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14. ABSTRACT Project CHECO was established in 1962 to document and analyze air operations in Southeast Asia. Over the years the meaning of the acronym changed several times to reflect the escalation of operations: Current Historical Evaluation of Counterinsurgency Operations, Contemporary Historical Evaluation of Combat Operations and Contemporary Historical Examination of Current Operations. Project CHECO and other U. S. Air Force Historical study programs provided the Air Force with timely and lasting corporate insights into operational, conceptual and doctrinal lessons from the war in SEA.					
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PROJECT

Contemporary

Historical

Examination of

Current

Operations

REPORT

**THE DASCs in II CORPS TACTICAL ZONE
JULY 1965 - JUNE 1969**

31 AUGUST 1969

**HQ PACAF
Directorate, Tactical Evaluation
CHECO Division**

Prepared by:
**ERNIE S. MONTAGLIANI
CAPTAIN JOHN R. WOHNISGL**
Project CHECO 7th AF, DOAC

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PROJECT CHECO REPORTS

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 7AF/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. Along with the other CHECO publications, this is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM.



MILTON B. ADAMS, Major General, USAF
Chief of Staff

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WARREN H. PETERSON, Colonel, USAF
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2. DI. 1
(b) T9AF(DI). 1
(c) USAFSOF(DO). 1

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(b) 4TFW(DO). 1
(c) 23TFW(DOI). 1
(d) 27TFW(DOI). 1
(e) 33TFW(DOI). 1
(f) 64TAW(DOI). 1
(g) 67TRW(C). 1
(h) 75TRW(DO). 1
(i) 316TAW(DOP). 1
(j) 317TAW(EX). 1
(k) 363TRW(DOC). 1
(l) 464TAW(DO). 1
(m) 474TFW(TFOX). 1
(n) 479TFW(DOF). 1
(o) 516TAW(DOPL). 1
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(r) 4554CCTW(DOI). 1

(4) TAC CENTERS, SCHOOLS

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(b) USAFTARC(DID). 2
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(d) USAFTFWC(CRCD). 1

(e) USAFAGOS(DAB-C). 1

b. SAC

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(c) DM. 1
(d) DI. 1
(e) OA. 1
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(2) AIR FORCES

(a) 2AF(DICS). 1
(b) 15AF(DI). 1

(3) AIR DIVISIONS

(a) 3AD(DO). 3

c. MAC

(1) HEADQUARTERS

(a) MAOID. 1
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(c) MACHO. 1
(d) MACOA. 1

(2) AIR FORCES

(a) 21AF(OCXI). 1
(b) 22AF(OCXI). 1

(3) WINGS

(a) 61MAWg(OIN). 1
(b) 62MAWg(OCXP). 1
(c) 436MAWg(OCXC). 1
(d) 437MAWg(OCXI). 1
(e) 438MAWg(OCXC). 1

(4) MAC SERVICES

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d. ADC

(1) HEADQUARTERS

(a) ADODC 1
(b) ADOOP 1
(c) ADLCC 1

(2) AIR FORCES

(a) AF ICELAND(FICAS) . . . 2

(3) AIR DIVISIONS

(a) 25AD(ODC) 2
(b) 29AD(ODC) 1
(c) 33AD(OIN) 1
(d) 35AD(CCR) 1
(e) 37AD(ODC) 1

e. ATC

(1) HEADQUARTERS

(a) ATXPP 1

f. AFLC

(1) HEADQUARTERS

(a) MCVSS 1

g. AFSC

(1) HEADQUARTERS

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(b) SCS-6 1
(c) SCGCH 2
(d) SCTPL 1
(e) ASD(ASJT) 1
(f) ESD(ESO) 1
(g) RADC(EMOEL) 2
(h) ADTC(ADGT) 1

h. USAFSS

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(b) CHO 1

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(b) 6940 Scty Wg(OOD) 1

i. AAC

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j. USAFSO

(1) HEADQUARTERS

(a) COH 1

k. PACAF

(1) HEADQUARTERS

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(b) DI 1
(c) DPL 2
(d) CSH 1
(e) DOTECH 5
(f) DE 1
(g) DM 1
(h) DOTECH 1

(2) AIR FORCES

(a) 5AF(DOPP) 1
(b) Det 8, ASD(DOASD) 1
(c) 7AF

1. DO 1
2. DIXA 1
3. DPL 1
4. TACC 1
5. DOAC 2

(d) 13AF

1. CSH 1
2. DPL 1

(e) 7/13AF(CHECO) 1

(3) AIR DIVISIONS

(a) 313AD(DOI) 1
(b) 314AD(DOP) 2
(c) 327AD
1. DO 1
2. DI 1
(d) 834AD(DO) 2

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(4) WINGS

(a) 8TFW(DCOA)	1
(b) 12TFW(DCOI)	1
(c) 35TFW(DCOI)	1
(d) 37TFW(DCOI)	1
(e) 56SOW(WHD)	1
(f) 347TFW(DCOOT)	1
(g) 355TFW(DCOC)	1
(h) 366TFW(DCO)	1
(i) 388TFW(DCO)	1
(j) 405TFW(DCOA)	1
(k) 432TRW(DCOI)	1
(l) 460TRW(DCOI)	1
(m) 475TFW(DCO)	1
(n) 633SOW(DCOI)	1
(o) 1st Test Sq(A)	1

(5) OTHER UNITS

(a) Task Force ALPHA(DXI)	1
(b) 504TASG(DO)	1

m. USAFE

(1) HEADQUARTERS

(a) ODC/OA	1
(b) ODC/OTA	1
(c) OOT	1
(d) XDC	1

(2) AIR FORCES

(a) 3AF(ODC)	2
(b) 16AF(ODC)	2
(c) 17AF	
1. ODC	1
2. OID	1

(3) WINGS

(a) 20TFW(DCOI)	1
(b) 36TFW(DCOID)	1
(c) 50TFW(DCO)	1
(d) 66TRW(DCOIN-T)	1
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FOREWORD

"The DASCs in II Corps Tactical Zone" examines Tactical Air Control Systems (TACS) in II Corps, and assesses managers of airpower in II DASC and DASC Alpha, as well as resources, responsibilities, and procedures of these centers. Further, this CHECO report discusses the Direct Air Support Centers' role in providing immediate tactical air support for the ground forces operating in II Corps. It also includes information received from the DASCs themselves about effectiveness of their immediate support.

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CHAPTER I
INTRODUCTION

The II Corps Tactical Zone (Fig. 1) comprised 49 percent of the land mass of South Vietnam. It contained the widest (150 miles) and longest (300 miles) measurements of any of the four corps, encompassing diverse terrain features of mountains, rolling highlands, dense jungle areas, and coastal lowlands.^{1/} When considering the war in II Corps in the historical context, the distance factor must always be kept in mind, for air operations there were dramatized by this vast expanse.

In 1961, the decision was made to increase the U.S. advisory effort in South Vietnam. The USAF carried out a study of the country's air situation, which resulted in the establishment of a Tactical Air Control System as outlined in the Thirteenth Air Force Operations Plan Nr. 226-61.^{2/}

The plan included the formation of an Air Operations Center (AOC) at Tan Son Nhut to oversee the use of airpower throughout South Vietnam. In each of the four corps, Control and Reporting Centers were formed, with the managers of airpower in the Corps designated as Air Support Operations Centers (ASOC). On the ground operating level, Air Control Parties (ACPs) were emplaced with major ground units of battalion size or larger.^{3/}

Initially, the manager of airpower in II and III Corps was called the II ASOC and was collocated with the II Corps headquarters at Pleiku. In 1963, the responsibility for III Corps was assumed by a "Sub-ASOC" that the Allied commanders ordered into being at Nha Trang. This "Sub-ASOC" was later

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phased out when a new ASOC was organized at Headquarters, III CTZ, at Bien Hoa, South Vietnam.^{4/}

The II ASOC was manned jointly by U.S. Air Force and Vietnamese Air Force (VNAF) personnel. The VNAF provided the ASOC Director and staff, who were responsible for planning, coordination, and employment of South Vietnamese air assets in support of Army of Republic of Vietnam (ARVN) ground forces. The USAF, on the other hand, furnished the Deputy Director and others, who had similar duties concerning sorties flown by American aircraft, also in support of the ARVN units.^{5/}

