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KHMER

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NOV 70 — NOV 71

15 JUN 1972

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HQ PACAF

Directorate of Operations Analysis
CHECO/CORONA HARVEST DIVISION

Prepared by:

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Project CHECO 7th AF, DOAC

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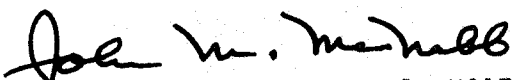
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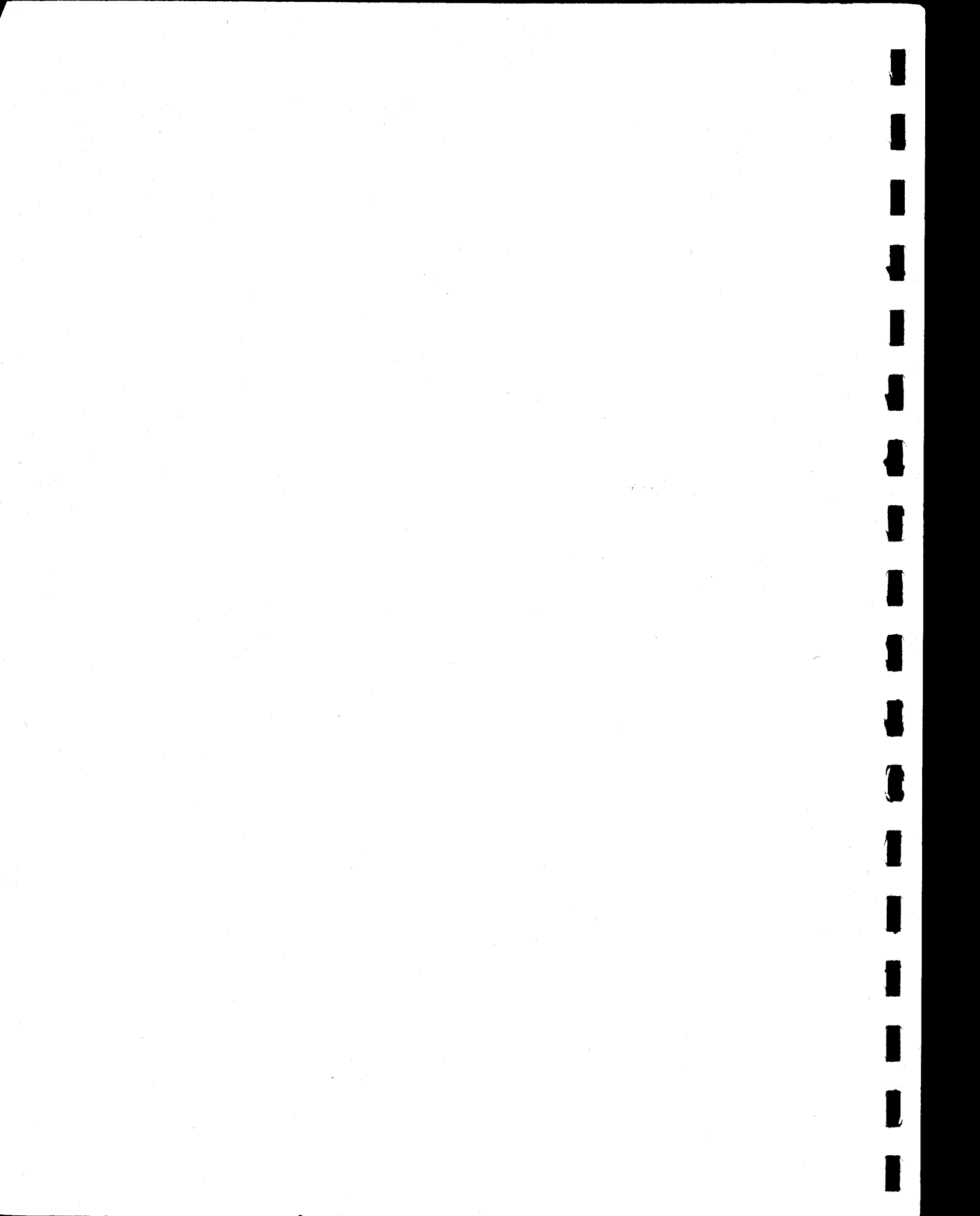
The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in the employment of USAF airpower to meet a multitude of requirements. The varied applications of airpower have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, there has been an accumulation of operational data and experiences that, as a priority, must be collected, documented, and analyzed as to 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 that would be primarily responsive to Air Staff requirements and direction, and would provide timely and analytical studies of USAF combat operations in SEA.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet this Air Staff requirement. Managed by Hq PACAF, with elements at Hq 7AF and 7/13AF, 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.


JOHN M. McNABB, Major General, USAF
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Robert E. Hiller

ROBERT E. HILLER
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iii

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 - (4) AFCHOS 2(10,11)
- c. AFCSA
 - (1) AF/SAG. 1(12)
 - (2) AF/SAM. 1(13)
- d. AFSAMA. 2(14,15)
- e. AFIGO
 - (1) AFOSI/IVOA. . . 3(16-18)
 - (2) IGS 1(19)
- f. AFINATC 5(20-24)
- g. AFACMI. 1(25)
- h. AFODC
 - (1) AFPRC 1(26)
 - (2) AFPRE 1(27)
 - (3) AFPRM 1(28)
- i. AFPDC
 - (1) AFDPW 1(29)

j. AFRD

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- (2) AFRDQ 1(31)
- (3) AFRDQPC 1(32)
- (4) AFRDR 1(33)
- (5) AFRDQL 1(34)

k. AFSDC

- (1) AFLGX 1(35)
- (2) AFLGM 1(36)
- (3) AFLGF 1(37)
- (4) AFLGS 1(38)
- (5) AFSTP 1(39)

l. AFDAD 1(40)

- m. AFXO. 1(41)
 - (1) AFXOD 1(42)
 - (2) AFXODC. 1(43)
 - (3) AFXODD. 1(44)
 - (4) AFXODL. 1(45)
 - (5) AFXOOG. 1(46)
 - (6) AFXOSL. 1(47)
 - (7) AFXOV 1(48)
 - (8) AFXOOSN 1(49)
 - (9) AFXOOSO 1(50)
 - (10) AFXOOSS 1(51)
 - (11) AFXOOSV 1(52)
 - (12) AFXOOTR. 1(53)
 - (13) AFXOOTW 1(54)
 - (14) AFXOOSZ 1(55)
 - (15) AF/XOXAA. 6(56-61)
 - (16) AFXOXXG 1(62)

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3. MAJOR COMMAND

a. TAC

(1) HEADQUARTERS

- (a) XP. 1(63)
- (b) DOC. 1(64)
- (c) DREA. 1(65)
- (d) IN. 1(66)

(2) AIR FORCES

- (a) 12AF
 - 1. DOO. 1(67)
 - 2. IN. 1(68)
- (b) T9AF(IN). 1(69)
- (c) USAFSOF(DO). 1(70)

(3) WINGS

- (a) 1SOW(DOI). 1(71)
- (b) 23TFW(DOI). 1(72)
- (c) 27TRW(DOI). 1(73)
- (d) 33TFW(DOI). 1(74)
- (e) 35TFW(DOI). 1(75)
- (f) 314TAW(DOI). 1(76)
- (g) 67TRW(DOI). 1(77)
- (h) 347TRW(DOI). 1(78)
- (i) 316TAW(DOX). 1(79)
- (j) 363TRW(DOI). 1(80)
- (k) 317TFW(DOI). 1(81)
- (l) 474TFW(DOI). 1(82)
- (m) 516TAW(DOX). 1(83)
- (n) 4403TFW(DOI). 1(84)
- (o) 58TAC FTR TNG WG. 1(85)
- (p) 354TFW(DOI). 1(86)

(4) TAC CENTERS, SCHOOLS

- (a) USAFTAWC(IN). 1(87)
- (b) USAFTFWC(DR). 1(88)
- (c) USAFAGOS(EDA). 1(89)

b. SAC

(1) HEADQUARTERS

- (a) DOX. 1(90)
- (b) XPX. 1(91)
- (c) LG. 1(92)
- (d) NR. 1(93)
- (e) HO. 1(94)

(2) AIR FORCES

- (a) 8AF(DOA). 2(95,96)

c. MAC

(1) HEADQUARTERS

- (a) DOI. 1(97)
- (b) DOO. 1(98)
- (c) CSEH. 1(99)
- (d) MACOA. 1(100)
- (e) 60MAWG(DOXPI) 1(101)

(2) MAC SERVICES

- (a) AWS(HO). 1(102)
- (b) ARRS(XP). 1(103)

d. ADC

(1) HEADQUARTERS

- (a) DO. 1(104)
- (b) DOT. 1(105)
- (c) XPC. 1(106)

(2) AIR DIVISIONS

- (a) 25AD(DOI). 1(107)
- (b) 23AD(DOI). 1(108)
- (c) 20AD(DOI). 1(109)

e. ATC

- (1) DOSPI. 1(110)
- (2) DPX. 1(111)

UNCLASSIFIED

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f. AFLC

- (1) HEADQUARTERS
- (a) XOX 1(112)

g. AFSC

- (1) HEADQUARTERS
- (a) XRP 1(113)
- (b) XRLW 1(114)
- (c) SAMSO(XRS) 1(115)
- (d) SDA 1(116)
- (e) HO 1(117)
- (f) ASD(RWST) 1(118)
- (g) ESD(XRL) 1(119)
- (h) RADC(DOT) 1(120)
- (i) ADTC(CCN) 1(121)
- (j) ADTC(DLOSL) 1(122)
- (k) ESD(YWA) 1(123)
- (l) AFATL(DL) 1(124)

h. USAFSS

- (1) HEADQUARTERS
- (a) AFSCC(SUR) 2(125, 126)

- (2) SUBORDINATE UNITS
- (a) Eur Scty Rgn (DOAA). 1(127)

i. USAFSO

- (1) HEADQUARTERS
- (a) CSH 1(128)

j. PACAF

- (1) HEADQUARTERS
- (a) DP 1(214)
- (b) IN 1(215)
- (c) XP 2(216, 217)
- (d) CSH 1(218)
- (e) DC 1(219)
- (f) LG 1(220)
- (g) DOAD 51(221-271)

(2) AIR FORCES

- (a) 5AF
- 1. CSH 1(129)
- 2. XP 1(130)
- 3. DO 1(131)
- (b) Det 8, ASD(DOASD). 1(132)
- (c) 7AF
- 1. DO 1(133)
- 2. IN 1(134)
- 3. XP 1(135)
- 4. DOCP 1(136)
- 5. DOAC 2(137,138)
- (d) T3AF
- 1. CSH 1(139)
- (e) 7/13AF(CHECO) . . . 1(140)

(3) AIR DIVISIONS

- (a) 313AD(XP) 1(141)
- (b) 314AD(XP) 2(142,143)
- (c) 327AD 1(144)
- 1. IN 1(144)

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(4) WINGS

- (a) 8TFW(DOEA) 1(145)
- (b) 56SOW(WHD) 1(146)
- (c) 366TFW(DO) 1(147)
- (d) 388TFW(DO) 1(148)
- (e) 405TFW(DOEA) 1(149)
- (f) 432TRW(DOI) 1(150)
- (g) 1st Test Sq(A) 1(151)

