnessed by US Advisors on the ground. The US/VNAF FAC coordination line as established by Corps headquarters was not covered by VNAF FACs creating a 5 to 12 km corridor around the FEBA without FAC cover. This resulted in US FACs being required to cover both areas of responsibility. Between 21 and 25 Apr a new VNAF duty officer arrived at the TOC from IV Corps. He was introduced to me as the new ALO. He was only at Quang Tri until 25 Apr but Gen Giai was favorably impressed with him. In fact he was invited to attend the battle staff meetings and received approval from the entire ARVN staff and US Advisors. It is unfortunate that he got sick and airlifted out. In my opinion he should have been promoted and designated as the 3rd ARVN ALO. The failure of VNAF personnel to cooperate and their failure to respond in critical situations was a source of continuous frustration. The situation finally came to the point that US Advisors and 3rd ARVN staff literally laughed when VNAF L-19s were mentioned.

h. Response by higher headquarters to special mission requests of the 3rd ARVN left much to be desired. This is especially evident in treatment of requests for MK-36 magnetic influence mines. As stated in the beginning of this section

[REDACTED]

four areas were selected for anti-tank area denial mining operations with MK-36s. Most requests as executed were changed to straight MK-82s with the FMU-72 long delay fuses. The ordnance of these and other missions reportedly fragged with MK-36s were observed to detonate instantaneously by the US FAC. The FMU-72 fuse was completely useless in stopping tanks or for anything other than chance harassment. The Navy seeded YD 100/480 on 13 Apr with MK-36s which was a target that the 3rd ARVN had not requested and in fact was the center of the final objective in the ARVN offensive plan (Quang Trung 729) initiated 14 Apr 72. As it turned out NVA tanks supporting a division were able to advance unchecked through the pass at YD 1195/4332, target number one, to overrun firebase Pedro and eventually Quang Tri.

Summary Phase III: This phase in the battle for Quang Tri is marked by the greatly increased use of US TAC air and the increasing responsibilities of US FACs for the direction of close air support. Coordination problems are worked on along with largely futile efforts in advising the ARVN on proper effective utilization of air assets. Efforts to gain proper VNAF ALO and FAC performance were ineffective. Use of special weapons such as MK-36s for interdiction did not conform to request parameters and were of little value or effect. Despite several ARVN attempts to produce counter-offensive operations the total area of ARVN control during this time had been progressively decreasing as the NVA maneuvered for their final drive on Quang Tri.

5. (C) Phase IV (26 Apr - 1 May). The final phase in the battle for Quang Tri opens with a rapid increase in enemy pressure. The NVA divisions were completing maneuvers so as to make attacking thrusts from all quadrants. The front line trace was rapidly shrinking to the point where utilization of large amounts of TAC Air was being hampered by the close proximities between air strikes and artillery lines of fire. On or about 26 April, General Hudson at I DASC presented a good workable plan for air operations. At 1000 hours each morning Gen Hudson would pass me all the air strike information for the previous 24 hours. An overlay was prepared for Gen Giai showing previous 24 hours accomplishments. This was a great aid to staff and advisory planning for the next day. By 1200 hours 40 preplanned missions would be submitted for the next day. An additional 10 CSS missions were to be submitted utilizing LORAN for targets west of the YD 140 grid line. Ten of the fifty missions were to be available for immediate requests. It should be pointed out that this plan was for the relatively constant tempo of battle described in the previous phase. The plan lasted about 12 hours as the NVA commenced their final push on Quang Tri. By this time it was evident US FACs would have to assume complete

[REDACTED]

responsibility for the AO. In coordination with I DASC and General Hudson the following deployment was used until the end. US FACs were assigned specific areas with the Fast FACs working north of the Cua Viet and Mieu Giang rivers and OV-10/0-2s to the south for interdiction and/or close air support as required. Elements in the field would send the TAC air requests thru the US Army and not to the US TOC.\* The TOC would pass the request to the US TACP which would insure proper coordination and FAC coverage. Problems coordinating ARVN artillery control with fighter strikes for maximum firepower utilization occurred. It was difficult to get ARVN artillery to stop fire for air strikes. When clearance to resume fire was given their guns would barely get lined up again before another air strike was due in. ARVN artillery had problems as their guns were constantly being redeployed making artillery registration difficult. Conflicts with fighter patterns and gunfire lines were numerous and unavoidable. Because of the heavy concentrations of enemy ground fire, fighters were forced to make pull-offs over the friendly forces. This procedure tended to prompt unsubstantiated reports of short round incidents. Troops would see fighters breaking over their lines coincidental with incoming enemy artillery and jump to conclusions. Of the few short round incidents reported only one appeared to have credence and no one was killed. This particular incident was at night and involved possible enemy deceptive measures in a hotly contested TIC situation. On several occasions ARVN artillery was found firing through air strikes. It is very fortunate that no aircraft were lost to friendly artillery.