Considered an extension of the Air Operations Center, the II ASOC's stated purpose was to provide better response to tactical air support requests from the ARVN ground forces in II CTZ (before 1965, no FWMAF ground units existed in II Corps). The ASOC also permitted the Commander, Vietnamese Air Force, and the Military Assistance Command, Vietnam (MACV) to centralize the execution of close air support and air reconnaissance operations in II Corps.^{6/}

As a result of a country-wide study made in late 1963, a new request system was devised and put into operation in May 1964. The old system required specific oral or written clearance at all echelons up to Corps commander. By instituting the "silence gives consent" principle, it was possible for ground units to bypass intervening levels and ask for air support directly at the Corps' level. Also in May 1964, a comprehensive program was started to brief all U.S. Army advisers and ARVN commanders on the use of the new system.^{7/}

The air support situation in South Vietnam had been under study for some

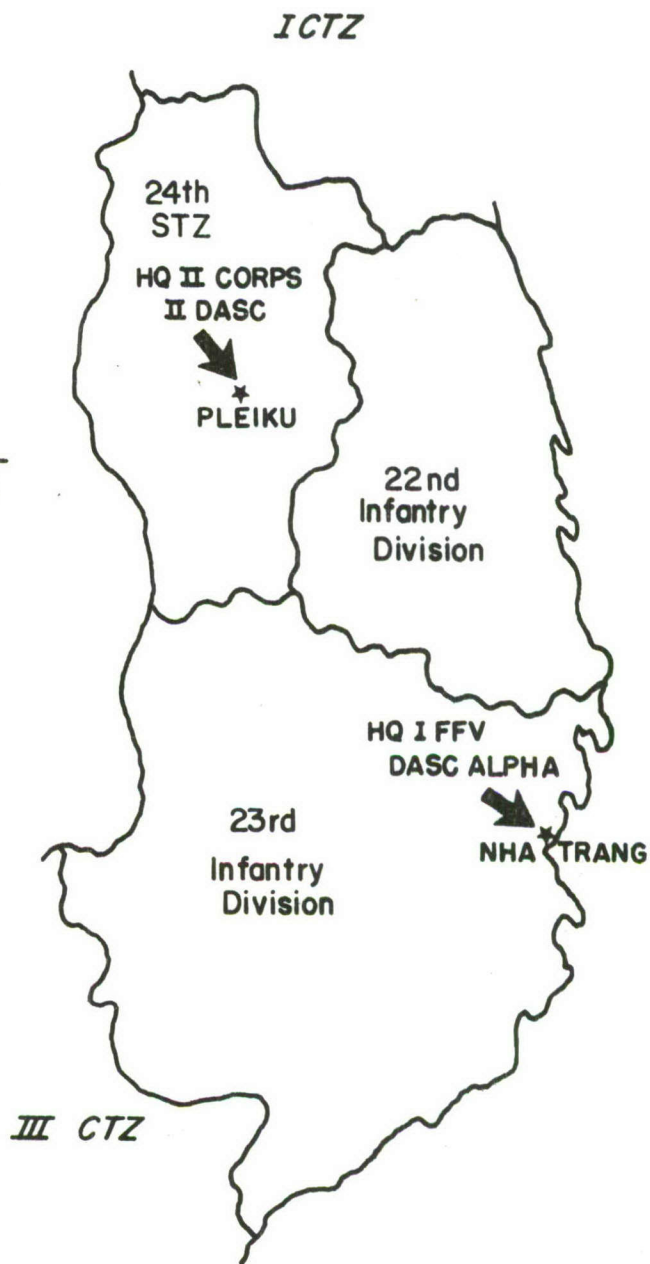
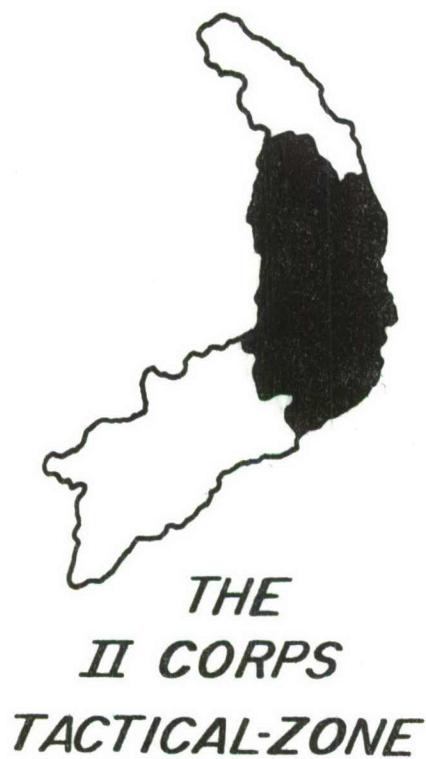


FIGURE I

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time by U.S. air and ground commanders, as new methods were being investigated to better control air assets. Almost concurrent with the entry of U.S. ground forces into the country in 1965, a new TACS and complimentary Army Air/Ground System was presented and put into operation. The AOC, the ASOCs, and the ACPs were redesignated as the Tactical Air Control Center (TACC), the Direct Air Support Centers (DASC), and the Tactical Air Control Parties (TACPs), respectively.^{8/}

The basic differences between the old and new systems were: (1) the Air Force now controlled and operated immediate air request nets for the TACPs at battalion level and above; (2) coordination delays were avoided by having immediate requests passed directly from the battalion TACPs to the DASCs, with intervening TACPs monitoring; (3) the TACC assumed responsibility for committing air assets to preplanned requests, allowing the DASCs to concentrate on immediate requests; (4) an improved displacement capability was provided the DASCs by always having a TACP equipped with mobile communications facilities at the same level; (5) Air Force and Army communications systems became standardized; and (6) the TACPs maintained a station in the supported ground unit's radio net, if required.^{9/}

not so!
yes!

The II ASOC at Pleiku became II DASC and remained a joint USAF/VNAF organization. On 1 August 1965, Task Force Alpha^{*} was activated and became operational as a Field Force Vietnam (FFV) headquarters, with operational control over all Free World Military Assistance Forces (FWMAF) ground units in II CTZ.^{10/} Concurrently, an all-USAF DASC (DASC Alpha) was organized and collocated with the headquarters at Nha Trang.

*Distinguish as separate unit--not that of TFA, Nakhon Phanom.

[REDACTED]

The operational plan for DASC Alpha was to support US/FWMAF assigned to the Headquarters FFV (later redesignated I FFV), in coordination with the II DASC at Pleiku. When FWMAF units operated unilaterally within an assigned tactical area of responsibility (TAOR), the air support for them was given directly from the TACC to DASC Alpha. If the units were operating in conjunction with II Corps ARVN elements, the air support was processed through II DASC.^{11/}

The system initiated in the latter part of 1965 prevailed until 2 April 1969. There were two DASCs in II Corps. The II DASC included USAF/VNAF personnel with the Americans acting mainly in an advisory capacity. DASC Alpha was an all-USAF operation, with little advisory responsibility, but rather it supported Allied operations. Down to the TACP level, the situation was similar--those under II DASC included personnel from both countries, with the USAF advising; the TACPs assigned and directed by DASC Alpha were all FWMAF, charged with conducting operations and with few advisory duties.