(5) OTHER UNITS

- (a) Task Force ALPHA(IN) . 1(152)
- (b) Air Force Advisory Gp. 1(153)

k. USAFE

(1) HEADQUARTERS

- (a) DOA 1(154)
- (b) DOLO 1(155)
- (c) DOO 1(156)
- (d) XP 1(157)

(2) AIR FORCES

- (a) 3AF(DO) 2(158, 159)
- (b) 16AF(DO) 1(160)

(3) WINGS

- (a) 50TFW(DOA) 1(161)
- (b) 20TFW(DOI) 1(162)
- (c) 401TFW(DCOI) 1(163)
- (d) 513TAW(DOI) 1(164)

4. SEPARATE OPERATING AGENCIES

- a. ACIC(DOP) 2(165, 166)
- b. AFRES(XP) 2(167, 168)
- c. AU
 - 1. ACSC-DAA 1(169)
 - 2. AUL(SE)-69-108 . . . 2(170, 171)
 - 3. 3825/HOA 2(172, 173)
- d. ANALYTIC SERVICES, INC 1(174)
- e. USAFA
 - 1. DFH 1(175)
- f. AFAG(THAILAND) 1(176)

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

a.	COMUSJAPAN/J3	1(177)
b.	CINCPAC (J301)	2(178,179)
c.	CINCPACFLT (Code 321)	1(180)
d.	COMUSKOREA (ATTN: J-3)	1(181)
e.	COMUSMACTHAI/MACTJ3	1(182)
f.	COMUSMACV (TSCO)	1(183)
g.	COMUSTDC (J3)	1(184)
h.	USCINCEUR (ECJB)	1(185)
i.	CINCLANT (CL)	1(186)
j.	CHIEF, NAVAL OPERATIONS	1(187)
k.	COMMANDANT, MARINE CORPS (ABQ)	1(188)
l.	CINCONAD (NHSV-M)	1(189)
m.	DEPARTMENT OF THE ARMY (ASM-D)	1(190)
n.	JOINT CHIEFS OF STAFF (J3RR&A)	1(191)
o.	JSTPS	1(192)
p.	SECRETARY OF DEFENSE (OASD/SA)	1(193)
q.	CINCSRIKE (STS)	1(194)
r.	CINCAL (RCJ3-A)	1(195)
s.	MAAG-CHINA/AF Section (MGAF-0)	1(196)
t.	U.S. DOCUMENTS OFFICE, HQ ALLIED FORCES NORTHERN EUROPE	1(197)
u.	USMACV (MACJ031)	1(198)

6. SCHOOLS

a.	Senior USAF Representative, National War College	1(199)
b.	Senior USAF Representative, Armed Forces Staff College	1(200)
c.	Senior USAF Rep, Industrial College of the Armed Forces	1(201)
d.	Senior USAF Representative, Naval Amphibious School	1(202)
e.	Senior USAF Rep, U.S. Marine Corps Education Center	1(203)
f.	Senior USAF Representative, U.S. Naval War College	1(204)
g.	Senior USAF Representative, U.S. Army War College	1(205)
h.	Senior USAF Rep, U.S. Army C&G Staff College	1(206)
i.	Senior USAF Representative, U.S. Army Infantry School	1(207)
j.	Senior USAF Rep, USA JFK Cen for Mil Asst	1(208)
k.	Senior USAF Representative, U.S. Army Field Artillery School	1(209)
l.	Senior USAF Representative, U.S. Liaison Office	1(210)
m.	Senior USAF Rep, U.S. Army Armor School, Comd and Staff Dept	1(211)

7. SPECIAL

a.	The RAND Corporation	1(212)
b.	U.S. Air Attache, Vientiane	1(213)

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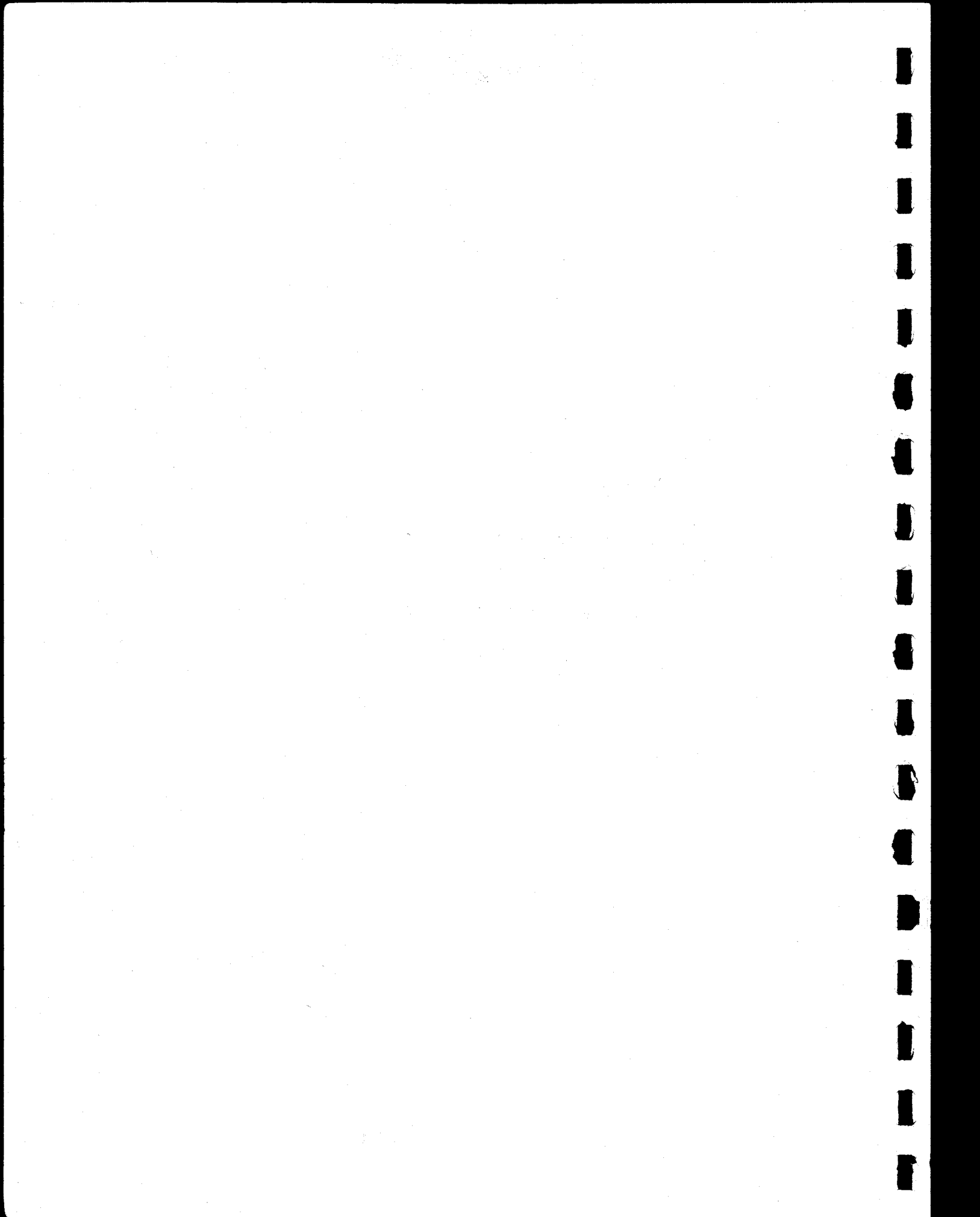


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TABLE OF CONTENTS

	<u>Page</u>
FOREWORD	x
Chapter	
I. INTRODUCTION	1
Background	1
Overview	2
II. US AIR OPERATIONS	8
Policies	9
Rules of Engagement	11
Command and Control	15
Operations	21
Air-to-Ground Communications	30
Mekong River Convoys	31
Summary	32
III. KHMER AND ROYAL THAI AIR FORCE OPERATIONS	33
Khmer Air Force Operations	33
Royal Thai Air Force Operations	38
IV. VIETNAMESE AIR OPERATIONS IN THE KHMER REPUBLIC	43
Coordination Difficulties	43
VNAF Support of ARVN	45
V. CONCLUSION	49
FOOTNOTES	52
GLOSSARY	61

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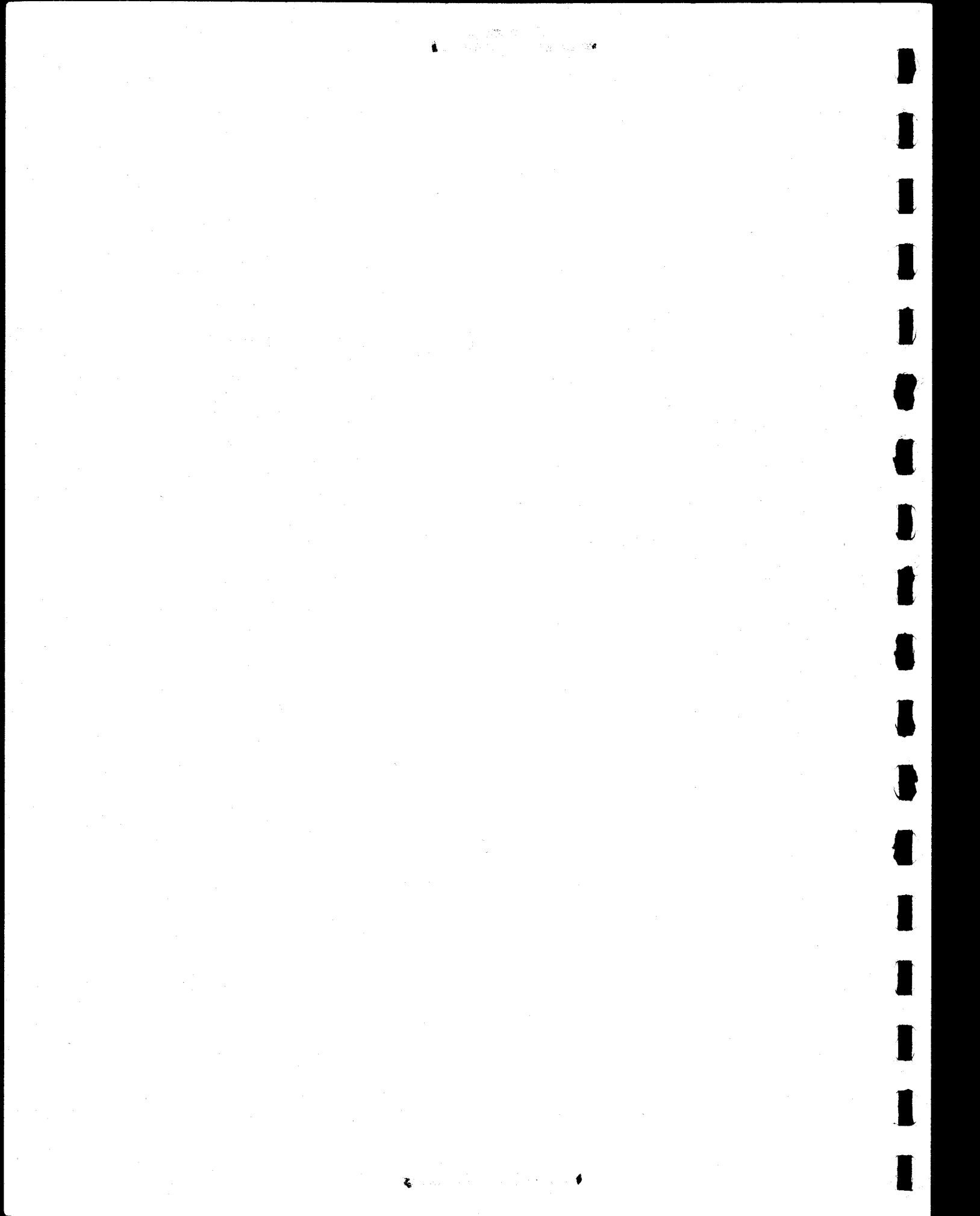
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FOREWORD

This report covers the period from 1 November 1970 to 31 October 1971. The US role in the air operations graphically illustrated the application of the Nixon Doctrine of 1970 which said that US air power would substitute for American ground troops in support of our allies. The report focuses on the necessity for efficient command and control of air resources that kept dwindling as the US presence in SEAsia was withdrawn. The report also shows the problems inherent in a situation where friendly ground forces had such limited capabilities that air supremacy could not assure victory. The political restrictions on air operations in the Khmer Republic restricted the US support to an interdiction effort, but close and direct air support missions were also interpreted as preventing enemy forces and supplies from entering the Republic of Vietnam.