a. During the final phase US air was used exclusively with the exception of VNAF C-123s that made emergency resupply drops. It should be noted that VNAF fighters were given responsibility to cover southern I Corps to avoid unnecessary coordination problems in the Quang Tri conflict. Coordinating six and seven FACs including Fast FACs working to the north trying to knock out the SAM sites became a 24 hour job requiring increased attention. Heavy artillery hazards were increased by SAM shrapnel and booster impacts. Sleep could only be managed by small intervals as B-52s and close TICs added to the barrage of fire. When enemy artillery became more intense, a Fast FAC or a slow one if necessary was directed to VR the suspected areas.

b. At 2030 hours, 26 Apr, Gen Giai, in conjunction with the Province Chiefs, gave the advisors clearance to strike requested targets using the initials of Gen Giai. Some TIC situations were so closely situated that at times it was impossible to keep one set of fighters from breaking through another set working a couple thousand meters away. As the battle progressed and the ARVN area of control was severely diminished, it became

\*Apparant omission in text at this point.

~~CONFIDENTIAL~~

impossible to strike anything without stopping artillery and NGF. Although there was direct land line communications between the US TACP, NGF and ARVN FSCC, half of the time the advisors were required to run to the ARVN TOC to get a stop fire or a resumption. NGF gave outstanding cooperation but several times had to be limited to beach fire. It was during this period the NGF liaison officer at Quang Tri informed me that the commander off shore threatened to pull some of their ships out of the AO if a more effective plan was not utilized. It is doubtful they had the authority to withdraw, but they were finally convinced that if the weather got worse NGF would be the only fire support available as ARVN artillery was fast diminishing with guns left behind and ammo in short supply. Text book restricted artillery plans did not fit this situation. In multiple TIC situations, ground commanders constantly insisted on more support (TAC air, artillery and NGF). With saturation of communications, delays in execution, and coordination problems, few gunsight lines or max ordinates were passed to FACs.

c. Around 28 Apr as the FEBA continued to contract and withdraw towards the city of Quang Tri, the problem of controlling up to 200 close air support sorties around the clock became more and more difficult. It was imperative to have FAC coverage in the immediate area to respond to TICs and the continuous reports of tanks approaching from all directions. With many different elements reporting attacks by fire and up to 15 tanks the decision to place FACs in the most immediate threat area became one of the most pressing situations of the conflict. The US TACP would respond to urgent calls by diverting a FAC and one or two sets of TAC air only to find out that the ground commander suspected tanks and wanted someone to check out the area. In the meantime the FAC should have remained in his primary area to complete destruction of known targets and/or tanks. US FACs in general were spread thinly and did not have sufficient time to conduct VR before being requested elsewhere. On 28 Apr a US FAC was diverted from VR in an area suspected to contain several NVA regiments for a TIC south of the Quang Tri combat base. Tanks were spotted and since they did not have ARVN marker panels the ARVN commander in the TOC gave clearance to strike them. The FAC was hesitant since the tanks were in the open and not actively hostile. Two hours later the tanks were found to be friendly. No strike was put on the tanks but this type of information only served to confuse the entire defense plan and divert needed air support. At other times forward elements of a battalion would report tanks and enemy advancing which FACs would later confirm as old destroyed hulks. However, several times, every FAC in the area was assigned 3 to 4 sets of fighters with more on the way. In only one or two instances, a mission would report in with 10 minutes station

[REDACTED]

time or less and no FAC was in a position to control it. With I DASC approval they were directed to drop off TACAN radials and DME's. The Fast FACs were our most effective protection to the north and west for suppressing heavy artillery. On a few occasions when 7AF had failed to have tankers on station the FACs would have to RTB for fuel and then the heavy barrages would break loose once again.

d. Near the end of April the VNAF Spooky flare ships were heavily depended on to keep an area lit when a FAC was directing several night strikes against a TIC.

NOTE: In the last part of Apr, contact with my counterpart was intermittent and unproductive. On the night of 28 Apr, during a TIC situation and because of the need for illumination, I asked my counterpart to try and contact I Corps to find out if a Spooky was available, Capt Tu's only reply was that he did not like to talk to I Corps. When Spookys were available the VNAF TACP personnel would be sound asleep and considerably annoyed when I would shake one of them awake at 0200 to find out where Spooky was and how to contact it.