Inasmuch as the two II Corps ground elements--the ARVN II CTZ headquarters and the U.S. First Field Force Vietnam--were located at Pleiku and Nha Trang, respectively, the physical split of the two DASCs contributed to a confusing situation. It was realized that a problem existed, both with lines of communications and with delineation of responsibility. Although no perfect solution appeared available, a partial and workable solution came about through a major reorganization of the TACS in II Corps. On 2 April 1969, all USAF operational elements were consolidated at DASC Alpha, with the exception of one officer and a small contingent of enlisted personnel who remained at II DASC in a purely

LOCATION OF DASC IN CHAIN OF COMMAND

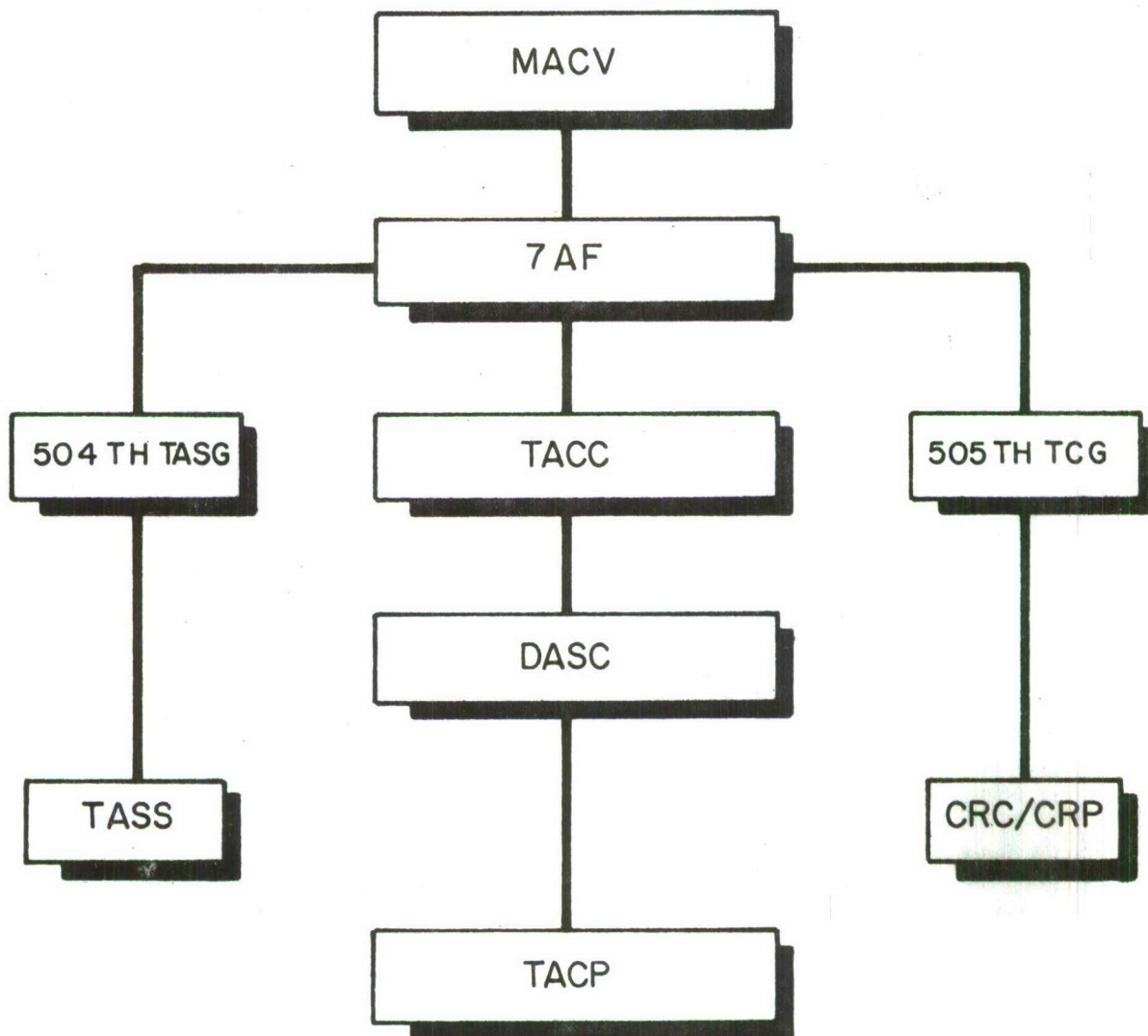


FIGURE 2

TACC & THE SEVEN DASCs

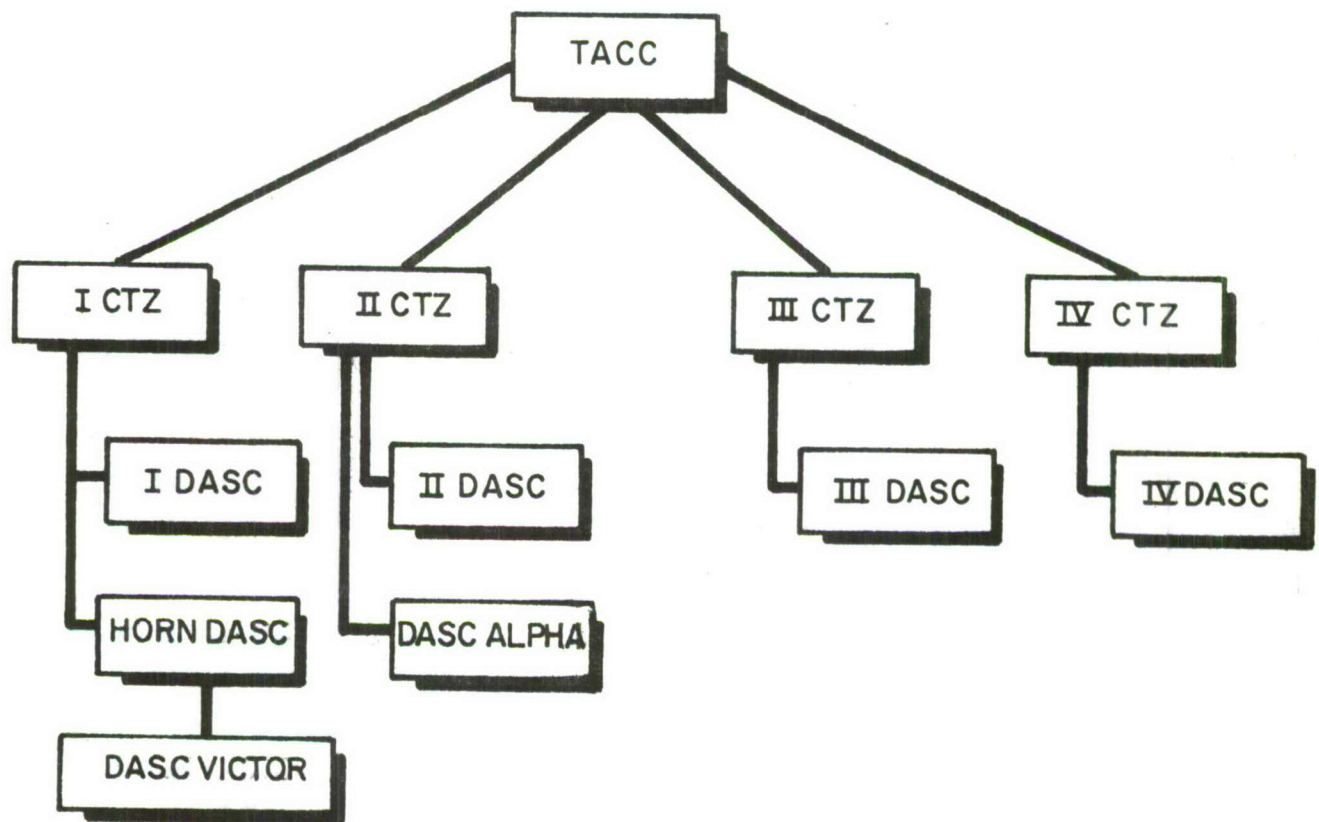


FIGURE 3

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liaison capacity.^{12/} The removal of USAF personnel and reassignment under DASC Alpha left II DASC a completely VNAF organization.^{13/}

The VNAF Sector Tactical Air Control Parties under II DASC were reorganized to allow 12 fully operational in II Corps, one for each province. TACPs for the two ARVN divisions and the 24th Special Tactical Zone were collocated with Sector TACPs in Binh Dinh, Darlac, and Kontum Provinces. The TACPs, manned by one VNAF officer and two enlisted men, did not have a 24-hour capability and at times were limited because of insufficient equipment and training.^{14/}

The removal of USAF from the VNAF system did not affect the primary mission of II DASC, for it retained the responsibility for supporting ARVN units in II Corps. In the opinion of Colonel Adams, USAF Senior Adviser to II Corps, the VNAF TACS became degraded, because it no longer had USAF assets. Accordingly, DASC Alpha assumed part of its mission. By July 1969, about 50 percent of DASC Alpha's tactical air support operations were executed for ARVN units.^{15/}

[REDACTED]

CHAPTER II

ORGANIZATION

DASC Alpha and II DASC were operationally subordinate to the Tactical Air Control Center (TACC) and served primarily as an extension of its control (Figs. 2 and 3). The DASCs provided a fast reaction capability to satisfy immediate requests from ground forces for close air support, tactical air reconnaissance, and emergency airlift. They also furnished minute-to-minute coordination between the ground forces and the supporting air elements.^{1/}

II DASC

The mission of II DASC was to provide advice to the Commanding General (CG), II CTZ, and the U.S. Army Advisory Group, II CTZ, on the proper employment of tactical airpower in joint air/ground operations and to provide control and direction of tactical airpower used in support of requests from ARVN units in II CTZ.^{2/} To accomplish this mission, II DASC was organized as shown in Figure 4.