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CHAPTER I
INTRODUCTION

Background

By early November 1970, the Viet Cong and the North Vietnamese Army (VC/NVA) controlled over 50 percent of the Khmer Republic's territory.* This situation had come about after the United States (US) and the Republic of Vietnam's (RVN) cross-border incursion in May 1970. After US troops pulled out in June 1970, the only Allied ground forces operating in the Khmer Republic were the Force Armee National Khmer (FANK) and the Army of the Republic of Vietnam (ARVN). The FANK was not strong enough to contain the VC/NVA and the ARVN limited their presence in the Republic to periodic sweeps in the plantation area just west of the RVN/Khmer border.

The VC/NVA, with approximately 85,000 men,^{1/} moved to expand and protect their lines of communication (LOCs) from Laos to the RVN. The overthrow of the Sihanouk government by Lon Nol denied the VC/NVA use of the port at Kompong Som, and the enemy forces fell back on land LOCs to support their activities in RVN. To secure these routes, the VC/NVA

*After the Khmer Republic was established in October 1970, the words "Cambodia" and "Cambodian" became obsolete. "Khmer" and "Khmers" will be used exclusively throughout this report except where the older terms appear in quotations or titles of publications, reports, etc.

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made war on the fledgling Khmer Republic and by late 1970 the Khmers had control of less than half of the territory and slightly more than 50 per cent of the population. They controlled Phnom Penh and most of the larger population centers, but the major LOCs and rice producing areas were less secure. Without outside military support, it was questionable whether the government of the Khmer Republic (GKR) could survive through the northeast monsoon (dry) season which began in November 1970.

Overview

United States military members of the American Embassy staff at Phnom Penh early in November made a cautious assessment of the military situation in the Khmer Republic. Based on the fact that there had been little change in the disposition and capabilities of the enemy through 1 November, these officials believed the VC/NVA would continue to harass the GKR and interdict friendly LOCs with light ground attacks and attacks by fire (ABFs), and predicted that enemy forces would take only defensive action in response to anticipated FANK offensives. The Americans had little intelligence information on the relatively inactive Khmer Rouge (literally, Red Khmers) or so-called VC Khmer forces; still, little significant activity on their part was expected. Expressing cautious optimism, the Embassy military staff did not believe that the enemy's limited attacks would undermine the GKR's strength or the Khmer public morale, upon which might depend the country's fate.

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The Embassy staff's collective opinion was that Premier Lon Nol's objective of widening his government's control and influence was too ambitious because it was beyond the capabilities of Khmer armed forces.* The FANK seemed to be making progress in their actions and capabilities, but their universal shortages limited them to light infantry efforts even with Allied air support. Still, the U.S. Ambassador in Phnom Penh predicted that the FANK would perform creditably during the 1970-71 dry season;^{2/} but this did not prove true. By October 1971, Khmer ground forces had succeeded only in maintaining a defensive posture and were holding roughly the same territory as they had a year earlier.

The basic objective of the US was that there should be no "total takeover" of the Khmer Republic by VC/NVA forces.^{3/} American air resources and third country forces were to be used to secure that objective. According to the Commander, Military Assistance Command, Vietnam (COMUSMACV), the overall mission of the Commander, Seventh Air Force (7AF) as single manager for air operations in the Khmer Republic, was to "conduct the most aggressive US and VNAF air campaign that [was] feasible..."^{4/}

*The American Ambassador also indicated that the US Government was unwilling to support the Lon Nol objective since it would have meant committing more than just air power or MAP support. See Footnote 2 for the source of this information.

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The Joint Chiefs of Staff (JCS) observed in June 1970 that the critical focus of the war had shifted from the Republic of Vietnam to the Khmer Republic and Laos, particularly to the former.^{5/} As it developed over the year, however, US air resources were not allocated as though that were the case. In fact, operations in the Khmer Republic had a much lower priority than those in Laos from November 1970 to November 1971.^{6/}

Not only did the Khmer operations receive less emphasis than those in Laos, but the complex Rules of Engagement (ROE) for Southeast Asia (SEAsia) placed further restrictions on the application of air power in the Khmer Republic. The US military establishment developed the ROE in response to the policy of limiting damage and destruction to noncombatants, their homes, businesses, cultural areas and religious structures. There was generally strict observance of the ROE despite the apparent efforts of public news media to show otherwise.

An earlier CHECO report on air operations in the Khmer Republic noted that battles for ground positions often began before Allied ground commanders called in tactical air (tacair) strikes. When this happened there was often unacceptable damage to the position itself, especially if it was in an urban, cultural or temple area.^{7/} The ROE, under which American forces operated throughout the SEAsian conflict, helped limit the damaging effects of "destroying a position to save it." Those same ROE, however, made the tasks of air commanders much more complex while

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placing further limitations on air operations in the Khmer Republic.* Even when tacair was used on an extensive scale, the limited capabilities of Khmer ground commanders and their units frequently made it impossible to save the position.**

Although the operations of US, Khmer, Thai, and Vietnamese air forces are discussed in Chapters II through IV, some discussion of their overall effort is necessary here.

The U.S. Air Force (USAF) provided most of the air support in the Khmer Republic. The overall mission of US air operations was to conduct an interdiction campaign against enemy forces and LOCs, and to support friendly ground forces. Most of the missions flown by all air forces in the Republic were in support of ground operations either as close air support (CAS) or direct air support (DAS); but, in theory, this would prevent VC/NVA forces and materiel from reaching the RVN.^{8/} United States air operational objectives were also to "increase the cost" to NVN of "continuing aggression and support of insurgencies in South Vietnam, Laos, and Cambodia." The strategy was to maintain a free and independent "friendly" government in the Khmer Republic which would cause "major problems [for] the VC/NVA and [reduce] the threat to South Vietnam."^{9/}

*See Chapter II, pp. 12 - 17.

**It should be noted that many such actions were small-scale engagements or skirmishes involving battalion-sized units or smaller. For this reason, few specific examples could be documented.

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The US flew 39,151 sorties of all types in the Khmer Republic from 1 November 1970 to 1 November 1971. Of these, 17,611 were attack sorties and the remainder were combat support sorties.^{10/} The attack sortie totals were in contrast to 98,916 US attack sorties flown in the Barrel Roll and Steel Tiger AOs (Areas of Operation) of Laos and approximately 29,177 strike sorties flown in the Republic of Vietnam.^{11/} It was apparent that in the allocation of US air resources the Laos AOs had the highest priority while the RVN maintained a higher precedence than the Khmer Republic.

The Khmer Air Force (KAF) and Royal Thai Air Force (RTAF) roles were supplementary only.* Their AOs were severely restricted due to limited capabilities, and, especially in the case of the Thais, politico-economic factors. The Vietnamese Air Force (VNAF) flew 24,475 fixed wing aircraft sorties in the Khmer Republic, of which 12,215 were attack sorties. Almost all of the VNAF sorties supported Republic of Vietnam Armed Forces (RVNAF) operations.

Command and Control of air operations in the Khmer Republic underwent major changes due to the drawdown and realignment of American forces in SEA-sia. Seventh Air Force consolidated its control of the air war in June 1971 by combining the Tactical Air Control Center (TACC) with the Command Post (Blue Chip). The TACC had been responsible for controlling air

*Total KAF sorties were not available; and the RTAF flew an extremely limited number. See Chapter III.

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operations in the Khmer Republic and RVN and Blue Chip formerly managed all other US air operations in SEAsia. This consolidation of control enhanced the efficiency and ease of coordinating air operations.

In addition to the changes in command and control at 7AF, forward air control of US air operations also changed significantly due to re-deployment. Several forward air controller (FAC) units either phased out or merged with others as AOs were combined, expanded or eliminated. In general this caused a reduction of FAC coverage in the Khmer Republic which further limited the employment of US air power.

Despite realignment of US command and control functions, there was in effect no single manager for all air operations in the Khmer Republic. The VNAF retained direction of their own out-country air operations through their own TACC and the small KAF exercised control through an Air Operations Control Center (AOCC) established at Phnom Penh. Operating on a limited basis as a result of a joint agreement the RTAF administered their AO through a Direct Air Support Team (DAST) at Battambang in the western Khmer Republic.

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CHAPTER II

US AIR OPERATIONS

Seventh Air Force Operations Plans (OPLANS) 715 and 730 provided the guidance for air operations in the Khmer Republic from November 1970 to November 1971. Air operations in the Khmer Republic followed the north-east and southwest monsoon cycles and were part of the Commando Hunt air interdiction campaigns. The mission of 7AF under these plans was to conduct an interdiction campaign against enemy forces and LOCs and "support friendly ground forces in Laos, Cambodia, and SVN." Successful accomplishment of the mission would "increase the cost" to North Vietnam of "continuing aggression and support of insurgencies" in the three nations.^{12/}

The planners assumed that during the northeast monsoon or dry season, the VC/NVA would attempt to take Phnom Penh, control the major Khmer rice producing areas and gain access to the sea at Kompong Som as a major LOC for attacking South Vietnam. For this purpose, the enemy supposedly had the 1st NVA, 5th VC, 9th VC, and 7th NVA divisions in the Khmer Republic with the 308th, 320th, and 325th divisions as reinforcements. These forces totalled approximately 85,000 VC/NVA troops, with possibly 48,000 of them being combat soldiers.^{13/}

To combat this threat, the US and allied commanders employed tacair, air logistics, air reconnaissance, air control, long range cross-border artillery, rescue combat air patrol (rescap) support, control of seaborne traffic and naval air resources.^{14/} The US objectives in utilizing these

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measures were to prevent a "total VC/NVA takeover" of the Khmer Republic;^{15/}
to deny the enemy freedom of movement; and, at least, to maintain the status
quo (e.g., not lose any more provincial capitals or friendly LOCs).^{16/}

As the dry season progressed into the first half of 1971, the VC/NVA developed five rather limited, specific goals. First, they planned to control the land and use it as rear support areas. Second, in the west the enemy's activities aimed at converting rice production around the Tonle Sap Lake to their own use. Third, in remaining areas not under their direct control, enemy forces planned to interdict and harass FANK and ARVN activities. Fourth, the VC/NVA aimed at harassing and terrorizing provincial capitals and Phnom Penh to further weaken the shaky Lon Nol regime. Lastly, the enemy planned to conduct aggressive campaigns to recruit and train indigenous forces. (There was little evidence that this fifth objective came as close to success as did the others.)^{17/}

Policies

An earlier CHECO report on air operations in the Khmer Republic stated that according to the prerequisites of Air Force Manual 3-1, tacair did not enjoy the flexibility and timeliness necessary for optimum effectiveness.^{18/} This was true partly, because the use of air power in the Khmer Republic was confined by precise, geographically limited operating areas. Policies in effect for the Republic dictated a "low profile US posture" and those same restrictions continued throughout the entire year covered by this report.