On 29 Apr coordination of fighters was one of constant shuffling between TICs. Quang Tri had, by this time, been completely cut off. A serious TIC situation would be in progress a few thousand meters south of the TOC and then a tank supported NVA regiment would attempt to enter the city from the west. Enemy ground troops supported by tanks were 2000 meters east. The river on the north prevented any serious enemy penetration from that direction. The enemy had our FAC frequencies and was continually spouting foul mouth words and playing loud music attempting to disrupt communications. On 29 Apr the NVA apparently relaxed efforts to conceal 130mm gun sites in order to sustain fire. Every type of ordnance was used from general purpose MK-82s and napalm to CBU and Rockeye. However, TACAIR was unable to silence all the NVA artillery. The 130mm was extremely accurate and delivered precise hits on important roads and installations in support of the NVA infantry. In retrospect if Tac Air could have silenced all the heavy artillery, the ARVN might have been able to stop the tanks and infantry from the beginning of the invasion.

e. ARVN artillery's failure to fire illumination rounds as requested by US advisors and FACs presented problems at night. The ARVN artillery was requested to fire flares to ignite at 3000 ft AGL. Ten minutes later a flare round would go off at 6000 ft, 2000 ft above the FACs altitude lighting

[REDACTED]

his position and resulting in intense 23mm, 37mm and 57mm anti-aircraft fire. A subsequent adjustment would result in flares fired with up to 4000 meters error in azimuth and illumination at 800 to 1000 ft AGL. One night the artillery claimed they did not have any illumination rounds resulting in some close air support mission cancellations in TIC situations. Later investigation by the US artillery advisor found that the ARVN did have the illumination rounds. On 30 Apr when the ammunition was running short, VNAF C-123s made two drops on La Vang about 1500 meters from the TOC. The Deputy Commander, Col Chung, had issued instructions to cancel the mission for fear of losing the aircraft to the intense fire. The first two aircraft bravely flew up Highway 1 through heavy fire, made their drop and exited safely to the ocean. These C-123s were given FAC and fighter support to suppress the ground fire. The approach route used by the C-123s was extremely dangerous because of the entrenched NVA blocking force dug in along the highway. The air dropped cargo fell 200 meters outside the Drop Zone and the ARVN did not retrieve it because they thought there were too many VC in the area. Unknown to me, a second set of C-123s were inbound while I was attending a staff meeting. FAC and fighter coverage was not coordinated. About 3 miles from the China Sea the last C-123 was shot down and impacted in the ocean. The US Navy recovered one body. On 30 Apr friendly positions consisted of isolated pockets and a few thousand square meters in the heart of Quang Tri. All Tac Air missions were diverted to close air support with the exception of those missions needed to silence SAM sites in and south of the DMZ. Coordination with the ARVN became more tense. The enemy occupied the west end of Quang Tri bridge most of the time with the Vietnamese Marines still holding at Quang Tri combat base. To the east and south of the city streams of refugees and retreating troops became almost impossible to identify. The Marines were ordered to withdraw into the city in order to prevent them from being isolated and cut off. ARVN engineers in a moment of panic blew the bridges into Quang Tri before the Marines had completed their withdrawal stranding some armor and artillery pieces on the west bank. By 1800 hours most ARVN artillery was destroyed and several tanks were abandoned and destroyed.

f. During the night of 30 Apr the situation was deteriorating badly. One set of US fighters was being controlled by an OV-10 in an attempt to destroy a POL dump, ammo storage area, and abandoned tanks at the Quang Tri combat base. This was immediately after the Marines tactical withdrawal. NGF was firing harassment and interdiction in the area and was hesitant in checking fire. The fighters pulled off high to hold for clearance. The fighters stated they would resume the

[REDACTED]

strike if NGF would stop immediately. However, the delay that resulted caused one fighter to return to base. The second fighter did release on target but by that time the FAC had minimum fuel and all ordnance had to be dropped on the first run. NGF did play a very important role in the defense of Quang Tri. After 1800 hrs on 30 Apr, NGF was the only artillery available to the 3rd ARVN commander.

g. By 2300 hrs, 30 Apr, all territory north of Quang Tri had been abandoned. TACAIR support was continuous through this period. In the late hours of 30 Apr, US advisors started to make plans for escape. Several plans were suggested. One plan was to join up with any organized remnants of the Marines or Rangers. A second plan was to break east and evacuate from the beach under cover of Tac Air and NGF. Although this was the shortest way to the sea it involved facing a regiment of NVA with unknown number of tanks. There were several other plans but the one that looked most promising was a break-out to the southeast to the sea. However, the available intelligence indicated we would be faced by elements of a NVA Battalion at key road junctions and bridges. By the morning of 1 May the Marines still held the west side of the city with the Ranger groups to the south. All effective ARVN resistance to the NVA, north, east and west of the Citadel had disappeared leaving the VNMC Brigade, 3rd ARVN staff and US advisors comprising the effective front. US advisors continued to coordinate Tac Air and NGF until the end. At 1200 Gen Giai declared the situation hopeless. The ARVN staff group then started preparations to break-out of the Citadel and join up with the VNMC and Rangers 1200 meters south. At 1400 Gen Giai's group took fire and were unable to break out. He then rejoined the US advisors in the Citadel. This left 80 US and 40 to 50 ARVN in the headquarters TOC surrounded and cut-off by the NVA. At 1420 Gen Hudson in I DASC passed me a coded set of coordinates for a pickup zone (PZ). The PZ as passed was an open field to the east of the Team 19 compound about 1000 meters southeast of the TOC. To reach the PZ would have required us to fight our way from the Citadel to the PZ at that time. Col Metcalf had the PZ changed to the Citadel heli-pad which was somewhat smaller but more secure. From this time there were three FACs assigned to cover the US advisors with the other FACs covering the retreating columns to the south. The three US FACs were given one of three sectors in order to create a wall of fire to our west and suppress all enemy fire and activity in a corridor heading 090° from the TOC to the sea. Each FAC was given four sets of air to commence air support at 1530 with the Jolly Greens due in at 1535. Two of the FACs had good secure radio gear so I had no problem in briefing the mission. The third FAC had inoperative secure mode so that the most critical information had to be coded with as much as