The U.S. Deputy Director had control of all U.S. assets and personnel in the parallel USAF/VNAF system. After April 1969, II DASC became a VNAF operation, although the Deputy Director remained, mainly in an advisory capacity. A handful of NCOs remained to handle language problems during the transition from joint operation to VNAF operation. The organizational chart did not change except for the deletion of the USAF components. The field elements did not disappear--they remained with the units they served. The USAF personnel, however, were transferred to the control of DASC Alpha, II DASC was now a totally Vietnamese Air Force organization. It should be remembered that the ARVN ALO,

II DASC ORGANIZATION

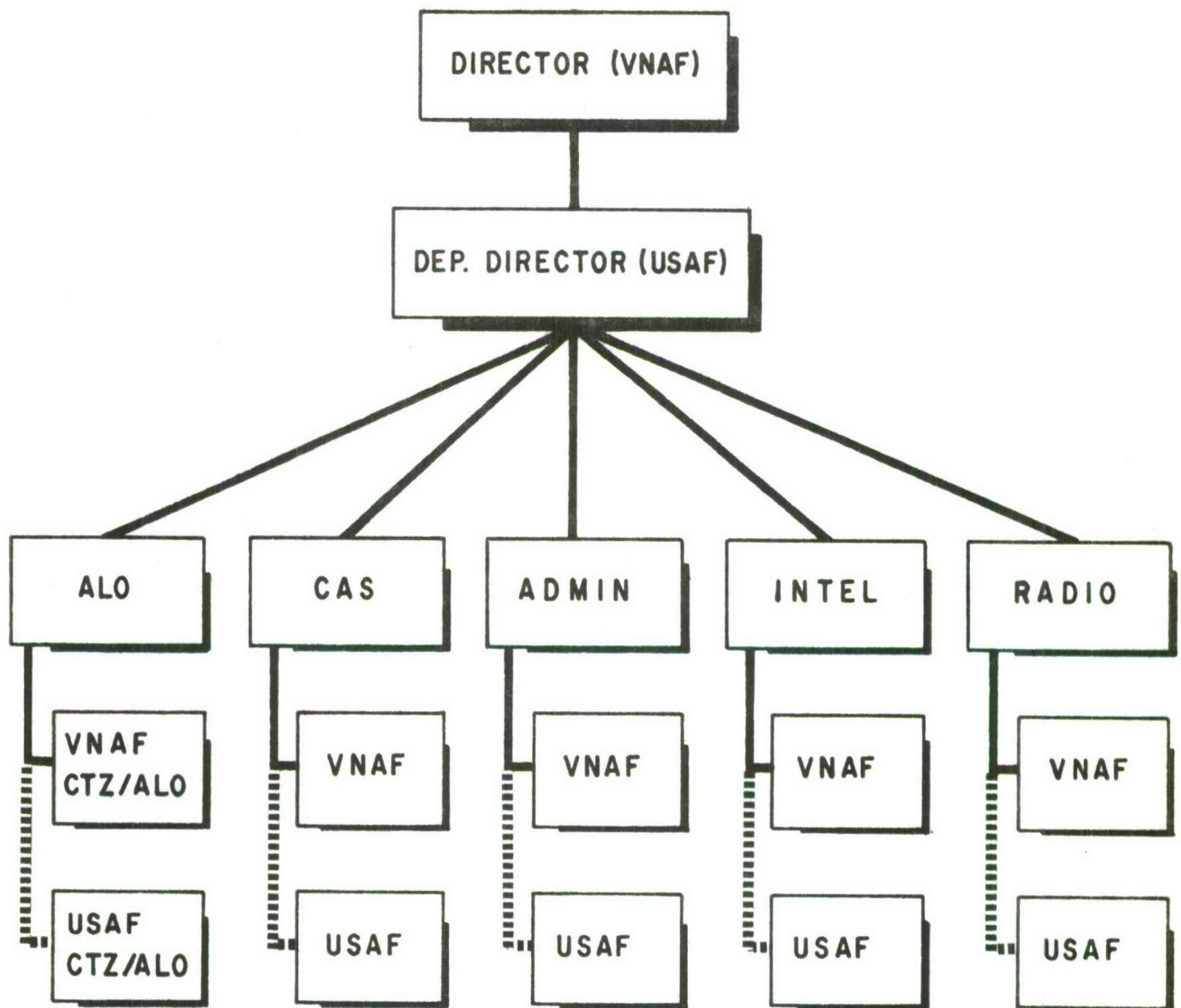


FIGURE 4

[REDACTED]

II Corps, and his organization were USAF personnel.^{3/}

DASC Alpha

The mission of DASC Alpha was to provide advice to the CG, I FFV, and to the Deputy Commanding General, ROKV-FC, and staffs on the proper employment of tactical airpower in joint air/ground operations and to provide control and direction of tactical airpower used in support of requests from I FFV and ROKV-FC/ARVN.^{4/}

The major functions of the DASC were:

- . Advise: on the Air Situation.
- . Coordinate: on the use of Tactical Air.
- . Notify: TACC of Requirements.
- . Integrate: Air Operations with Ground Operations.
- . Operate: Direct Air Request Net.
- . Supervise: TACPs.

To accomplish these functions, DASC Alpha was organized as shown in Figure 5.^{5/}

DASC Alpha Headquarters Element

The Headquarters element was located at the I FFV compound just north of Nha Trang Air Base. It was made up of five basic sections: Administration, Close Air Support, Intelligence, Reconnaissance, and Radio. A brief description of each section's operations follows:

The Administration (Admin) Section was charged with DASC's housekeeping duties. It assured that the DASC was furnished with its requirements as far

[REDACTED]

as personnel and equipment were concerned, and gave the necessary administrative support.^{6/}

The heart of the Headquarters element was the Close Air Support (CAS) section. It received and acted upon requests for air support from the field. The section controlled the missions flown in response to the requests, and generally, managed the use of USAF assets in II Corps.^{7/}

The DASC Intelligence (Intel) Section acted as a terminal for the transmission of intelligence data both up and down the TACS, as well as laterally among the various organizations in II Corps. It coordinated the movement of the information between the 7AF and the field units. Within the DASC, Intel kept other sections informed of enemy activity throughout the CTZ, providing all available information whenever possible.^{8/}

The Reconnaissance (Recon) Section supported the I FFV G-2 and S-2 staff organizations. It advised, assisted, and briefed those elements on the capabilities and use of USAF tactical reconnaissance assets. The section also processed requests for reconnaissance missions, monitored each mission flown in support of II Corps, and finally, passed the results to I FFV.^{9/}

The Radio Section operated the DASC's direct air request net. The section ran two radio nets "Ragged Scooper," supporting FWMAF, and since the April 1969 reorganization, "Carbon Outlaw," which served all USAF TACPs located with ARVN units. The Radio Section also maintained an instant capability for communications with the far-flung areas of II Corps.^{10/}

[REDACTED]