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The fact that US air operations in the Khmer Republic were to be "low profile" did not mean that the air effort lacked support and guidance from the highest US authorities. After a meeting with Henry Kissinger, President Nixon's Advisor for Security Affairs, Admiral McCain, the Commander-in-Chief, Pacific Command (CINCPAC), informed General Creighton Abrams (COMUSMACV) that Mr. Kissinger favored "strong US air support" in the Khmer Republic. Admiral McCain stated that Mr. Kissinger did not want just "conceptual" plans but full-fledged operations plans that would be "supported by generous use of all types of RVNAF and US air support."^{19/}

In response to guidance from higher authorities 7AF required early in the 1970-71 dry season campaign that all US strikes flown in the Khmer Republic be reported as "air interdiction" missions.^{20/} The rationale behind categorizing nearly all types of air support missions as interdiction strikes was that if the VC/NVA could not get forces and materiel into RVN because they were stopped or destroyed in the Khmer Republic, then they were in fact interdicted.

To support the interdiction effort, CINCPAC authorized aerial reconnaissance over all of the Khmer Republic, except Phnom Penh, with armed escort for flak suppression. Search and rescue (SAR) aircraft could return ground fire without prior clearance for the protection of downed crews and their rescuers. Flareships were authorized to provide illumination anywhere in the Republic.^{21/}

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Rules of Engagement

There have been self-imposed restrictions by warring parties in almost all modern wars. In general, limited wars have had extensive and complex ROE and those governing air operations in the Khmer Republic were no exception. The 7AF OPLANS covering US air operations in the Khmer Republic contained complete lists of the ROE.^{22/} The nature of the battle area and the frequent use of combined US and allied forces required adherence to specific ROE to limit damage and casualties to friendly forces, civilians and their properties. The JCS established the ROE for SEAsia and they could be supplemented by other headquarters such as CINCPAC, CINCPACAF, COMUSMACV, and the 7AF Commander.^{23/}

Commanders of US strike forces had to insure that all subordinates responsible for making or controlling strikes were thoroughly familiar with the ROE. This responsibility included indoctrinating and testing strike aircrews, mission planners, FACs, air liaison officers (ALOs), TACC, and Combat Sky Spot personnel in knowledge and application of the ROE. In addition these people had to be given a review every 30 days and re-testing every three months.^{24/} Some units performed the training and testing even more frequently. Seventh Air Force required US advisors to encourage RVNAF units to comply with the ROE, and if violations occurred, the advisors were to suspend US fire support.^{25/}

The ROE allowed US air strikes in all of the Khmer Republic, but there were numerous limiting factors. There was an area in the northeastern

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Khmer Republic where US aircraft could strike with the approval of TACC. This was the Freedom Deal AO with two extensions. In the Freedom Deal AOs, the FANK validated the targets and TACC, or its airborne extensions, TACC(A)*, had to approve the US strike requests. Outside Freedom Deal, US strikes had to be considered on a case-by-case basis. Most of the fighting was in Freedom Deal, so normally approvals were easier to get in that area.

Another limiting factor was the restriction against striking pagodas, religious shrines, and cultural areas. Both the TACC and FACs controlling air strikes had detailed maps showing their location. These areas were normally off limits for air strikes, even with FANK validation. Although the ROE did not prohibit strikes against pagodas, USAF policy and practice did. This policy may have originated in December 1970 when 7AF forbade ^{26/} USAF strikes against "religious structures" under any circumstances.

On numerous occasions FANK ground commanders requested strikes on pagodas but TACC routinely disapproved the requests. The enemy quickly learned that he was safe from air attack in pagodas and routinely used them as sanctuaries and firing points. One place near Kompong Thom was nicknamed "Pagoda Mountain" by Rustic FACs because of the ground fire from the pagoda there. ^{27/}

*TACC(A) consisted of EC-121 aircraft based at Korat RTAFB, Thailand, which were used as an airborne command post and radio relay station.

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The FAC controlling a particular area normally received air strike requests, including the coordinates of the target, from a FANK or ARVN ground commander. The FAC checked the grid on his own maps, and if there were no prohibited areas evident either on the maps or through visual reconnaissance (VR), then the FAC relayed the strike request to TACC or TACC(A). After checking 1:50,000 scale maps himself, the senior duty officer (SDO) in either of these control centers had to secure validation from a FANK liaison duty officer. If the FANK officer validated the target, then TACC or TACC(A) could approve the request* and order in strike sorties if they were not already available on the scene. The TACC could also deny the request, based on nonavailability of strike planes, improper ordnance mixes on available aircraft, higher priority targets elsewhere, or the possibility that the strikes might cause unacceptable risk to friendly forces, civilians or property.

In the case of a Tactical Emergency (TAC-E), the ROE allowed a FAC to use available sorties or to expend his own ordnance (if his plane was armed, as in the case of OV-10 aircraft). In this case, it was left to the FAC's discretion to decide whether the situation was too critical to allow the target approval procedure to run its normal course. According to some sources, this happened frequently but there was little evidence that

*TACC(A) could not approve strikes outside Freedom Deal, but had to defer to TACC.

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US FACs misused this option.^{28/}

For the interdiction mission in the Khmer Republic, Category A and B LOCs were established, and there was constant message traffic throughout the period either redefining or modifying the ROE concerning them. Category A LOCs were enemy LOCs along which no friendly personnel, traffic, installations, or dwellings existed within 1,000 meters. On these "pre-validated" routes strike aircraft could attack moving or stationary target or suspected target area. Category B routes were enemy LOCs along which there were friendly personnel, traffic, installations or dwellings but along which the enemy were transporting personnel or supplies. On Category B LOCs, air attacks were authorized within 500 meters against motor vehicles or moving watercraft at night and against motor powered boats or motor vehicles in daylight hours. ROE required prestrike warnings to friendly personnel. They were to be warned not to travel at night and that during daylight hours any motor powered boat or motor vehicle observed would be destroyed. No strikes could be made on Category B routes closer than 500 meters to an inhabited village. Villages and towns of 15 or more structures, pagodas, religious shrines, and cultural areas were off-limits to US air strikes. There were procedures in the ROE for clearing villages for strikes, including leaflet drops to warn noncombatants. This allowed the enemy to escape, too.^{29/}

There were basic rules governing the return of ground fire against strike or support aircraft. The first was that aircraft could not return ground fire from temples, shrines or areas of cultural value. The second

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rule modified this somewhat by allowing it in the case of ground fire against SAR efforts. Thirdly, pilots and gunners could return ground fire in the Freedom Deal AOs if it did not come from places mentioned in the first rule above. The fourth rule prohibited returning ground fire elsewhere in the Khmer Republic unless the FANK validated and TACC or TACC(A) approved the request.^{30/}

In ROE governing other types of US air strikes, Arc Light (B-52s) strikes were not allowed within one kilometer of noncombatants or within three kilometers of friendly ground forces unless there was a TAC-E. During TAC-Es, and upon request of the FANK, COMUSMACV could authorize strikes within one kilometer of friendly forces if they were dug in with overhead cover. The US could perform aerial reconnaissance throughout the Khmer Republic, but armed escort and flak suppression for reconnaissance aircraft was authorized only in the interdiction area (FREEDOM DEAL).^{31/}

Command and Control

When the 1970-71 northeast monsoon campaign began, the 7AF Commander was the single manager for all out-country US air operations except ARC LIGHT. The TACC and its extension, TACC(A), operated in separate physical locations from Blue Chip, the 7AF Command Post. The TACC conducted operations in RVN and the Khmer Republic while Blue Chip controlled all other out-country air operations. The drawdown of US forces in SEAsia emphasized the increasing need to manage air resources as a single force.

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Major operations conducted before and after the June 1971 merger proved the necessity and wisdom of combining Blue Chip and TACC. Lam Son 719 and 720 in Laos and RVN were examples of operations that occurred prior to 1 June; Tonle Toch and the action around Krek and Tay Ninh took place in the Khmer Republic and the latter spilled over into RVN after the unification of the two control centers. Battles on the Plain de Jarres and on the Bolovens Plateau in Laos were further examples of 1970-71 actions ^{32/} which emphasized the need for single management of US air resources.

This was not complete unification, and true single management of air operations could hardly exist as long as there were as many as four centers capable of directing and controlling air strikes in the Khmer Republic. Besides the USAF and VNAF TACCs at Tan Son Nhut, there was the Khmer AOCC at Pochentong Airfield, Phnom Penh, and the RTAF DAST at Battambang in the western Khmer Republic.

TACC(A) was part of the USAF attempt to give more timely responses to requests for air support in the Khmer Republic. The TACC(A) mission consisted of EC-121 aircraft which flew out of Korat RTAFB, providing continuous dawn to dusk coverage over the Khmer Republic. Each EC-121 had Khmer, Thai, RVNAF, and USAF liaison officers aboard; it was their task to help coordinate the multinational air operations. If the FANK, the ARVN, or US FACs needed support quickly, the TACC(A) had the authority to allocate or divert sorties as immediate strikes. The Khmer representative was authorized to validate targets in these instances.

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When the TACC(A) was first established in September 1970, it served only as a radio relay station for TACC.^{33/} In October 1970, however, 7AF authorized the TACC(A) to approve strikes,^{34/} but only in Freedom Deal.^{35/} To make this possible, representatives from all four allied nations had to be aboard. By 16 December 1970, a joint-forces agreement with the Thais was finalized,^{36/} and one with the VNAF came on 31 December.^{37/} With these arrangements completed, the TACC(A) had the capability to control the air strikes of the USAF, VNAF, KAF, and RTAF.*

There were some problems, however, in the TACC(A) operating procedures. One was the failure of TACC(A) to properly report strike procedures. The TACC was not being informed of request denials and when TACC was questioned on the circumstances, they knew little about the particular incidents. This was partially remedied on 10 November 1970 when 7AF established better reporting practices for TACC(A).^{38/} These instructions had to be reaffirmed in January 1971. Another problem centered around the type of EC-121 aircraft performing TACC(A) duty. At first they were College Eye EC-121Ds, but flight evaluations indicated the EC-121Rs were better.^{39/} The switch to the latter took place on 29 November 1970 and the TACC(A) call sign changed from Ethan to Batcat.^{40/} The call sign changed again to Ramrod on 3 February 1971.^{41/} In December 1970, the TACC(A) attained the

*In practice, however, the KAF and RTAF did not operate in the Freedom Deal AO, which was the only area in the Khmer Republic where TACC(A) had authority to approve strikes.