[REDACTED]

possible transmitted in the clear without alerting the NVA. The briefings were complete at 1515 and final preparations were made to evacuate. The power station was blown at 1520 by the NVA and control of TACAIR was turned over to Ramrod, the ABCCC, by land line to I DASC. Army advisors proceeded to burn classified material and destroy all the equipment with high explosives. Four squads had been formed in case the evacuation failed and a breakout had to be made. The air cover commenced at 1530 as F-4s started delivering every type of ordnance. The tactical situation dictated that normal safe distances from much of the ordnance be waived so we could do nothing but watch, wait, and thank God for the US Air Force. Enemy artillery continued to hit the Citadel. One 105mm artillery round impacted 5 feet beneath an American guarding the south wall. There were no casualties as the soft dirt absorbed the full impact. About 1600 hrs, I received word from a FAC that the Jolly Greens were on their way in. At 1615 the first Jolly Green was seen coming in at a low altitude with American Sandy's doing clover leaf fire suppression patterns around him. I was extracted along with 26 ARVN and 14 US advisors on the third and final Jolly Green at 1635. I can state without reservation that I have never witnessed such an impressive display of aerial cover and fire control as the Sandy's provided for the Jolly Green helicopters during the evacuation.

h. Summary Phase IV: During this final phase the NVA made strong coordinated attacks from all directions on Quang Tri. The city became cut-off and isolated. The intense NVA heavy artillery and tanks created maximum havoc by splitting some ARVN forces and inducing panic in others. NGF and US TACAIR were more effectively used while ARVN artillery gradually lost all value. Many RVN forces held while others broke and ran. The RVN Marines never lost fighting effectiveness and had to be ordered to withdraw many times to plug gaps in the front. In the end the 147th Marine Brigade, 258th Marine Brigade, and the 20th Tank Squadron, because they never stopped fighting and remained effective, enabled the US advisors, cut-off at the Citadel, to evacuate. Those units, with their advisors, fought their way out towards Hue. US Advisors and ARVN staff remained at the TOC coordinating TACAIR and NGF until the last possible moment.

6. (S) Effective Tactics:

a. Use of Fast FACs for reconnaissance of enemy artillery in a AAA/SAM environment far forward of the FEBA with tankers to extend operational on-station time was extremely effective. The mere presence of a FAC near a suspected gun location would silence the enemy's artillery. It must be emphasized that few 130mm gun locations were pinpointed and destroyed until the

[REDACTED]

enemy fired in the presence of a FAC.

(1) Recommend that a system be developed to ferret out well camouflaged heavy artillery pieces such as the 130mm gun.

b. Division of FAC duties with Fast FACs well forward of the FEBA and 0-2/OV-10 FACs covering the FEBA provided good workable close air support in the intense AAA/SAM environment both day and night.

c. Use of secure voice communications, ground and air, were most effective in critical battle situations when the enemy attempted to "spoof" or jam working frequencies.

(1) Recommend that secure voice communications be further developed, miniaturized, and distributed so that all ground units, including forward elements in the field, can use secure communications with the FAC.

d. VNAF A-1s were outstanding and awe inspiring as was US Tac Air in the support of ARVN ground Units.

(1) Recommend that the A-1s ability to operate effectively under low ceilings be retained in future attack aircraft designed for close air support roles.

(2) Recommend that an all weather capable system be developed that can deliver a high volume of ordnance on an immediate tactical basis in support of ground troops. Combat Skyspot type delivery is insufficient and ineffective in critical tactical situations.

e. The RVN Marines and the 20th Tank Squadron were the most outstanding and effective fighting units in the battle of Quang Tri.