DASC ALPHA ORGANIZATION

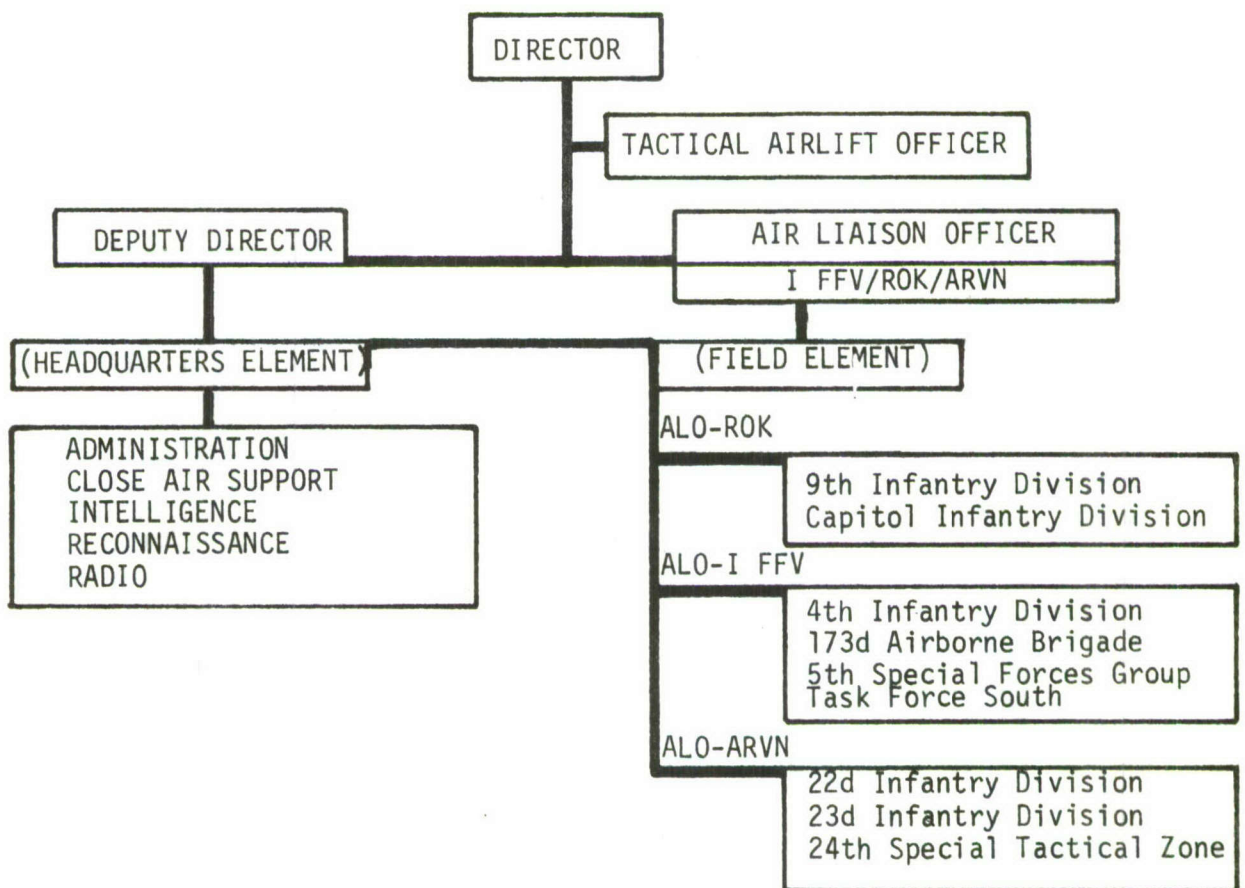


FIGURE 5

[REDACTED]

DASC Alpha Field Element

The USAF II Corps ALO was charged with the direction of the DASC's Field Element. He controlled the system which reached down to the operating level-- the TACPs serving the ground units in the field. The TACP assignments in the DASC TACS were not static. The average number in place during early 1969 was ^{11/}33, generally apportioned as follows: ROK-8; U.S. Army-13; and ARVN-12.

Exclusive of aircraft maintenance personnel, the Field Element was authorized a total of 194 officers and 180 enlisted personnel in July 1969. The number actually in place and in operation during the same period was 133 officers and 144 enlisted personnel. Pertinent to equipment, the situation was similar; more was authorized than actually was being used. The Field Element was supposed to have 77 aircraft, 70 MRC-108 radios, and 89 M-151 vehicles. ^{12/}The numbers actually assigned and in operation were 60, 63, and 61, respectively.

The TACPs were comprised of USAF ALOs, FACs, and radio operators. Equipped with communications facilities, they were deployed with the ground units in the field. Each TACP was under the direction of an ALO, who was responsible to the ^{13/}ALO at the next higher ground force echelon throughout the chain of command.

The functions of the TACPs were to advise the ground commanders on the use of tactical air and to assist them in planning for airstrikes in support of the operations. The TACPs would request the air support from DASC Alpha, control the strikes, and report the results. Finally, the TACPs were responsible for keeping the DASC informed of developments in their respective areas and for monitoring the communications nets. ^{14/}

[REDACTED]

Summary

The TACS in II CTZ was originally organized with II DASC manned by USAF/VNAF personnel, supporting ARVN exclusively, with DASC Alpha responsible for the FWMAF. After April 1969, II DASC became an all-VNAF DASC, and the USAF personnel formerly committed to it were transferred to DASC Alpha's operation. The separation prevailed down through the Field Element to the TACPs; the USAF shouldered the responsibility for providing much of the air support for ARVN units in II CTZ.

[REDACTED]

CHAPTER III

PROCEDURES AND RESOURCES

The close air support for units in II CTZ was provided on a preplanned and immediate basis, as was the case throughout South Vietnam. Requests for both types were processed through the Joint Air/Ground Operations System (JAGOS) established by MACV directive to provide an integrated command and control system.^{1/}

Preplanned Air Requests

Preplanned strikes were normally those initiated by the ground commanders to support a coming maneuver. The ARVN TACS in II Corps obtained the necessary clearances, processed the requests from the field, established priorities, and passed consolidated lists to DASC. The DASC and II Corps headquarters allocated VNAF assets to fulfill the requests, transmitting the information through the Joint Air/Ground Operations System to the Tactical Air Support Element, and the Tactical Air Control Center. From there, the frag was "furnished" to the VNAF Tactical Fighter Wings who flew the missions. In effect, the DASC prepared the frag for VNAF assets in II Corps, and the passing of the data through the system was more or less a formality.^{2/} Any requests from the ARVN TACS which could not be supported by VNAF were fragged by TASE to be supported by the USAF.

DASC Alpha, on the other hand, received all preplanned requests from FWMAF, obtained clearances, established priorities, and sent the list to the MACV TASE. The TASE in turn established priorities based on the requirements of

[REDACTED]

units throughout South Vietnam, and sent a levy to the TACC to be satisfied within the limits of air resources available. The strike planners in the TACC then prepared the frag for USAF Tactical Fighter Wings, which flew the missions.^{3/}

Immediate Air Requests

Ground commanders did not always know when to expect contact from the enemy. Although intelligence resources were fully utilized, there were times when the situation did not call for the use of preplanned air support. If the situation changed and air support were needed quickly, the commander could request an immediate airstrike. The same basic procedure and clearances were required as in preplanned sorties but proceeded at a much faster pace.

The immediate request was transmitted by the TACP through the DARN directly to the DASC. Each ascending level of the U.S. Army Command monitored these transmissions through its TACP; radio silence meant approval. When a Vietnamese unit required immediate air support, the request was forwarded to the Province Chief who forwarded the request to the DASC; when the request was approved at II Corps or I FFV, it became mandatory for the DASC to fulfill the requirement. When II DASC was a joint USAF/VNAF organization, before April 1969, either USAF or VNAF fighters, depending upon availability, were used. Since April, the USAF support of Vietnamese forces came from DASC Alpha, and II DASC supplied VNAF fighters (if available), when VNAF FACs requested the strike.^{4/}

Immediate Air Strikes Supporting ARVN

An immediate airstrike (IAS) request could be initiated by the ARVN Commander, U.S. Adviser, USAF FAC, or VNAF FAC. The Sector S2/3 Air Officer and

[REDACTED]

Adviser were primarily responsible for clearing the target with all forces having areas of operations (AOs) overlapping the target. The Province Chief's political clearance had to be obtained prior to every strike. Additionally, the Sector S-3 was responsible for clearing targets for RF/PF and other sector forces. Free World Forces and Special Forces cleared the targets only for their own troops. The Division S-3 Air Officer had primary responsibility to clear targets with ARVN regiments except for those special areas where blanket political clearance was granted the unit in that AO. The Sector S-3 would only clear for the ARVN regiment, if he had direct operational control of the regimental forces. Clearances in II Corps border provinces required "B" Company 5th SFG(A) approval as well as II Corps and I FFV. These procedures were followed to clear and process a strike, if a FAC requested an immediate air strike: ^{5/}

- . FAC radioed target coordinates, description, special ordnance, rendezvous point, time over target (TOT) desired, and contact with friendly forces, to the sector TACP radio operator.
- . The sector TACP radio operator immediately informed the Sector S-2/3 Air Officer, Adviser, or Sector TOC Officer of target coordinates and description, and stated if the FAC were in contact with friendly units near the target area. The radio operator requested from the Sector 2/3 Air Officer, a target number and names of persons and units clearing the target.
- . The Sector 2/3 Air Officer and Adviser, or TOC Duty Officer and Adviser had to clear the target with all applicable units in the province, for example, Province Chief, ARVN Regimental Forces, Special Forces, and Free World Forces, where applicable. After clearing the target, he would give the TACP radio operator the sector, Special Forces, or the ARVN Regimental target number and names of persons clearing the target (Sector S-2/3 Air or Duty Officer). The person clearing the target would

[REDACTED]

record all target clearance data.