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capability to give FACs and gunships traffic advisory service based on the X-T plotter readout of ground sensors. The SDO could also direct the FACs and gunships to the traffic areas.^{42/}

Forward air controllers generally praised the flexibility and timeliness of the TACC(A) system when it worked as designed. Some FACs believed that it served more often as a radio relay station than as a more responsive alternate to TACC.^{43/} As the TACC(A) operation began phasing out toward the end of 1971, another radio relay station, Sundog Alpha, served as effectively as the EC-121s in this capacity.^{44/} Although the TACC(A) could order strikes, it most often deferred to TACC for decisions.^{45/}

The maps used by TACC* and the FACs also affected strike approvals during the 1970-71 campaigns. They were 1:50,000 scale maps that showed the numbers and types of structures in villages and towns throughout the Khmer Republic. All of the maps were out of date, and some were as much as 12 years old.^{46/}

Early in November 1970, 7AF authorized FAC units flying OV-10 aircraft to arm their planes with 2.75 HE/HEAP rockets and 7.62mm machine guns for use in TAC-Es. This was allowed (1) if the ground commander requested air and armed helicopters were not available; (2) if it was a "fleeting target" that the FANK validated and TACC approved; or (3) if a SAR effort was in progress.^{47/}

*After 1 June 1971, TACC and Blue Chip were synonymous terms.

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The intricate procedures established for getting air strike request approved through TACC pointed out how extremely sensitive US participation was in the Southeast Asia war by late 1971.

Usually the FANK ground commanders made their air support requests through a USAF FAC on-station in the AO. The FAC then relayed the request to TACC or TACC(A) for validation. There were FANK representatives on duty in TACC at Tan Son Nhut and in TACC(A) during daylight hours.

Once the TACC received the request, the officers there checked it against their maps for possible ROE violations and then gave it to the FANK duty officer who also checked the location on his maps. If the FANK duty officer did not validate the request, TACC disapproved it on the spot. The request, if validated, was weighed against any other priority requests. If there were no limiting circumstances then TACC either provided the necessary sorties to the FAC or allowed him to control strike aircraft already available on the scene. If the situation were serious, it was necessary to divert sorties to the target.

For other than immediate air strikes, the routing of air strike requests was basically the same except that the FAC might make the request on his own if he discovered a lucrative target that could wait. Then the validated and approved request would go to the TACC "frag"*

*Fragmentary Orders (frag) were the daily supplemental orders that directed specific units to strike specific targets on other than an immediate basis. "Frag" were preplanned strike orders and contained mission number and function, type of ordnance, TOT and other instructions.

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shop where it became a preplanned strike. Ground commanders could also request preplanned strikes.

The FACs were the key to effective control of air operations in the Khmer Republic. They, too, felt the squeeze of restrictive ROE and reduced resources due to the US withdrawal from SEAsia. When the period began there were six FAC AOs in the Khmer Republic: Covey, Rustic,⁰⁻² Spike (Nail), Stormy, Sundog, and Tillie. All but the Spike (Nail) and Stormy FACs flew out of bases in RVN. During the period, the FAC AOs were changed drastically as three FAC units ceased operations in the Republic altogether and the other three units went through major realignments.

The Stormy, Spike (Nail) and Tillie FACs were the first to go early in the southwest monsoon season of 1971. The Tillies ceased operations in the southwestern Khmer Republic on 1 July,^{48/} and the KAF assumed responsibility for the AO (renamed Langka) with six wornout O-1s. Many of the Tillie pilots moved into the Sundog unit at Tan Son Nhut, and when the Khmers requested FAC assistance in Langka, the Sundogs in effect^{49/} expanded their AO to cover the old Tillie AO on an "on-call" basis.

In September, the Rustic FACs, who had been flying in the central Khmer Republic, moved to Ubon RTAFB and FAC coverage changed drastically again.^{50/} Their O-2 pilots and planes went to the Sundogs and the Rustic OV-10s moved to Ubon to absorb the Spike (Nail) AO in addition to keeping part of their old one in the central Republic. Now their AO covered most

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of the central and northern Khmer Republic. The west was left with only an occasional Rustic sortie. There were virtually no night operations in the Rustic AO except for an occasional Sundog flight in support of a TAC-E. Although the Covey AO and mission in the northeast remained basically the same, these changes led to a significant reduction of FAC coverage in the Khmer Republic during the rainy season of 1971.^{51/}

Operations

The US air mission in the Khmer Republic was officially interdiction but in practice most sorties were either close air support (CAS) or direct air support (DAS).^{52/} It was extremely difficult to carry on a potent interdiction campaign without an effective targeting intelligence system.^{53/} Most of the major enemy LOCs were either in enemy controlled territory or in areas where triple canopy jungle precluded effective aerial reconnaissance. Since FANK capabilities were limited largely to defending major positions outside the LOC areas, there was little chance of inserting ground forces into the LOCs with any great hope of success. The major insertion efforts centered around ARVN cross-border incursions in the eastern Khmer Republic. These campaigns, collectively labelled Operation Toan Thang, enjoyed only limited success. American air assistance for these operations was mostly logistical or combat support. When US strike support was committed for ARVN actions it was usually CAS or DAS. The 7AF allotted many preplanned strikes for interdiction in support of ARVN operations and there were large Arc Light efforts also, but it was

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hard to obtain good bomb damage assessment (BDA). Then current US policy precluded any new American ground incursions to interdict enemy LOCs.

From November 1970 to November 1971, US forces flew 17,611 attack sorties in the Khmer Republic. According to directives from 7AF, US forces flying attack sorties in the Republic were to report their mission as air interdiction operations.^{54/} From January through October 1971, the 7AF Command Status Book listed only one CAS mission in the Khmer Republic and no DAS strikes.^{55/} Nevertheless numerous sources gave clear evidence that the major strike effort in the Khmer Republic was in close or direct support of friendly ground forces.^{56/}

The OPLANS for the northeast and southwest monsoon campaigns of 1970-71 allocated between 10 and 12 per cent of available US tacair sorties for operations in the Khmer Republic.^{57/} In keeping with the Nixon Doctrine^{58/} most of these sorties went for the support of friendly Khmer and ARVN ground forces, both in day-to-day and major operations.

As the dry season began late in 1970, both the Khmers and the RVNAF planned offensive action in various parts of the Republic. The FANK had already begun operations to open roads south and southwest of Phnom Penh and was preparing to begin clearing operations northward on Route 6 toward Kompong Thom. The ARVN likewise launched operations late in October 1970. As in previous cross-border incursions,

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these RVNAF actions aimed at driving into VC/NVA LOC and base camp areas in the eastern section of the Khmer Republic.^{59/} The VC/NVA initiated major countermoves aimed at forestalling FANK initiatives. On 19 November, they attacked in Kompong Cham province northeast of Phnom Penh in a successful move to prevent FANK from opening Route 6 to Kompong Thom. Then later in the month, the enemy closed Route 4 at Pich Nil Pass. This was a major LOC from Phnom Penh to the port at Kompong Som. The FANK suffered heavy casualties in these operations, while the VC/NVA demonstrated, as they were able to do throughout the period, that they could engage and defeat Khmer forces almost at will in spite of concentrated allied air power. In the only major success of November, the ARVN uncovered the largest enemy supply cache since allied operations began in the Khmer Republic earlier in 1970.^{60/} Although the US actually flew fewer attack sorties in November than any month since June, combat support sorties went up by almost 200 per cent, mostly in support of RVNAF operations in the eastern Khmer Republic.*^{61/}

The number of US attack sorties increased sharply in December as the VC/NVA dry season offensives gained momentum. Major action centered in the north central part of the Republic, especially at Kompong Cham where the enemy isolated the provincial capital and the allied effort shifted to relieve the pressure there. The RVNAF joined with the FANK in one of the only major coordinated actions the two countries waged successfully. The two forces succeeded in relieving

*VNAF operations are covered in Chapter IV of this study.

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Kompong Cham's isolation as US air operations were increasingly dedicated to support FANK and ARVN ground operations.^{62/}

This trend continued as the dry season advanced. By January 1971 US attack sorties reached their highest level since June 1970, and continued to rise until the early part of the rainy season.* There was no significant decrease in US air operations until July 1971, when there was a drop of nearly 800 sorties that month. After that there was only a slight variation in the overall sortie rate until the end of October 1971. When FANK launched Operation Chenla II to reopen Route 6 north to Kompong Thom, the rate increased again while the overall US SEAsia sortie rate continued to decline. In fact, the proportion of overall SEAsia US attack sorties allocated to the Republic was higher from June to October than it was earlier.

In spite of a stated 7AF intention to increase FAC operations in the Khmer Republic,^{63/} the total US reconnaissance effort dropped steadily in relation to the previous year. The FAC sorties did increase in the first campaign of the period when the Rustic and Tillie units at Binh Thuy and Bien Hoa ABs gained more assets due to the redeployment of US Army (USA) units from RVN.^{64/} The phased US withdrawal from SEAsia,

*Sortie statistics did not agree from source to source. Although each source derived its figures from the same data bases, none agreed on totals. Figures used in the tables and graphs in this report came primarily from the 7AF Command Status Book and the VNAF Status Review.

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however, cut down on FAC coverage early in the southwest monsoon campaign that began in May.

The forward air control function was not the only one that suffered because of the drawdown. Other mission activities either cut back operations or ceased altogether as the units and their aircraft redeployed. The F-100s flew 3,937 sorties in the Khmer Republic from 1 November 1970 to 30 June 1971, then ceased flying as the airplanes went back to the US. The AC-119 Shadow gunships served as another example. With US crews, the Shadows flew 2,168 missions in the entire year, but due to the turnover of the AC-119s to the VNAF, the USAF flew only 53 sorties in September and October 1971.^{65/} Up until then the USAF provided eight AC-119s per day for 24-hour coverage of operations in the Republic. After the conversion on 10 September 1971, the VNAF sent only three per day and they did not often fire in support of Khmer TICs.^{66/} There were 287 RB-57 sorties in the Khmer AOs, but the number began declining as the rainy season set in, then ended altogether at the end of July 1971.^{67/}

Another air program that had previously enjoyed success in the Khmer war was the USAF Light Fire Teams (LFTs). An LFT consisted of one UH-1H command and control helicopter, two LOH-6As and two rotary wing gunships, the AH-1G Cobras. In January 1971 COMUSMACV authorized LFTs to support ARVN ground forces, Khmer major positions and enemy LOCs to the limits of the helicopters' range, but not more than 100 nautical miles inside the Republic. The LFTs could operate under visual flight rules only and were under the normal control channels of

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7AF through TACC.^{63/} They operated under the direct control of USAF FACs and had to notify TACC(A) when they crossed the Khmer/RVN border. The FAC had the authority to cancel or postpone the LFT mission if the situation dictated. The LFT air mission commander (AMC) controlled the Cobras once the FAC cleared the strike unless the AMC aborted or was out of position, in which case the FAC controlled the Cobras directly.^{69/} The FACs praised the capabilities of the LFTs, especially in giving good BDA or in discovering valid targets in heavy jungle or foliage. The AMCs used their LOHs to get down close and literally blow the jungle canopy apart to see below it. The FACs commented that to do this the LOH crews "either didn't have much sense or had a whole lot of guts."^{70/}

The LFTs flew basically two types of missions: (1) general interdiction and (2) interdiction supporting ARVN operations.^{71/} The latter was another way of saying the LFTs flew basically CAS missions. Once the targets were validated and cleared, the LFTs could expend in direct support of ARVN forces if effective communications could be established with ground elements. As in just about all US air operations in the Khmer Republic, any serious language difficulties in air-to-ground communications required immediate termination of the strike.^{72/} Unfortunately the USA began pulling back its forces also, and by August 1971 the LFTs were available for special operations only.^{73/} Another flexible and effective weapon was taken from the hands of officers charged with waging the air campaign in the Khmer Republic.