#### 7. (C) Conclusion and Summary of Critical Problems.

a. The VNAF ALO assigned to the 3rd ARVN Division was ineffective and failed to exercise leadership or command and control of the VNAF FACs in support of deployed ground units. His lack of knowledge, initiative, and involvement coupled with refusal in many instances to support 3rd ARVN plans, forced US Advisors to become involved in an operation which should have been exclusively ARVN/VNAF controlled.

b. VNAF FAC intelligence inputs to the 3rd ARVN prior to the offensive and refusal by the FACs during the offensive to support front line units at the Forward Edge of the Battle Area (FEBA) resulted in overdependence on US FACs for tactical

[REDACTED]

air control and on US air power in general.

c. ARVN staff knowledge of air support utilization and planning was extremely limited. ARVN ground commanders were requiring total destruction of opposing forces by TAC air instead of making proper use of their own organic firepower.

d. ARVN commanders in the field accept the failure of VNAF FACs to render proper support. Ground commander's reluctance to address incidents of improper support to higher levels removed any effective pressure to remedy TACS weaknesses resulting in later VNAF failures in important areas of Tactical Air Control.

e. Contributing factors in the fall of Quang Tri were:

(1) Adverse weather during the first critical days of the NVA offensive (30 Mar - 6 Apr).

(2) Inability to neutralize enemy armor and heavy artillery quickly enough in the intense AAA and SAM environment.

(3) The massive SAR no-fire zones which hampered ARVN efforts to counter NVA maneuver and fire.

(4) ARVN exploitation of extensive air preparation was hesitant and under strength.

(5) Targeting changes and modifications of 3rd ARVN requests by higher command levels without coordination.

(6) Delay and ineffective execution of area denial mission requests.

f. Recommendations.

(1) To avoid unnecessary duplication of effort in identifying for correction any incidents of VNAF FAC or ALO non-support, I recommend that the US Army advisors team up with the AFGP ALO Advisor in investigating and making a joint report submitted to AFGP and Hq MACV for action. This will help eliminate conflicting reports and unnecessary effort in identifying critical problems.

(2) There is an urgent need for the 3rd ARVN Staff to attend a VNAF Air Ground Operations School (AGOS) in order to become more familiar with the basic requirements of air support targeting and planning. This is especially applicable to junior officers in division, regiment, and battalion staff.

# UNCLASSIFIED

## FOOTNOTES (U)

1. (S) CHECO Report, Air Defense in Southeast Asia, 1945-1971, 17 Jan 73, pp. 9-10.
2. (U) 7AF Pamphlet 55-1, "Seventh Air Force In Country Tactical Air Operations Handbook," 20 Mar 68, p. 35. (Hereafter cited: 7AF Pamphlet 55-1.)
3. (S) CHECO Report, Direct Air Support Centers in I Corps, 31 Aug 69, pp. 3-4. (Hereafter cited: CHECO DASC I Report.)
4. Ibid.
5. Ibid., p. 22.
6. Ibid., p. 61.
7. (S) CHECO Report, The DASCs in II Corps Tactical Zone-July 1965 to June 1969, 31 Aug 69, pp. 4-5. (Hereafter cited: CHECO DASC II Report.)
8. (S) CHECO Report, III DASC Operations, 1 Aug 69, pp. 46.
9. (S/AFEO) CHECO Report, Air Operations in the Delta, 8 Dec 67, p. 7. (Hereafter cited: CHECO Delta Report.)
10. (S) CHECO Report, IV DASC Operations, 1965-1969, 1 Aug 69, p. 13. (Hereafter cited: CHECO DASC IV Report.)
11. Ibid.
12. Ibid., p. 14.
13. Ibid.
14. Ibid., p. 15.
15. Ibid.
16. (S) CHECO Report, VNAF FAC Operations in SVN, 28 Jan 69, p. 6. (Hereafter cited: VNAF FAC Report.)
17. Ibid., p. 44.
18. (S) CHECO Report, Tactical Control Squadron Operations in SEASIA, 15 Oct 69, pp. 3-4.

# UNCLASSIFIED

19. (U) Interview with Col Russell S. Lewis, Commander, 621st Tactical Control Squadron, 18 Jul 73.
20. (S) CHECO Report, Vietnamization of the Air War, 1970-1971, 8 Oct 71, p. 4. (Hereafter cited: CHECO Vietnamization Report.)
21. Ibid., p. 8.
22. Ibid.  
(S) CHECO Report, VNAF Improvement and Modernization Program, 5 Feb 70, pp. 33-50.
23. (U) AFAG Staff Digest, 24-30 May 70, p. 3.
24. (U) AFAG History, 1 Jan-31 Mar 71.
25. (S) CHECO Vietnamization Report, p. 31.
26. Ibid.
27. Ibid., p. 29.
28. (C) 7AF (DO) Ltr, "MR I TACS Vietnamization Program," 23 Jul 71.
29. (S) 7AF (DOCPC) Working Paper, 3 Jun 71, pp. 1-5.  
(C) Communications Supplement to VNAF OPLAN 69-14, undated.
30. (C) AFAG-ODC Ltr, VNAF TACS ALO/FAC Upgrading Plan, Mar 69, Change 1, dated 5 Jul 69.
31. (C) II DASC Ltr, MR III Vietnamization Report, 8 Jan 71.
32. (C) I DASC Ltr, VNAF Training, 8 Jan 71.
33. (C) II DASC Ltr, MR II Vietnamization Report, 6 Feb 71.
34. (S) VNAF FAC/ALO Upgrading Plan, Mar 69, pp. B-2 to B-6.
35. (C) VNAF OPLAN 69-14, May 69, p. 2.
36. Ibid.
37. Ibid., p. 3.