- . After receiving the target number and clearance data, the Sector TACP radio operator would immediately radio the target number, coordinates, description, type of ordnance desired if applicable, and rendezvous point to the appropriate DASC. The radio operator stated if the FAC were in contact with the friendly elements on the ground and whether the Sector S2/3 Air Officer had cleared the target.
- . The Sector S2/3 Air Officer, Adviser, or TOC Duty Officer, clearing targets would immediately inform the Division G-3 Air Officer, Adviser, or DTOC Duty Officer of the target request and clearance data. If the person at sector clearing the target could not obtain all applicable clearances, he had to notify the division.
- . The Division G-3 Air Officer, Adviser, or DTOC Duty Officer checked the immediate air request to insure that it had been cleared by all forces working near the target area. If all clearances had not been obtained, he would call the applicable unit to obtain the clearance. After obtaining all required clearances, he logged the request number, coordinates, and clearance data and passed this information to II Corps G-3 Officer, Adviser, or CTOC Duty Officer.
- . The II Corps G-3 Officer, Adviser, or CTOC Duty Officer had to check the target request for all applicable clearances, and passed the request to II DASC for VNAF strikes or DASC Alpha for USAF strikes.
- . The DASC could not scramble or divert aircraft to support the request until they had received the target number coordinates, rendezvous point, and statement by II Corps G-3 Air Adviser or CTOC Duty Officer that the target was cleared.

It should be noted that IAS coordinates were passed in the clear, unless the strike was requested more than one hour in advance of the requested time on target. All targets were cleared for a one kilometer radius unless requested otherwise. The ground commander requesting the strike could be within the cleared area, if he had contact with the FAC. It was the ground commander's

[REDACTED]

responsibility to accurately mark friendly locations for the FAC.^{6/}

When a ground commander requested immediate airstrikes and he was not in contact with a FAC, the request was forwarded by the quickest possible means to the unit's headquarters and to the sector or division TOC. The sector or division would immediately launch a FAC to contact the ground commander or adviser. The request would then be processed by sector and division personnel as outlined here.^{7/}

Immediate Airstrikes Supporting FWMAF

All immediate requests were transmitted from the TACP to DASC Alpha using the DARN. The request was monitored and acknowledged by all echelons. Intermediate commands also gave a clearance statement. If any Army echelon above the initiating level desired to disapprove the request for any reason, DASC Alpha was notified by the TACP and the request was canceled. Then, the request-^{8/} or was notified of the cancellation by the disapproving headquarters.

Gunships

Also included as IAS were all AC-47 (Spooky), AC-119 (Shadow), and C-47 (Moonshine) missions flown in support of troops in contact (TIC) during hours of darkness. All requests for immediates were passed through the USAF DARN.^{9/} Spooky, Shadow, and Moonshine were maintained on ground and airborne alert status at various bases in II CTZ during the hours of darkness.

Spooky (AC-47) aircraft were stationed at Pleiku, Phu Cat, and Nha Trang and on alert as indicated on the Spooky-Shadow-Moonshine frag sheet. Aircraft on airborne alert flew combat air patrol (CAP) during the times indicated on the frag order and could be diverted by DASC to a TIC mission as required.

[REDACTED]

Whenever a CAP aircraft was diverted to TIC missions, a ground alert aircraft was scrambled to take its place. Proper clearances were required for all expenditures.^{10/}

Shadow (AC-119) aircraft were stationed at Nha Trang and Phan Rang. Shadow aircraft were assigned armed recon/interdiction missions rather than CAP to take advantage of their sophisticated target acquisition devices. They were diverted by the DASC to TIC missions whenever a need existed. Proper clearances were still required for Shadow aircraft, although Shadow Boxes (precleared areas) were usually provided.^{11/}

Moonshine was a C-47 aircraft loaded with 128 parachute flares, capable of providing continuous illumination for periods up to five hours over a given location. Moonshine aircraft were located at Pleiku and remained on ground alert for scramble when necessary. They could provide illumination for Spooky/Shadow operations, or any other operation requiring continuous illumination for a period of time. Moonshine was also used to provide illumination for FAC-directed night airstrikes.^{12/}

COMBAT SKYSPOT

It was imperative that an effective system of tactical air support be available for nights and during inclement weather; COMBAT SKYSPOT (CSS) was the operational program which could best fill this need. Although CSS was initially much restricted in its employment for close air support, it demonstrated a high degree of effectiveness and became an important method for delivering ordnance during periods of poor visibility. However, CSS deliveries were not

[REDACTED]

made within 1,000 meters of friendly positions without the request and approval of the Ground Commander, who had to assume responsibility. ^{13/}

Procedures

After the requests for IAS were approved, the DASC CAS Section was required to execute certain procedures to provide the necessary air support. The section kept a current situation board on which were listed all of the preplanned strikes for the day. Also included were types of aircraft, ordnance carried, preplanned target and TOT. Thus the fighter duty officer (FDO) had at his fingertips, a current listing of the preplanned resources available to him. If he needed additional air support, it was only as far away as his hot line to TACC. ^{14/}

Requests for IAS were received through the DARN, using HF radios, with the direct hot line and long distance telephone as backup. If the requests were from a unit lower than the responsible TACP, approval from the TACP had to be obtained. The duty officer (or FDNCO) copied the information from the unit's mission request. He then handed (at II DASC he called) the request to I FFV/ II Corps G-3 Air Duty Officer for approval and initials. If the situation warranted, the Duty Officer would divert a preplanned airstrike from another target to reduce reaction time. If resources could not be obtained from the preplanned missions under DASC control, the FDO would request IAS from TACC (approximately 85% of all IAS were filled by scrambles). Requests to TACC had to include unit request number, target coordinates, target description, number of flights, and type of ordnance. The time when the request was submitted to TACC was also recorded. When TACC filled a request, the FDO/FDNCO recorded

[REDACTED]

the fighter information, as well as the time the request was filled, or the reason it could not be honored. The request cycle was completed by notifying all interested agencies to insure mission completion, i.e., unit, CRCs, etc. ^{15/} If the unit required additional support, the request steps were repeated.

CHAPTER IV

COORDINATION BETWEEN THE DASCs

After reorganization of the DASCs in II CTZ, it became necessary to establish procedures and methods of control of FWMAF air assets used in support of ARVN units. On 1 April 1969, a meeting was held in the Office of the Director, DASC Alpha, at Nha Trang. Those in attendance were the Director, DASC Alpha, the G-3 Air, I FFV, the G-3 Air Adviser, II Corps, and his assistant, along with Senior Fighter Duty Officers and Fighter Duty NCOs from the two DASCs.^{1/} The procedures were devised and agreed upon by the participants.