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In any case the viability of the Nixon Doctrine, which implied that US air power would substitute for US ground forces in saving positions or governments, was severely tested in the 1970-71 Khmer campaigns. When the battle for a position was already joined and the ground forces had only limited capabilities, not even massive air support brought victory every time.^{74/} In fact, there was only one major operation launched by FANK during the entire period where air power was truly decisive. This was Operation Reporter on the Tonle Toch River, the Khmer response to a VC/NVA attempt to further isolate Phnom Penh by seizing marsh areas east of the capital.

The major action centered around the town of Prey Vihear where FANK forces were isolated and in serious trouble. The operation lasted from 28 May to 6 August, but the major air action took place in June. Seventh Air Force relaxed the ROE somewhat and dedicated large amounts of tacair for the operation. A 10-15 kilometer zone was cleared for the USAF FACs to expend US strikes that were available throughout the day.^{75/} USAF AC-119s also worked freely in the area, expending up to 180,000 rounds per day from 28 May to 8 June in support of FANK ground troops. The TACC cleared the FACs and gunships to expend without requesting TACC approval if they received a FANK request and had sufficient ROE clearance. The Sundog FACs gave continuous coverage and tacair came on the scene at daybreak. By late June, 50 per cent of US tacair resources for the Khmer Republic was going in support of FANK ground operations at Tonle Toch. From 21-24 June

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there were 80 tacair strikes per day in Operation Reporter.^{76/}

The Sundog FACs reported one successful tactic that resulted from KAF C-47 airdrop failures. Air Force AC-119s were allowed to fire on enemy troops gathering the misplaced supplies and this caused numerous enemy casualties.^{77/}

The constant and concentrated US air effort, operating with more than usual freedom, hurt the enemy so badly during the daytime that he had to use the hours of darkness to regroup. There was less tacair available at night, but it was not needed as much. The FANK considered the operations near Tonle Toch as their most significant victory of the entire war.^{78/} It was, but it probably made them overconfident, and perhaps led to serious setbacks later in the year. No other operation in the entire period owed as much to tactical air power for its success.

There were numerous other operations launched by FANK during the period with and without significant US air support. In general, the low profile, strictly limited US air operations could not provide enough support to make up for the poor capabilities of Khmer forces, but there were numerous instances where FACs had more tacair than they could handle and it was still not enough to save the position.^{79/} This was true of both FANK and ARVN operations. When the enemy closed Route 4 at Pich Nil Pass, as he did at least three times in the 1970-71 period, neither tacair nor Arc Light strikes could open the LOC without voluntary withdrawal by the VC/NVA or successful ground operations by friendly

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forces. In other words, most air operations in the Khmer Republic were in response to enemy initiative, and the VC/NVA usually chose to disengage rather than suffer damaging casualties.

The enemy also seemed able to engage and disengage at will against ARVN operations in the northeastern Khmer Republic. Although this will be discussed later in Chapter IV, the VC/NVA followed a pattern of engaging at their own initiative.

The ARVN Toan Thang operation had several phases with each one beginning as the RVNAF crossed the border and then withdrew from the Khmer plantation areas east of the Mekong River. Toan Thang 01-71 actually began in February, but major action did not occur until later when the ARVN withdrew from Snoul in Kratie Province under heavy enemy pressure. USAF FACs claimed they saw the enemy buildup around Snoul, but were unable to make preemptive strikes in time to prevent the defeat. When the ARVN pulled back toward the RVN border, US air strikes were called in to destroy the equipment the RVNAF left behind. The ARVN losses included 839 individual and 110 crew-served weapons, 14 artillery pieces, 9 tanks, 15 APCs, and 64 trucks.^{80/}

The US provided more combat air support sorties than tacair or gunship sorties to RVNAF cross-border operations. This was in keeping with the Vietnamization objectives of the US Government, but when the VNAF could not meet the demands of its ground forces, US strike efforts usually provided covering fire for RVNAF withdrawals as at Snoul and

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the Krek-Lay Ninh engagements. (See Chapter IV.)

Air-to-Ground Communications

Air-to-ground communications problems continued to limit the effectiveness of air operations in the Khmer Republic.^{81/} The problem eased somewhat as the French-speaking FAC/FAG program^{82/} gained headway. The Khmer and Vietnamese ground commanders and radio operators also learned to speak better English so USAF aircrews found it increasingly easier to communicate with them. Toward the end of the period fewer enlisted and commissioned volunteers were available for this duty and fewer were flying FAC missions. Most FACs preferred to fly alone and communicated directly with the ground forces. Some FAC units, like the Ubon-based Rustics, were getting more French-speaking pilots and there was less need for interpreters.^{83/} Language difficulties during a particular mission required immediate termination of the strike.^{84/}

Communications in the Khmer Republic remained a major problem throughout the period, though there was a promise of aid shortly after the Commando Hunt VII campaign began. The Khmer forces were critically short of just about everything. (See Chapter III.) This was especially true in FANK equipment for point-to-point communications. At one time in the period, the Khmers' PRC 25 and PRC 105 motor generators were only 10 percent operational and there was little improvement throughout the two campaigns. There was also one occasion when an entire FANK brigade had only one FM radio. There was the possibility of improving this critical limitation on 8 November 1971 when the US gave the Khmers

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five MRC-108 jeep-mounted central communication, tactical control nets through the Military Assistance Program (MAP).^{85/}

Seventh Air Force formed the Tri-Partite Deputies Working Group at Tan Son Nhut AB to aid in solving some of the major communication problems in Khmer air operations. The Tri-Partite Deputies worked to improve the air-to-ground tactical request net and the point-to-point communications nets. On 19 October, 7AF began training a team of five KAF members to operate the MRC-108 control sets so they could, in turn, train their own people when the transfer took place in November. Seventh Air Force also began a survey on 10 November 1971 to make further improvements in the Khmer communications net.^{86/} The Deputies developed joint procedures for working with the RTAF and VNAF in requesting air support for ground operations in the Khmer Republic.^{87/} This group also had as one of its major tasks the improvement of coordination between the Khmers, the Thais, and the Vietnamese. The traditional antagonisms between the three peoples made communications and cooperation difficult. The point-to-point communications remained critical at the end of the 1971 wet season.^{88/}

Mekong River Convoys

The successful establishment of air support for Mekong River Convoys was the subject of a special CHECO report and will not be covered in depth here.^{89/} The program, a joint US-RVNAF-GKR effort, began on 12 January 1971 to relieve the critical fuel situation in Phnom Penh, and the 7AF TACC was in control of air operations supporting the convoys. There

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were stringent ROE in effect along the Mekong and, along with the complex routing of air support requests, they made it difficult to approve air strikes. In spite of these problems, the VC/NVA had been unable by the end of 1971 to prevent any convoys from reaching Phnom Penh. The GKR was originally to have taken over the convoy escort responsibility in September, but they lacked the capability and the turnover was postponed indefinitely in August.^{90/}

Summary

The key to US air operations lay in the 7AF TACC and its ability to effectively employ dwindling air resources under severe political and operational restrictions. The flexibility of tacair could not be fully exploited in the Khmer Republic due to the ROE, low priorities (in relation to Laotian operations), the difficulties created by traditional enemies attempting coalition warfare, and the poor capabilities of the FANK. All of these were factors which prevented more success in air operations in the Khmer Republic.

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CHAPTER III

KHMER AND ROYAL THAI AIR FORCE OPERATIONS

Khmer Air Force Operations

When the 1970-71 dry season began the KAF had basically the same problems left over from the previous season.^{91/} These included a lack of equipment, an unwieldy aircraft mix, low maintenance capability and operational limitations. They had three types of fighters consisting of four OM-170 Fouga Magisters (French), nine T-28s (US) and 12 MIG-17s (Russian). Five of the T-28s were on loan from the RTAF. The KAF had 98 aircraft in the inventory besides these 25 operational fighters.

To man its fighters the KAF had only 24 line pilots, some of whom were triple-qualified.^{92/} There were only about 100 pilots in the KAF when the period began, but with US aid, the Khmers established a pilot-training school at Battambang in the western part of the country.

There had been technical problems with modifying the MIGs to carry US MK-82 bombs, but these had been largely solved.^{93/} The MIGs were also fitted with .50 caliber machine guns and the KAF fighter sortie rate averaged over 30 per day until 22 January 1971.^{94/} Although the KAF operations were by no means "winning the war," they were apparently causing the VC/NVA considerable concern.

At approximately 0200 hours on 22 January 1971 the enemy launched a devastating ABF and sapper attack on the KAF at Pochentong Airport.^{95/} The KAF sortie rate declined abruptly since the VC/NVA attack destroyed

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or damaged most of the Khmer Air Force. American military officials in the Embassy at Phnom Penh agreed with FANK G2 that "a special analysis of the days (sic) events indicated that the enemy...weakened that element of FANK strength...he...feared the most, air power."^{96/} From that point on, the KAF aircraft inventory was much less complex and therefore much easier for the US to support through MAP. The attack destroyed all the MIGs and Magisters as well as numerous other "nonstandard" KAF planes.

The recovery of the KAF was slow despite US MAP aid, and the Khmers suffered from "air power infancy" throughout the Commando Hunt V and wet season campaigns of 1970-71. The US Government began immediately after the attack to reconstitute the KAF with MAP aid. All but three of the T-28s were reparable, but the Secretary of Defense (SECDEF) still wanted some of the losses replaced with six A-1s from US resources in RVN.^{97/} There was a loophole in this requirement, however. The GKR had to satisfy CINCPAC on airfield security at Pochentong before delivery, so this gave room for a calculated delay. The SECDEF ruled out giving A-37s to the Khmers because of cost, lead time, training and maintenance capabilities.^{98/}

The USAF preferred not to give A-1s to the Khmers, but they did support a plan to get the Royal Thai Government (RTG) to loan the KAF five more T-28s.^{99/} The American Embassy in Phnom Penh also recommended not giving the A-1s due to problems that far outweighed the advantages of such aid. The Khmer's capabilities were too limited and they had not sufficiently recovered from the shock of the 22 January disaster at the time of these proceedings. As it was, the main credit for any KAF planes flying by 3 February was due to an Air America team that had gone to Pochentong

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shortly after the attack.^{100/} Ultimately the RTG agreed to loan the KAF two T-28s in return for five newly modified T-28s from other US resources before 30 June 1971. The RTAF had already loaned the Khmers three T-28s.^{101/} By 10 February CINCPAC advised CINCPACAF to cancel all plans for the A-1 transfer.^{102/} The Khmers flew all their combat fighter strikes in T-28s from then on.

The KAF increased its capability to support ground operations when it began operating C-47 gunships in June 1971.^{103/} The original planning for this new capability included converting six C-47s from US resources^{104/} and training two KAF instructor crews in the Lao AC-47 training unit at Udorn RTAFB.^{105/} This was part of the US Government's intention of restoring KAF capabilities after the 22 January disaster.^{106/}

The first modification began 21 April and the sixth plane was completed by mid-June 1971. The planes were not intended to be AC-47s, but simply C-47 gunships. Each aircraft was outfitted at Tan Son Nhut AB with M-3 .50 caliber, pad-mounted machine guns.^{107/} At first 7AF tried to get permission for the KAF crews training at Udorn to fly combat training missions in Laos and in the Khmer Republic, but the US air attache in Vientiane and the Deputy Chief, JUSMAGTHAI, prevented it. The US mobile training team working with the Khmers was forbidden to fly combat missions, and the political implications of Khmer aircrews flying combat in Laos or the Republic out of Thailand were too sensitive to allow it.^{108/} The C-47 gunship modifications did not provide adequate crew safety or aircraft survivability nor did the planes have satisfactory air-to-ground

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communications.^{109/} At the end of the period, the modifications to correct these deficiencies were still in progress, but the gunships still performed above expectations.