UNCLASSIFIED

# UNCLASSIFIED

38. (U) AFAG Staff Summary Sheet, VNAF Air Liaison Officer-Forward Air Controller (ALO/FAC) Problems, 4 Mar 71.
39. (C) AFAG Ltr, VNAF Corps and Division ALO Advisor, 23 Nov 70.
40. (U) AFAG Staff Summary Sheet, ALO/FAC Problems, 4 Mar 71.
41. (C) AFAG Ltr, 23 Nov 70, p. 2.
42. (C) AFAG Staff Summary Sheet, undated, Supplement to Sheet on ALO/FAC Problems dated 4 Mar 71.
43. Ibid.
44. Ibid.
45. (U) Memo, BG Watkins to Gen Hardin, Gen Clay, 7 Apr 71.
46. (C) AFAG Staff Summary Sheet, ALO/FAC Problems, undated.
47. (S) 7AF DOCP message, 200945Z Mar 71, subject: DASC and Corps Support by USAF.
48. (S) CHECO Vietnamization Report, pp. 29-30.
49. (U) Memo for the Record, MR IV ALO Advisor, Vietnamese Air Force Air Liaison Officer System, circa Spring 1971. (Hereafter cited: MR IV ALO Advisor MR, circa Spring 71.)
50. (C) AFAG Staff Summary Sheet, ALO/FAC Problems, Apr 71.
51. (U) MR IV ALO Advisor MR, circa Spring 71.
52. Ibid.
53. Ibid.
54. Ibid.
55. II DASC Vietnamization Report, 6 Feb 71, p. 2.
56. Ibid.
57. (U) MR IV ALO Advisor MR, circa Spring 71.
58. (C) I DASC Ltr, VNAF Training, 25 May 71.

UNCLASSIFIED

# UNCLASSIFIED

59. (C) AFAG-AFAT-2 Ltr, AFAT-2 Status Briefing-23 Tactical Wing (VNAF), 16 May 69.
60. (C) AFAG-AFAT-6 Ltr, Utilization of Liaison Crew Members and Aircraft, 26 Feb 69.
61. Ibid.
62. (C) VNAF OPLAN 69-14, May 69, Appendix A, p. A-15.
63. (C) AFAG (DO) Ltr, Utilization of FAC Aircraft, 1 Jul 70.
64. (C) AFAG Routing-Coordination & Summary Sheet, "NO FAC Problems," 22 Aug 70.
65. (C) I DASC Ltr, 25 May 71.
66. (U) AFAG Staff Study, ALO/FAC Problems, 4 Mar 71.
67. (C) II DASC Vietnamization Report, 6 Feb 71.
68. (U) MR IV ALO Advisor MR, circa Spring 71.
69. (C) AFAT-2 Status Briefing, 16 May 69.
70. (C) AFAG Ltr, VNAF Corps and Division ALO Advisors, 22 Nov 70, p. 1.
71. (C) II DASC Ltr, MR II Vietnamization Report, 8 Jan 71.
72. (C) I DASC Ltr, VNAF Training, 8 Jan 71.
73. (C) AFAG Study, Radio Reliability of VNAF O-1s, 15 Jun 70, p. 2.
75. Ibid.
76. (S) Hq TAC (DOC) Ltr, USAFAGOS Assistance Visit to the Republic of Vietnam AGOS, 7 Jan 72.
77. Ibid.
78. (S) AFGP Staff Digest, 20-26 Feb 72, p. 2-2.
79. Ibid., p. 2-3.
80. Ibid.

UNCLASSIFIED

# UNCLASSIFIED

81. Ibid.
82. (C) MACSR-23AF Ltr, Subj: Utilization of O-1A FAC Aircraft in 23d DTOR, 11 Jan 72.
83. (S) AFGP Staff Digest, 12-18 Mar 72, p. 2-1.
84. (S) Staff Summary Sheet, ALO Advisors Monthly Report, 30 Jan 72.
85. (C) ALO ADV MR II Ltr, Monthly Activities Report, 4 Mar 72.
86. (C) AFGP (DOT), ALO Advisor Newsletter, 16 Feb 72.
87. (S) AFGP Staff Digest, 2-8 April 72, p. 2-1.
88. (C) 23d ARVN Div ALO Advisor, Ltr, VNAF ALO/FAC Problem Areas, Nov 71.
89. (C) End of Tour Report, Major Delmar Lanning, ALO Advisor to 2d ARVN Division, circa Feb 72.
90. (C) ALO Advisor, 3d ARVN Division Ltr, Weekly Report #4, 12 Dec 71.
91. (C) ALO Advisor, 3d ARVN Division Ltr, Weekly Report #5, 19 Dec 71.
92. (C) EOT Report, Major Edward P. Schuster, 18 Mar 72.
93. (C) ALO Advisor, III Corps, Ltr, Monthly Progress Report, 31 Jan 72.
94. (C) ALO Advisor, 23d ARVN Division Ltr, VNAF ALO FAC Problem Areas, Nov 71.
95. Ibid.
96. (C) AFGP ALO Advisor Newsletter, 16 Feb 72.
97. (S) AFGP (DO) Ltr, Present ALO/FAC System, 20 Jan 72.
98. Ibid.
99. Ibid.
100. (C) AFGP (DOT) Staff Summary Sheet, ALO Advisors Monthly Report, 30 Jan 72.
101. (C) EOT Report, Capt Michael E. Cavanaugh, ALO Advisor to 25th ARVN Division, 19 Feb 72.