FAC Controlled Airstrikes

If ARVN requests for immediate airstrikes could not be met by VNAF, the G-3 Air, II Corps, was authorized to request the strikes directly from DASC Alpha. The DASC would fill the request from FWMAF assets, designate the controlling FAC, and so advise the G-3 Air.^{2/}

For preplanned requests, all II Corps requirements for FWMAF assets were passed daily to G-3 Air, I FFV, and then forwarded to the TASE. A telephone alert order was then sent by the TASE to the G-3 Air II Corps. The FWMAF assets to be used in support of ARVN were passed by mission number from TACC to G-3 Air, I FFV as an alert order. This in turn was relayed to G-3 Air, II Corps, who would then accomplish the targeting and establish desired rendezvous, working closely with II DASC. The rendezvous data were sent to G-3 Air I FFV, and DASC Alpha. The DASC would advise the CRP and the Fighter Wings. The II Corps TACS was responsible for informing ARVN forces of the

[REDACTED]

flights, as well as advising the TACPs and the Sector FACs.^{3/}

COMBAT SKYSPOT

When immediate COMBAT SKYSPOT requests could not be filled by VNAF, the G-3 Air, II Corps was to request the strikes directly from the Fighter Duty Officer at DASC Alpha. The DASC would pass the request forward and make the necessary contact with the radar to insure the strike. The Fighter Duty Officer then advised the II Corps G-3 Air of the coming mission.^{4/}

For preplanned COMBAT SKYSPOT missions, those that could not be supported by VNAF assets were to be passed in code from G-3 Air, II Corps to G-3 Air, I FFV. Within one hour of the scheduled TOT, the target coordinates were verified in the clear by the former or a Duty Officer or NCO at the II Corps Tactical Operations Center.^{5/}

Spooky/Shadow

All Spooky/Shadow aircraft operating in II CTZ were to fly under the tactical control of DASC Alpha. All requests for immediate gunship support from all units in II CTZ were to go directly to the DASC. The units desiring preplanned interdiction targets struck had to submit their cleared targets areas to the G-3 Air, I FFV. The targets originally passed in code required verification in the clear one hour prior to TOT. All preplanned strikes in support of ARVN forces were to be cleared prior to TOT.^{6/}

[REDACTED]

CHAPTER V
RESPONSIVENESS IN II CTZ

Accumulated data did not measure correctly the responsiveness of the Tactical Air Control Systems in II Corps. Therefore, the judgments and expertise of those who worked daily with the systems in II CTZ were solicited in early 1969. This discourse is constructed from their views.

II DASC

The DASC conducted a comprehensive study and analysis of missions flown in support of troops in contact in the II Corps ARVN system during January and February 1969. The purpose of the project was to determine the reaction and to identify areas in which improvement was possible. Each close air support mission was researched from the time the DASC received the request until the fighters achieved time over target.^{1/}

The results of the study showed that the average time for scrambled (off the alert pad) missions from receipt of request to TOT was 49 minutes. The times required for each individual phase of these immediates were as follows: (1) target approval-nine minutes; (2) fighter scramble to contact with FAC-30 minutes; and (3) contact with FAC until TOT-10 minutes. The use of diverted aircraft to satisfy the immediate requests involved less time (29 minutes) than scrambles, but since II DASC had averaged only two or three preplanned missions per day, wide use of diverts was not possible. During the reported period, only about 20 percent of the TICs were covered by aircraft that had been diverted from preplanned targets.^{2/}

[REDACTED]

In May 1968, the II DASC Deputy Director, Lt. Col. John Callahan, noted the fighter scramble times were considered excessive. He recommended that fighter facilities and scramble procedures be tailored for rapid response similar to the Air Defense Command intercept system.^{3/}

Later, in January 1969, his successor, Lt. Col. Arthur Shepherd, summed up the II DASC system:^{4/}

"There is always need for improvement. Perhaps the biggest problem in II Corps is due to the large amount of distance involved...."

"The strictly Air Force role in providing tactical air coverage in the Corps...is being accomplished much better than anything I have seen in World War II or Korea."

"However, a word of caution: This exceptional performance is only possible in a permissive air environment....It has spoiled us and in turn we have spoiled the ground forces by providing an abundance of tactical air. I doubt that we will be this fortunate in future conflicts...."

DASC Alpha

The responsiveness of airpower under DASC Alpha was seen by its Director as "adequate." However, he stated the need for faster response time was a general one. For an immediate request in support of troops in contact, the critical time element was expressed by the word "immediate."^{5/}

Whenever possible, immediates were filled by the diversion of preplanned sorties. When a preplanned strike was diverted to a nearby immediate target, the ground commander was actually fortunate that the resources were so readily available. The ground commanders in II Corps were aware that a delay would occur in most cases. Further, DASC Alpha had not received any complaints.^{6/}

[REDACTED]

CHAPTER VI
STATISTICAL DATA

The question as to effectiveness and timeliness of the close air support provided by the Air Force under the Tactical Air Control System (TACS) employed in the Republic of Vietnam could not be completely answered by the statistical data which were available when this report was written.

During the period of October 1967-June 1969, the reaction time data collected by the DASCs and TACC included time of request, time of either divert or scramble, rendezvous time, and time on target with first ordnance. The information was key punched onto an IBM card and filed on tape in the data bank at 7AF. To retrieve the data to calculate response times, a computer program was run which only looked at immediate requests. The output included DASC delay time, ground time, en route time, and target delay time.

These data showed that response times (1968 yearly average) were 52 minutes for divers^{1/} and 55 minutes for scrambles.

Anomalies

In the summarizations, four time spans were delineated for immediate scrambles. These were: (1) the time between the moment when the DASC received the request and the moment the scramble execute order was issued (DASC delay time); (2) that time span between scramble execute order and takeoff time (ground time); (3) the time from takeoff to rendezvous (en route time); and (4) the time span from rendezvous to first ordnance on target (target delay time). Divers did not require takeoff times thus, no ground time was counted

[REDACTED]

for them.^{2/}

Ground time and en route times were measures of physical sequence and were dependent primarily upon crew capabilities, aircraft performance, and distance to the target area. However, in both DASC delay time and target delay time, anomalies existed which bore no relationship to the actual ability of the Tactical Air Control System to respond to immediate requests, yet they unfavorably biased the reported data.

A good example was the "open immediate" type request, where the Army called and requested immediate support with a TOT several hours later. Obviously, this would skew the data since the time from request to first ordnance would appear excessively long, when in actuality the strike aircraft might have been over the target before the TOT.

An example of the "open immediate" occurred in II CTZ on 28 August 1968, and II DASC's average delay time for the month of August was approximately 70 minutes.^{3/} The Duc Lap Civilian Irregular Defense Group/Special Forces Camp and the MACV Sub-Sector Camp had been under attack since the morning of 23 August. The quantity of tactical air support it needed was fairly well established. Therefore, 16 requests for close air support to be used throughout the day were recorded at 0700 hours. It was obvious that it was too late to frag these requests as preplans, therefore they were immediates. The decision was made not to strip the scramble pads, but rather to divert preplans so as to keep a constant flow of airpower over the besieged camps without exhausting scramble assets. These "instant fragged" missions were entered into the data bank as immediate diverts to support TIC with DASC delay time as great as 10 hours and

[REDACTED]

34 minutes. These 634-minute DASC delays affected the averages significantly.^{4/}

Another anomaly which unquestionably affected the validity of total average times for divers and scrambles was that an estimated one quarter of the fastest possible responses to requests for immediate air were never introduced into the records-keeping system. These concerned preplanned strikes diverted by an ALO's unit to different targets within his area of operation. This information, unless specifically requested, never reached DASC channels and therefore never appeared in the data banks, although response to immediate requests may have been on the order of a few minutes from request to ordnance on target.^{5/}

Target delays were also cause for skewed data. Generally, holding delays attributable to the Air Force were either a FAC briefing on the target or strike aircraft burning down fuel. Other delays which increased the reaction time were: (1) ground commanders sorting out the ground situation and locating the positions of the friendlies, or (2) holding, waiting for a previous strike aircraft to clear the target.^{6/} All of these, whether debasing or avoidable, were included in the computer calculations.

A manual study was initiated on 1 June 1969 by the Current Operations Branch at TACC to determine the average Air Force response time for an immediate request. The computer data base obviously had shortcomings. Essentially, the data fed into the machine were not broken down sufficiently to provide meaningful data (the computer had no remarks section). The "odd ball" data were not explained, and the computer could not differentiate "good" data from "bad". The computer showed a large delay, but the cause of the delay was not delineated.^{7/} The delay breakdowns were not specific enough to provide meaningful information.