The Rustic and Sundog FACs claimed that the gunships were quick reacting and the .50 caliber HE/HEAP ammunition was easier to put on a target than the 7.63mm mini-gun ammunition fired by standard gunships. The barrels burned up faster, but the FACs praised the Khmer C-47s' responsiveness and accuracy.^{110/}

Due to the shortages which handicapped them throughout the year, the Khmers did not even have the capability to direct their own air operations. When the US FAC operational areas changed midway through 1971, the KAF attempted to assume responsibility for air operations in VR sectors 11 and 12--the old Tilly AO. On 1 July they had six FAC O-1s, their own T-28s, and the C-47 gunships for operation in the Langka AO. The KAF encountered immediate problems for several reasons. FANK commanders were skeptical of the KAFs abilities, with good reason. The O-1 engines were worn out and oil consumption limited their range even more than did fuel.

The KAF T-28s flew an encouraging number of sorties (95) from 6-16 July, which helped convince 7AF to complete the Tilly FAC phaseout.^{111/} This was probably a mistake, but one which the Air Force was unable to prevent due to the drawdown. In any event, FAC coverage in the Langka AO was insufficient and the next US FAC shuffle expanded the old Sundog AO to pick up the slack in early October 1971. Technically the Sundogs were allowed to

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work the Langka AO only when the KAF asked for assistance,^{112/} but the FACs claimed they spent a major portion of their time flying there.

Their overall sortie rate went up when the KAF got two more T-28s and additional operationally ready O-1 pilots, but that was not enough to offset their weakness.^{113/} Even so the KAF continued to increase their sortie rate and gave air support in Langka and Chenla II, which began on 20 August. By 13 September KAF's combined sortie rate increased 23 per cent in the Langka AO and 43 per cent outside it, mainly on Route 6 in Chenla II operations. The US gave the KAF eight new O-1 engines through MAP, but installation was slow.^{114/}

There was also a serious lack of joint operational planning by the FANK and KAF. The KAF AOCC claimed FANK gave them only eight days' notice for Operation Chenla II and they ran out of MK-82 bombs on 21 September. They were out for four days, then ran out of bombs again for three days from 2-5 October.^{115/} There had not been enough advance notice by FANK for their Air Force to build up sufficient bomb stores.

It was clear that what little support KAF could provide for their own ground operations was not enough. There would have to be continued USAF, RTAF, and VNAF support until some indefinite future date. In the meantime, the Chief of the Military Equipment Delivery Team, Cambodia (CHMEDTC), which was established in January 1971, recommended that the KAF be built up to meet US FY 72 MAP goals. This would allow the KAF to relieve the USAF and the VNAF of some CAS duties.^{116/}

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The Khmer AOCC served as another example of military inadequacy and infancy. Up until the latter phases of Operation Chenla II, AOCC coordination with FANK was generally poor because the FANK didn't take their Air Force or the AOCC seriously. The quality of targets FANK gave the KAF was indicated by a general lack of ground fire. In simpler terms there were no enemy forces in the target areas. FANK sent the "good" targets to 7AF TACC.^{117/} FANK seemed to have little respect for KAF, nor did they concern themselves with discovering how to plan more effective use of KAF's limited capabilities. The FANK even seemed to be hoarding .50 caliber and 7.62mm ammunition at the expense of KAF.^{118/} The KAF belonged to the FANK and was decidedly not an independent service.

The KAF could not perform air operations missions effectively because it was pitifully short of just about everything necessary to fight a war. Even with US MAP aid, which would total \$185,000,000 for CY 71,^{119/} it was easy to see that low priorities and political sensitivities in America would continue to hamper modernization of the KAF. Its leadership was weak and dominated by the FANK Chief of Staff. The KAF did not have enough line pilots, skilled managers or staff officers. They had little understanding of what it took to run a large air force and only belatedly began to appreciate the deteriorating combat situation at the end of the year.^{120/}

Royal Thai Air Force Operations

The RTAF had seen limited action in Khmer operations since July 1970. In that month the Thais set up a DAST at Battambang in the western Khmer

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Republic. The DAST used single sideband radio to communicate with their AOC at Don Muang Airport in Bangkok. The AOC was the authorizing agency for RTAF strikes. Seventh Air Force had no actual control over Thai strikes except through the USAF FACs.^{121/} The RTAF AO first included Preah Vihear and Koh Kong Provinces along with a 30 kilometer-deep strip along the Thai-Khmer border. Later, as the US drawdown continued in the 1970-71 campaign, the AO was expanded to include most of the northwestern Khmer Republic.^{122/} The RTAF could fly elsewhere in MR IV if the FANK requested it.^{123/}

As it turned out the RTAF was restricted primarily by munitions shortages to a much weaker role in the Khmer Republic than would otherwise have been the case. In early February 1971, provisions of US Public Law 480 seriously curtailed munitions for the RTAF. The bill deleted most munitions for the Thais except for training purposes. The Thais could, however, buy them from the US at cut-rate prices if, in return, the Thais would sell rice on the world market at lower prices. The Thais refused to go along with PL 480, but they continued to fly in the Khmer Republic.

The Thais dedicated portions of two squadrons for air operations in support of the Khmers. These were the 222d (T-28s) and the 622d (using one of three AC-47s possessed by the RTAF). These aircraft were based at Ubon RTAFB except when more distant targets required them to stage out of Battambang.

The system used to control strikes worked, but not to the satisfaction of the Thais. The FANK sent its strike requests to the DAST, which

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then passed on the information to the AOC. The AOC made the decision with approval from their own tactical headquarters, then asked the USAF Liaison Officer at Don Muang to coordinate with 7AF for FAC support. Once all the approvals were granted, the missions were fraggged as pre-planned strikes. The RTAF flew neither immediate strikes nor night missions; they had no training or capabilities for them. The RTAF lost only one plane (a T-28) and a pilot in Khmer operations.^{124/}

The RTAF did not fly large numbers of missions in the Khmer Republic. From 1 June to 31 December 1970, they flew 182 combat missions with their T-28s, F-5s, and AC-47s. The Thais also flew 171 combat support missions during the same time period. In 1971 from 1 January through 31 October they flew only 115 T-28 and AC-47 sorties along with approximately 109 combat support sorties. Their F-5s did not fly in Khmer operations during 1971.^{125/}

The low number of missions was a result of several factors. One was the low level of enemy activity in MR IV. There were an estimated 10,000 Khmer Rouge (KR) insurgents in the AO but they were not particularly active. The KR and NVA controlled most of the northwest, but made no movements toward Thailand so it was "quiet" in much of the RTAF AO. Another reason for the low-level ground and air activity was the GKR refusal to allow Thai troops to sweep the area. The area that the RTG wanted to put troops into formerly belonged to Thailand, and the implications were obvious.^{126/} The restriction of PL 480 on the cost-conscious Thais was a third factor. A fourth was the refusal of the GKR to allow the RTAF to

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establish a direct air support center (DASC) headquarters in Phnom Penh to cut down on response time to Khmer air requests. Perhaps that was because the Khmers feared that the Thais might try to direct or overrule FANK officials by virtue of superior numbers or equipment.^{127/} Another factor was the limited amount of FAC support available for RTAF use. The Thais did not have satisfactory forward operating bases in the Khmer Republic for their O-1s, nor did they have enough of those planes.

Added to that was the limited range of the FANK air request net in the area. The RTAF could depend on the 7AF communications network and USAF FACs until 27 May 1971 when 7AF cut off FAC support for the Thais and their operations closed for almost a month. This occurred when the 7AF Commander found it necessary to clarify the rules which allowed USAF FACs to control third country strikes. These rules permitted it if the situation demanded and if there were no third country FACs available. Even though the Thais had some O-1s, neither the GKR nor the RTG had ever authorized them to operate in the Khmer Republic and their pilots were not trained for these operations.^{128/} The Thais and 7AF renegotiated a FAC agreement in late June 1971 and by 8 July it was official.^{129/} Then, in late October the Rustic FACs were cut from two OV-10s in the RTAF VR to ^{130/} one. That was sufficient for the low level of air activity in the AO.

There was also bickering between the Thais and Khmers over the low level of RTAF support as far back as February 1971. The FANK claimed the RTAF was not giving the requested strikes; the Thais countered by saying the FANK was not requesting many. When they did, some of the targets were

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not valid or suitable for RTAF planes and munitions. The Thais also complained that the perennial FANK communication weakness prevented timely response by the RTAF and that Khmer lack of enthusiasm was hindering coordination between FANK and the Thais. The quarreling parties met in February and April 1971 to discuss these problems, but US liaison personnel were unable to get complete information on the results. The COMUSMACTHAI felt that perhaps the GKR desired less Thai aid as their security position seemed to improve. The Thais also indicated that most of their missions were in MR IV while their DAST was in MR III. They claimed that they were getting too few bombs as it was since the level of insurgency in Thailand was increasing.^{131/} The Thais did not get a DAST at Phnom Penh; they did not get their AO expanded, and they did not get permission to move troops into the western Republic.^{132/}

Besides the problems mentioned above, there were two more factors which affected Khmer-Thai relations. First, the FANK did not want to honor the RTAF requests because it might be hard to refuse similar RVNAF requests which the GKR believed might intrude on their national prerogatives. Second, the USAF AOC liaison officer believed the RTAF reviewed FANK strike requests for possible short round dangers, whereas the VNAF did not seem to exercise the same precautions.^{133/} There was little possibility of confirming this information.

The RTAF air operations provided an insight into the serious problems involved in persuading traditional enemies to work together with limited resources in a conflict that could determine their collective fates.

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CHAPTER IV

VIETNAMESE AIR OPERATIONS IN THE KHMER REPUBLIC

The VNAF performed CAS and logistics roles in the Khmer Republic from the beginning of the war there in April 1970.^{134/} Although they flew support for both FANK and ARVN ground operations, the VNAF effort for the RVNAF far outweighed that for the former.

There had been doubts about the effectiveness of VNAF support of the FANK. The CINCPAC reply to JCS questions about this was that the VNAF devoted at least one-third of their air resources to operations in the Khmer Republic. There had also been a significant number of weather and maintenance cancellations during the wet season from June through September 1970.^{135/} There was an increase of VNAF sorties early in the Commando Hunt V campaign, but the question still remained as to Vietnamese willingness to support the Khmers.

Coordination Difficulties

The bases for the problems of coalition warfare in the Khmer Republic lay in the traditional antagonisms of the Khmers, the Thais and the Vietnamese. These people had been enemies for centuries before the present conflict began. Parts of the Khmer Republic once belonged to Thailand, while the Vietnamese had ruled portions of it as well. The three peoples are ethnically different so there has been what amounted to racial prejudice to further endanger successful cooperation among them.