# UNCLASSIFIED

102. (S) MACSR-23 AF Ltr, Utilization of VNAF O-1A FAC Aircraft, 11 Jan 72.
103. (C) III Corps ALO Advisor Ltr, Monthly Progress Report, 31 Dec 71.
104. (C) 3d ARVN Division ALO Advisor Rpt, 12 Dec 71.
105. (S) AFGP (DO) Ltr, 20 Jan 72.
106. Ibid.
107. Ibid.
108. Ibid.
109. (C) III Corps ALO Advisor Ltr, Monthly Progress Report, 31 Jan 72.
110. (S) AFGP (DO) Ltr, 20 Jan 72.
111. (C) EOT Report, Major Schuster, 18 Mar 72.
112. (C) AFGP (DOT) Staff Summary Sheet, ALO Advisors Monthly Report, 24 Mar 72.
113. (S) EOT Report, Major Schuster.
114. (S) AFGP Staff Digest, 23-29 April 72, p. 2-3.
115. Ibid.
116. (S) AFGP Staff Digest, 14-20 May 72, p. 2-1.
117. (S) CHECO Report, Kontum: Battle for the Central Highlands: 30 Mar-10 Jun 1972, 27 Oct 72, p. 83.
118. (S) CHECO Report, The Battle for An Loc: 5 Apr-26 Jun 72, 31 Jan 73, p. 18.
119. (S) AFGP Staff Digest, 18-24 Jun 72, p. 2-1.
120. (S) AFGP Staff Digest, 23-29 Apr 72, p. 2-1.
121. (S) AFGP Staff Digest, 18-24 Jun 72, p. 2-1.
122. (S) AFGP Staff Digest, 9-15 Jul 72, p. 2-1

UNCLASSIFIED

# UNCLASSIFIED

123. Ibid., p. 2-2.
124. Ibid.
125. (C) AFGP (DO) Ltr, Input for Recommendation for Air Force Outstanding Unit Award, 4 Dec 72, p. 1.
126. (S) AFGP Staff Digest, 11-17 Jun 72, p. 2-1.
127. (S) AFGP Staff Digest, 13-19 Aug 72, p. 2-2.
128. (S) AFGP Staff Digest, 30 Apr-6 May 72, p. 2-1.
129. (S) AFGP Staff Digest, 7-13 May 72, p. 2-3.
130. Ibid.
131. (S) AFGP Staff Digest, 30 Apr-6 May 72, p. 2-2.
132. (S) AFGP Staff Digest, 9-15 Jul 72, p. 2-3.
133. (S) AFGP Staff Digest, 11-17 Jun 72, p. 2--.
134. (S) AFGP Staff Digest, 30 Jul-5 Aug 72, p. 2-1.
135. (S) AFGP Staff Digest, 25 Jun-1 Jul 72, p. 2-2.
136. (S) AFGP Staff Digest, 23-29 Jul 72, p. 2-3.
137. Ibid.
138. (S) AFGP Staff Digest, 10-16 Sep 72, p. 2-2.
139. (U) ALO Advisor, 23rd ARVN Division, Ltr, VNAF ALO FAC Problem Areas, Nov 71, p. 4.
140. (C) ALO Advisor, III Corps, Monthly Progress Report, 31 Jan 72.
141. (C) ALO Advisor, 18th ARVN Division, Ltr, ALO/FAC Problems, Jan 72.
142. (C) III Corps Monthly Progress Report, 31 Jan 72.
143. (S) AFGP (XR) Msg, Enhance Plus, 091070Z Nov 72.
144. (C) AFGP Staff Digest, 6-12 Jan 73, p. 2-1.