[REDACTED]

The manual study differentiated between gross reaction time (reaction time printed out by the computer) and Air Force reaction time. The Air Force reaction time was computed only on immediate-as soon as possible (ASAP) type requests, and did not include delays caused by non-Air Force attributing factors. Air Force reaction time included DASC delay time, scramble time, en route time, and AF holding delays. Average (arithmetic mean) reaction times were calculated for Jet Fighters, Conventional Fighters, and gunships. When the request was for a specific TOT (as differentiated from air support as soon as possible), the reaction time was zero if the TOT were met, and if the TOT were not met, due to Air Force circumstances, a delay was recorded. The average delay for requested TOT was kept separately and not included with ASAP immediate data.^{8/}

The Air Force reaction times, computed by the manual method, for the month of June 1969 were 35-40 minutes for scrambles and 20 minutes for Airborne diverts as against the computed times of 55 and 52 minutes, respectively. These figures closely agreed with the original estimates of 40 and 20 minutes.^{9/}

A project CHECO Report, "Response to Immediate Requests for Tactical Air-strikes", completed in April 1969, noted the differences in response times arrived at by the different methods. After submission of the report, a task force was organized in the TACC to probe both aspects of response--how to improve it, and how to improve the accuracy of the reporting. The task force worked out changes which were submitted to Hq PACAF. Concurrently, TACC initiated a manual reporting system on a test basis with the III DASC and the 3d Tactical Fighter Wing at Bien Hoa Air Base, RVN. Later, on 1 June 1969, an interim country-wide reporting system was introduced.^{10/}

[REDACTED]

Problems were identified and changes in the Automated data reporting system were tentatively scheduled for 1 September 1969. While detailed discussions of these changes were beyond the scope of this report, they were expected to reduce not only the actual response times, but would accurately reflect them in the reporting system from the DASCs in II Corps and throughout South Vietnam.

Conclusion

To have evaluated any DASC by examining its response time (based on data stored in the computer) to an IAS request would have proved meaningless. All immediate requests were not TIC or as soon as possible requests. In many instances, reaction times in the order of hours would have been acceptable while in other cases, any time over 20 minutes could have been unacceptable. Generally, the feeling among DASC Directors and Deputy Directors, Corps and Field Force ALOs, Brigade and Sector ALOs and FACs, and others conversant with the subject, was that while improvement of air response time would be welcomed, so far no dramatic need had yet been demonstrated or called for by ground commanders. Nearly all believed the Tactical Air Control System structure as it stood, was effective and highly responsive; it was not open to a general charge of "unresponsive."

No one, however, indicated that the USAF should applaud the status quo, or resist improvement, or fail to learn from numerous lessons presented. In discussions with their ground force counterparts--the G-3 and G-3 Air--the ALOs found conspicuous agreement with their own observations: in nearly all instances of troops in contact, FAC, and strike aircraft were on the scene before they could actually be used. In other words, Air Force response to the tactical immediate request had been timely and rapid.^{11/}

FOOTNOTES

CHAPTER I

1. (C) Interview, Lt Col Melvin Wilson, ALO, I FFV/ROK/ARVN, DASC Alpha, 24 Jul 69. (Hereafter cited: Interview with Lt Colonel Wilson.)
2. (S/NF) PACAF Test Directive Nr 63-4, Hq 2d Air Div, "Final Rprt, Operational Test and Evaluation, TACS in RVN," 1964. (Hereafter cited: PACAF Test Directive 63-4.)
3. Ibid.
4. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
8. (U) Ibid.
Rprt, Approved by Chiefs of Staff, USAF, USA, "Concept for Improved Joint Air/Ground Coordination," Mar-Apr 69.
9. Ibid.
10. (S) Historical Data Record, DASB, Current Ops Div, Deputy for Ops, 2d Air Div, 1 Jul 65 - 31 Dec 65.
11. Ibid.
12. (FOUO) Memo for Record, subj: DASC Alpha/II DASC Consolidation, Hq I FFV, 10 Apr 69.
13. (C) Interview, Lt Colonel Wilson.
14. (C) Interview, Col Adams, Sr Air Adviser, II Corps, 27 Jul 69.
15. Ibid.

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CHAPTER II

1. (C) Interview, Lt Colonel Wilson.
2. Ibid.
3. (U) Ibid.;
Oral Discussions, Lt Col Arthur Sheperd, Dep Dir, II DASC,
9-11 Jul 69.
4. Ibid.
5. Ibid.
6. (FOUO) Briefing, Maj Glen Connaly, SFD0, DASC Alpha, 13 Jul 69.
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8. (C) Interview, 1st Lt James W. Shofner, Intel Sec, DASC Alpha, 24 Jul 69.
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APPENDIX I

TARGET CATEGORIES - DASC ALPHA

Troops in Contact(TIC)

A hostile target which is in proximity to and has actively engaged friendly forces, requiring detailed coordination of each air mission with the ground forces in regard to location, fire, and movement.

Confirmed Enemy Location(CEL)

A hostile target in which the enemy's location is known, and his presence is being observed by air and ground observers.

Acquired Enemy Location(AEL)

Enemy locations based on SLAR, Red Haze, ground surveillance radars, airborne personnel detectors, and other detection devices or IR reports. Targets in this category must be based upon timely reaction and additionally must meet all of the following criteria: (1) Detection by one or more of the sensory devices listed or IR reports; (2) Validation by an evaluation of enemy patterns of movements and operations; (3) Terrain analysis by competent targeting agencies.

Suspected Enemy Locations(SEL)

Hostile targets or locations that do not meet the criteria of "Acquired Enemy Location" or where circumstances have precluded the timely expenditure of ordnance, thereby allowing the target to deteriorate into this category. Included in this category: (1) Agent Reports, (2) PW Reports, (3) Enemy caught in a cordon operation where specific location as defined under "AEL" or "CEL" cannot be determined; (4) Nonvalidated source of enemy sniper or small arms fire.

Fixed Target Destruction(FTD)

Fixed installations of a non-perishable nature such as: (1) Bridges; (2) Bunkers, caves, and other fortifications; (3) Structures; (4) Weapons positions; (5) Road complexes.

Troop Assault Preparation(TAP)

Targets on which ordnance is delivered, immediately prior to a troop assault, to neutralize enemy forces, fortifications, pre-positioned mines, booby traps, and other assault counter devices.

[REDACTED]

Landing Zone Clearing(LZC)

Ordnance delivered to clear or partially clear terrain of man-made or natural obstacles to accommodate the landing of heliborne forces.

SOURCE: (C) Tac Air Expenditure Analysis System, Hq I FFV, 1 Jun - 30 Jun 69.

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GLOSSARY

ACP	Air Control Party
Admin	Administration
ALO	Air Liaison Officer
AEL	Acquired Enemy Location
AO	Area of Operation
AOC	Air Operations Center
ARVN	Army of Republic of Vietnam
ASAP	As Soon As Possible
ASOC	Air Support Operations Center
CAP	Combat Air Patrol
CAS	Close Air Support
CEL	Confirmed Enemy Location
CIDG	Civilian Irregular Defense Group
CRC	Control and Reporting Center
CRP	Control and Reporting Post
CSS	COMBAT SKYSPOT
CTOC	Corps Tactical Operations Center
CTZ	Corps Tactical Zone
DARN	Direct Air Request Net
DTOC	Division Tactical Operations Center
FAC	Forward Air Controller
FDO	Fighter Duty Officer
FDNCO	Fighter Duty Noncommissioned Officer
FFV	Field Force Vietnam
FTD	Fixed Target Destruction
FWMAF	Free World Military Assistance Forces
HF	High Frequency
IAS	Immediate Air Strike
Intel	Intelligence
IR	Infrared
JAGOS	Joint Air/Ground Operations System
LZC	Landing Zone Clearing
MACV	Military Assistance Command, Vietnam
PACAF	Pacific Air Forces

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Recon	Reconnaissance
RF/PF	Regional Forces/Popular Forces
ROK	Republic of Korea
SEL	Suspected Enemy Location
SFG	Special Forces Group
SLAR	Side-Looking Airborne Radar
STZ	Special Tactical Zone
Tac	Tactical
TACC	Tactical Air Control Center
TACP	Tactical Air Control Party
TACS	Tactical Air Control System
TAOR	Tactical Area of Responsibility
TASE	Tactical Air Support Element
TFA	Task Force Alpha
TIC	Troops in Contact
TOC	Tactical Operations Center
TOT	Time Over Target
VNAF	Vietnamese Air Force (South)