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Early in the 1970-71 dry season campaign, VNAF crews were in Phnom Penh to train KAF crews on six helicopters the US gave the Khmers. Instead, the Vietnamese seemed to be living very well without doing much training. They were supplementing their per diem by selling their US-supplied weapons to the FANK or anyone else who had American dollars.^{136/} In late January 1971 the VNAF crews simply went home, and their air liaison officers in the DASC at Pochentong packed their belongings and "deserted" without saying when or if they would return.^{137/}

The VNAF had little desire or inclination to support FANK ground operations nor did the Khmers particularly want their support. There was even a suggestion that the Vietnamese attitude actually contributed to a significant number of VNAF short rounds when they flew support for FANK troops.^{138/} Another source, however, lent some doubt to this claim when in December 1970 a VNAF A-37 struck a FANK unit, killing six and wounding ten. A FANK officer reported that it was an "unfortunate incident of war" rather than some perverse carelessness on the part of the Vietnamese.^{139/}

While the depth of the mistrust and dislike was hard to measure, it was a fact that 7AF had to pressure the VNAF into giving air support to FANK operations. The Americans likewise pressured the Khmers into accepting VNAF assistance. One example of this was the AC-119 gunship conversion in September 1971. Prior to the conversion, the USAF flew eight AC-119s per day over the Republic and their support for TICs was extremely helpful. After the VNAF took over the AC-119s in RVN, they flew only three gunships of FANK ground action. In one of the most critical situations

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of the year, the Tonle Toch operations in May and June, there was no VNAF tacair and the FANK did not particularly want it.^{140/} In general the VNAF did not support the FANK unless there were extensive efforts in TACC to coordinate specific actions.^{141/}

This mutual mistrust among the Vietnamese, Khmers and Thais, led 7AF to set up the previously mentioned Tri-Partite Deputies Working Group. (See Page 38) The Tri-Partite Deputies not only worked at improving the tactical communications nets, but they also attempted to alleviate the long-held mutual antagonisms that prevented more effective cooperation among the allies.^{142/} This program offered hopes for better relations in the future.

VNAF Support of ARVN

The VNAF actually conducted a significant amount of the air operations in the Khmer Republic. Although most of their sorties supported ARVN forces, the VNAF effort was still extensive and showed an increasing ability on their part to handle major operations. They flew a total of 11,893 fighter sorties during the year in the Khmer Republic. There were 626 VNAF gunship missions in the 12-month period as well. The Vietnamese also flew approximately 9,862 liaison sorties and 2,364 transport sorties but the figures for these were incomplete. This was also true of the VNAF helicopter sorties, of which there were 42,694 from April through October 1971.*

*Helicopter sorties count each landing and takeoff as a sortie although it may be a part of only one mission.

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Most of the VNAF's air operations in the Khmer Republic supported RVNAF cross-border operations. There were numerous occasions throughout the year when the VNAF sortie rate exceeded that of the US in the Khmer Republic, especially when RVNAF troops were involved in heavy fighting around the plantation areas of the east central Khmer Republic and in neighboring RVN Tay Ninh Province. The VNAF imposed rather rigid mileage restrictions on the distance into the Republic which their fighters could fly. The VNAF A-37s could go in up to 120 kilometers, while the F-5s were limited to only 100 kilometers, but the VNAF seemed reluctant to let any of their aircraft fly beyond the Mekong River or north of Route 13. This was apparently based on an earlier Vietnamese/Khmer agreement and the VNAF generally held to it.^{143/} A major limitation was the lack of VNAF FAC sorties, and there were rigid restrictions on the use of USAF FACs to control third country strikes.

Later during the Krek-Tay Ninh operations, the USAF FACs had greater authority to control VNAF sorties, but the FACs expressed reluctance because they feared the consequences of short round incidents. In this case the VNAF FACs were unable to adequately control their own fighter strikes so the Sundog FACs received TACC approval to do the job. The Sundogs were offered the services of VNAF interpreters to ride in their O-2s to aid in communicating with ARVN ground commanders if no English-speakers were available. The Sundog FACs usually refused this assistance because they often did not know what was said or where the ordnance actually hit in relationship to the ground troops. It was their feeling

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that little was said if VNAF planes put bombs too close to their own troops. If USAF tacair strikes got too close, however, the FACs believed the ARVN complained of short rounds for which the FACs might be blamed. The USAF FACs were unsure whether they would receive support ^{144/} if there were short round incidents under these circumstances.

It was a certainty, however, that VNAF operations in the Khmer Republic offered measurable success and showed signs of progress in the Vietnamization of the war. Their airlift capabilities needed supplementing in major operations and the JCS gave COMUSMACV authority to use American resources for Operation Toan Thang early in the period. This authority ^{145/} was rather broad and did not require an existing emergency. This included USA helicopter support due to the limitation of VNAF fixed and rotary wing transport capabilities. By 10 March the VNAF had flown 1,270 airlift and logistics missions in that phase of Operation Toan Thang, while the US flew 7,603 including helicopter sorties. The VNAF flew almost 1,300 tacair sorties in support of the operation as opposed to USAF's 768 attack sorties.

The VNAF was thus capable of providing a high percentage of its own tacair needs in the major RVNAF operations of the period. They probably could have given more gunship support to FANK ground operations along with tacair, but both parties were still experiencing the mutual animosities that 7AF made a special effort to resolve. This concern was evident in the establishment of the Tri-Partite Deputies Working Group under the chairmanship of a USAF officer. The VNAF still has air transport

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difficulties but the continuing transfer of American air assets was a move to alleviate this problem.

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CHAPTER V

CONCLUSION

In January 1972 the exiled Prince Norodom Sihanouk, ex-King of Cambodia, gave a left-handed compliment to the effects of air power in the Khmer Republic. He credited the "bandit" Lon Nol's regime with retaining power "only through the intervention of the United States Air Force."^{146/}

Although his assessment may have been somewhat exaggerated, there is little doubt that air operations in the Khmer Republic played a significant, if not decisive role in the survival of the Khmer Government. It may be that the presence of air power bolstered confidence and morale in the Khmer forces enough to enable them to escape defeat. There were many occasions such as in Pich Nil Pass and in the Tonle Toch operations when air power clearly affected the outcome. There were others, as in some of the ARVN operations in the eastern Khmer Republic and in smaller FANK operations like Kang Rey and Bos Khnor, where the limited capabilities of friendly ground forces made the effects of air power much less apparent. The most visible results of tacair or airlift in some of the latter actions came when Allied planes had to destroy abandoned equipment and supplies or assist in the withdrawal of friendly forces.

The US Government maintained that air interdiction was the primary mission of air operations in the Khmer Republic. The actual interdiction of enemy LOCs, however, receive less emphasis than CAS or DAS. ARVN and FANK TICs definitely had the highest precedence for the allocation

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of strike and gunship sorties in the Khmer Republic.

The necessity for ROE in the SEAsia war is hardly questionable. There will always be arguments about their application, however, and the application of the ROE in the Khmer Republic had its detractors as well. Some sources asserted that there were critical situations, as at Tonle Toch, when application of the ROE was relaxed. There were other times, they said, when rules were not bent to ease the emergency, and some FACs stated that they saw positions overrun because strike clearances came too late or not at all. These pilots felt there should have been more flexibility in the clearances, especially if survival of the friendlies was at stake and the enemy was taking obvious advantage of the ROE, as he often did.^{147/} The responsibility for interpreting the ROE, however, was a command and control function necessarily subject to the personal judgment of the decision makers.

Seventh Air Force made progress toward single management of air operations in SEAsia by combining Blue Chip and TACC in June 1971 to control the dwindling US air power caused by the drawdown. The single management of all air resources was not achieved, though, since the VNAF continued to control their air operations from a separate TACC. The Khmers exercised control of KAF through their AOCC in Phnom Penh, while the Thais operated more or less independently utilizing their DAST in the western Republic and the RTAF AOCC at Don Muang RTAFB. It was also difficult to coordinate air operations with allied air forces

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that ranged from mere "infancy" in military capabilities to the most complex tactical weapons systems in existence. The outgoing 7AF Deputy Chief of Staff for Operations, Major General Joseph G. Wilson, alluded to some of the problems which affected Allied air operations in the Khmer Republic by saying:

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In a way controlled by strict limitations on employment of resources, the flexibility of tactical air must be exploited to the maximum...We found ourselves frequently responding to the initiatives of the enemy or Allied ground forces as well as fully employing air resources in an interdiction role.

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FOOTNOTES

1. See Chapter II.
2. (TS) Msg, 061045Z Nov 70, AMEMBASSY Phnom Penh to SECDEF.
3. (TS) Msg, 121226Z Jan 71, COMUSMACV to Cmdr 7AF.
4. Ibid.
5. (TS) Msg, 202311Z Jun 70, JCS to COMUSMACV.
6. (S/NF) Interview, topic: Air Operations in the Khmer Republic. With Lt Col Carl W. Matthews Tactical Air Control Branch Chief, Hq Seventh Air Force, by Captain Charles A. Nicholson at Tan Son Nhut Airfield, 28 December 1971. Hereinafter cited as Matthews Interview.
7. CHECO Report, The Cambodian Campaign, 1 July-31 October 1970, Hq PACAF, 31 December 1970, p. 1. (Hereinafter cited as CHECO Report, The Cambodian Campaign.)
8. (TS) Msg, 132257Z April 1971, JCS to CINCPAC.
9. (TS) Seventh Air Force OPLAN 714, "Southwest Monsoon Plan," 5 May 1971. See also OPLAN 714 (TS), "Southwest Monsoon Plan," 30 May 1970.
10. (S) Seventh Air Force, Command Status Book, Nov 1970-Oct 1971. There were relatively few US Navy (USN) and US Marine Corps (USMC) attack sorties flown in the Khmer Republic).
11. Ibid.
12. (TS) Seventh Air Force OPLAN 715, Change 2, 17 December 1970; and OPLAN 730, 5 May 1971 (Hereinafter cited as 7AF OPLANs 715 and 730).
13. (TS) Msg, 090601Z Nov 70, CINCPAC to CJCS.
14. Ibid. This planning was directed by (TS) Msg, 030025Z Nov 70, CJCS to CINCPAC.
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UNCLASSIFIED

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UNCLASSIFIED

UNCLASSIFIED

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UNCLASSIFIED

UNCLASSIFIED

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UNCLASSIFIED

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UNCLASSIFIED

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GLOSSARY

ABF	Attacks by Fire
ALO	Air Liaison Officer
AMC	Air Mission Commander
AO	Area of Operation
AOC	Air Operations Center
AOCC	Air Operations Control Center
ARVN	Army of the Republic of Vietnam
BDA	Bomb Damage Assessment
CAS	Close Air Support
CHMEDTC	Chief of Military Equipment Delivery Team, Cambodia
CINCPAC	Commander-in-Chief, Pacific Command
CINCPACAF	Commander-in-Chief, Pacific Air Forces
COMUSMACV	Commander, U.S. Military Assistance Command, Vietnam
DAS	Direct Air Support
DAST	Direct Air Support Team
FAC	Forward Air Controller
FANK	Force Armee National Khmer
FM	Frequency Modulation
GKR	Government of the Khmer Republic
JCS	Joint Chiefs of Staff
JUSMAGTHAI	Joint U.S. Military Advisory Group, Thailand
KAF	Khmer Air Force
KR	Khmer Rouge
LFT	Light Fire Teams
LOC	Line of Communication
MAP	Military Assistance Program
OPLANS	Operations Plans
ROE	Rule of Engagement
RTAF	Royal Thai Air Force
RTG	Royal Thai Government
RVN	Republic of Vietnam
RVNAF	Republic of Vietnam Armed Forces

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SAR
SDO
SECDEF

Search and Rescue
Senior Duty Officer
Secretary of Defense

TACC
TACC(A)

Tactical Air Control Center
Tactical Air Controller Airborne

VC/NVA
VR

Viet Cong/North Vietnamese Army
Visual Reconnaissance

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