UNCLASSIFIED

# UNCLASSIFIED

145. (C) 7AF (CS) Ltr, Special Survey, 19 Jul 71.
146. (U) EOT Report, Capt Michael E. Cavanaugh, ALO Advisor, 25th ARVN Division, 19 Feb 72.
147. (C) AFGP Staff Digest, 13-19 Feb 72, pp. 2-2 to 2-3.
148. (U) ALO Advisor, 18 ARVN Division, Monthly Progress Report, 30 Nov 71.
149. (C) ALO Advisor, III Corps, Monthly Progress Report, 31 Jan 72.
150. (U) Interview, 12 Jul 73, Capt Joseph G. Meeko IV, Project CHECO with Lt Col Herbert R. Fields, USAF, last AFAT Team Chief in MR IV.
151. (S) Hq 2 ADVON Operations Analysis Report, "Counter-insurgency Lessons Learned: Jul-Dec 1964," Jan 65.
152. (C) AFGP Study, Living Standards in the Vietnamese Air Force, 31 Jan 72.
153. (C) Hq USAF (XOV), Ltr, No Subject, 1 May 72.
154. (C) AFGP Ltr, VNAF Standard of Living, 20 May 72.
155. Ibid., p. 3-4.
156. (U) 7AF (DO) Ltr, VNAF Standard of Living, Jan 72.
157. Ibid.
158. (S) 7AF (CV) Ltr, VNAF Leadership Assessment, Sep 71.
159. Ibid.
160. (S) MACJ3-031 Ltr, VNAF Support for the RVNAF, 14 Dec 70.

UNCLASSIFIED

# UNCLASSIFIED

## GLOSSARY (U)

AA	Artillery Adjustment
AAA	Anti-aircraft Artillery
AB	Air Base
ABCCC	Airborne Battlefield Command and Control Center
AD	Air Division
AFB	Air Force Base
AFGP	Air Force Advisory Group
AFM	Air Force Manual
AGL	Above Ground Level
AGOS	Air Ground Operations School
ALO	Air Liaison Officer
AMC	Air Mission Commander
AO	Area of Operations
AOC	Air Operations Command
APC	Armored Personnel Carriers
ARVN	Army of the Republic of Vietnam
BDA	Bomb Damage Assessment
BDE	Brigade
CBU	Cluster Bomb Unit
CE	Convoy Escort
COB	Combat Observation of Battlefield
CONUS	Continental U.S.
CPI	Consumer Price Index
CRC	Control and Reporting Center
CRP	Control and Reporting Post
CS	Coastal Surveillance
CSS	COMBAT SKYSPOT
CTZ	Corps Tactical Zone
DAAR	Daily Air Activities Report
DASC	Direct Air Support Center
DISUM	Daily Intelligence Summary
DME	Distance Measuring Equipment
DMZ	Demilitarized Zone
EE	Escape and Evasion
EOT	End of Tour
FAC	Forward Air Controller
FEBA	Forward Edge of the Battle Area
FM	Frequency Modulated
FOL	Forward Operating Location
FRAC	First Regional Assistance Command
FSB	Fire Support Base
FSCC	Fire Support Coordination Center

# UNCLASSIFIED

HF	High Frequency
HQ	Headquarters
IMAT	Intelligence Mobile Advisory Team
JAOC	Joint Air Operations Center
JTD	Joint Table of Distribution
JGS	Joint General Staff
KTAS	Knots True Airspeed
LORAN	Long Range Electronic Navigation
MAAG	Military Assistance Advisory Group
MEDEVAC	Medical Evacuation
mm	millimeter
MR	Military Region
NCO	Non-commissioned Officer
NGF	Naval Gunfire
NOA	Non-operational Aircraft/Not Otherwise Assigned
NVA	North Vietnamese Army
OPLAN	Operations Plan
PACAF	Pacific Air Forces
PCS	Permanent Change of Station
POL	Petroleum, Oil, and Lubricants
PZ	Pickup Zone
QL	Quoc Lo (National Highway). Designations of major highways in RVN, e.g., QL-1, QL-14.
QTCB	Quang Tri Combat Base
ROC	Required Operational Capability
RTB	Return to Base
RVN	Republic of Vietnam
RVNAF	Republic of Vietnam Armed Forces
SAM	Surface to Air Missile
SAR	Search and Rescue
TAC	Tactical
TACAIR	Tactical Air (Support)
TACAN	Tactical Air Navigation
TACC	Tactical Air Control Center
TACP	Tactical Air Control Party
TACS	Tactical Air Control System
TASD	TACS Advisory Support Division

# UNCLASSIFIED

TASG	Tactical Air Support Group
TASMD	Tactical Air Support Management Division
TIC	Troops in Contact
TDY	Temporary Duty
TOC	Tactical Operations Center
TRAC	Targets Research and Analysis Center
UHF	Ultra High Frequency
UK	United Kingdom
USA	United States Army
USAFAGOS	USAF Air Ground Operations School
USMC	United States Marine Corps
VC	Viet Cong
VNAF	Vietnamese Air Force
VNMC	South Vietnamese Marine Corps
VR	Visual Reconnaissance
Wx	Weather

# UNCLASSIFIED