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Contemporary
Historical
Examination of
Current
Operations
REPORT

USAF SEARCH & RESCUE IN SOUTHEAST ASIA
1 JUL 69 - 31 DEC 70

23 APR 71

[redacted]

HQ PACAF
Directorate of Operations Analysis
CHECO/CORONA HARVEST DIVISON

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

OFFICE OF THE CHIEF OF STAFF

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.

RO[illegible] M. CAMPBELL, Major General, USAF
Chief of Staff

DEPARTMENT OF THE AIR FORCE
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3D AEROSPACE RESCUE & RECOVERY GROUP

X

ORGANIZATIONAL EMBLEM: 3d AEROSPACE RESCUE AND RECOVERY GROUP

SIGNIFICANCE: The emblem is symbolic of the Group. The color blue alludes to the sky, the primary theater of Air Force operations, and yellow to the excellence of Air Force personnel in assigned duties. The globe represents worldwide search, rescue and recovery operations performed by the Group. The cross depicts location of distressed personnel or required rescue operations. The lightning bolt denotes adversity (hostile forces or elements) which must be overcome to effect successful SAR operations and the arrow the response of the Group's forces to all emergencies.

MOTTO: PER ADVERSA AD EREPTIONEM - Through Adversity to the Rescue

BLAZON: On a shield of the sky proper, a sphere azure, rimmed and gridded or, superimposed in the southwest areas of the sphere a cross and three lightning bolt gules, a lightning flash bendwise argent, pierced by an arrow vert, all within a diminished bordure or.

POLICY OF AEROSPACE RESUCE AND RECOVERY

Air Rescue Service exists as an integral part of the military air power of the United States; its primary mission is the support of the Air Force in being upon implementation of the emergency war plan.

The thoughts and efforts of every man in Air Rescue Service must be directed toward creating an organization better equipped and trained to carry out the recovery of irreplaceable airmen in the least possible time under combat conditions.

CODE OF AN AIR RESCUE MAN

It is my duty, as a member of the Air Rescue Service, to save life and to aid the injured.

I will be prepared at all times to perform my assigned duties quickly and efficiently, placing these duties before personal desires and comforts.

These things I do that others may live.

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FOREWORD

This report represents the fifth study by the Southeast Asia CHECO office of Search and Rescue operations, and the fourth of a chronological series beginning with the early efforts to reestablish a combat SAR capability in 1961. In consideration of the current United States foreign policy towards disengagement in the SEA conflict, it was felt that this may be the last report of this series. In view of this an effort was expended to (1) include those aspects considered important to a complete understanding of the problems as well as the accomplishments of SAR that were not previously covered and (2) present a summary of the significant developments and activities which have occurred to provide the reader with a single documentary reference of the highlights of the SEA SAR mission.

While principal emphasis was placed on the July 1969 through December 1970 period, where it was felt that suitable background information was not otherwise available, such was included for the purpose of presenting a more understandable view of developments occurring during the principal eighteen-month period. By the same rationale, the particular section on Mission and Organization and other subject material such as Maintenance and Safety were not accorded less attention due to any consideration of their lesser importance, but because they were adequately covered previously, or were felt to be the subject matter of other reports.

In view of the extent of information presented in the report, the author had to rely on the invaluable assistance of many individuals. In

addition to the personnel of the 3 ARRGp headquarters staff and individual squadrons, who accorded the author unlimited support throughout the preparation of the report, particular acknowledgment is extended to the Office of the Historian, Aerospace Rescue and Recovery Services Headquarters.

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CHAPTER I

MISSION AND ORGANIZATION

MISSION

The 3d Aerospace Rescue and Recovery Group is organized and equipped to provide a Search and Rescue (SAR) Capability in Southeast Asia. Its mission is to: Command and control all USAF Aerospace Rescue and Recovery forces in the Southeast Asia Sub-Region; operate a Joint Rescue Coordination Center (JRCC) and Sub-Regional Rescue Coordination Centers established to control and direct the Rescue/Recovery mission in Southeast Asia.

Implementation of this mission by the Commander, 3d Aerospace Rescue and Recovery Group (3 ARRGp), who served on the 7th Air Force (7AF) staff as Director of Aerospace Rescue (DSR) was exercised through the following functions.

1. Advised the Commander, 7AF on the matters pertaining to rescue and recovery requirements and procedures.
2. Coordinated on matters pertaining to all ARRS activities, requirements and responsibilities in SEA.
3. Exercised operational control of all rescue forces in SEA in accordance with policies established by the Commander, 7AF and/or Commander, 41st Aerospace Rescue and Recovery Wing (41 ARRWg).
4. Kept the Commander, 41 ARRWg, informed of SAR requirements and all planned or conducted SAR operations.
5. Reported directly to the Commander, 41 ARRWg, on all command and administrative matters.

[redacted]

ORGANIZATION

Although the 3 ARRGp was operationally controlled by 7AF, its parent command organization was the 41 ARRWg, located at Hickam Air Force Base, to which it reported on command and administrative matters. Through the 41 ARRWg, the 3 ARRGp exercised its local area responsibilities to the ARRS of the Military Airlift Command (MAC). Figure 1 indicates the organizational structure of the 3 ARRGp as it existed at the close of 1970.

The SAR mission in SEA was executed by the 3 ARRGp, with headquarters at Tan Son Nhut Airfield, Republic of Vietnam (RVN). To implement this mission the 3 ARRGp was composed of four Aerospace Rescue and Recovery Squadrons (ARRSqs), operating from various locations within the 7AF area of operations, the land mass of SEA and adjacent territorial waters consisting of the Saigon, Bangkok and Rangoon Flight Information Regions (FIRs).

Overall command and control of these mission operations were exercised from the Joint Rescue Coordination Center (JRCC), collocated with the 7AF Command Center. Individual SAR missions were often allocated for direct control to either of the associated Rescue Coordination Centers (RCCs), Operating Locations (OLs) OL-A located at Son Tra Air Base, RVN, and OL-B at Udorn Royal Thai Air Force Base (RTAFB), when operations fell within their respective areas.

The four squadrons of the 3 ARRGp were established on the basis of SAR operational functions as follows: The 37 ARRSq at Da Nang AB was

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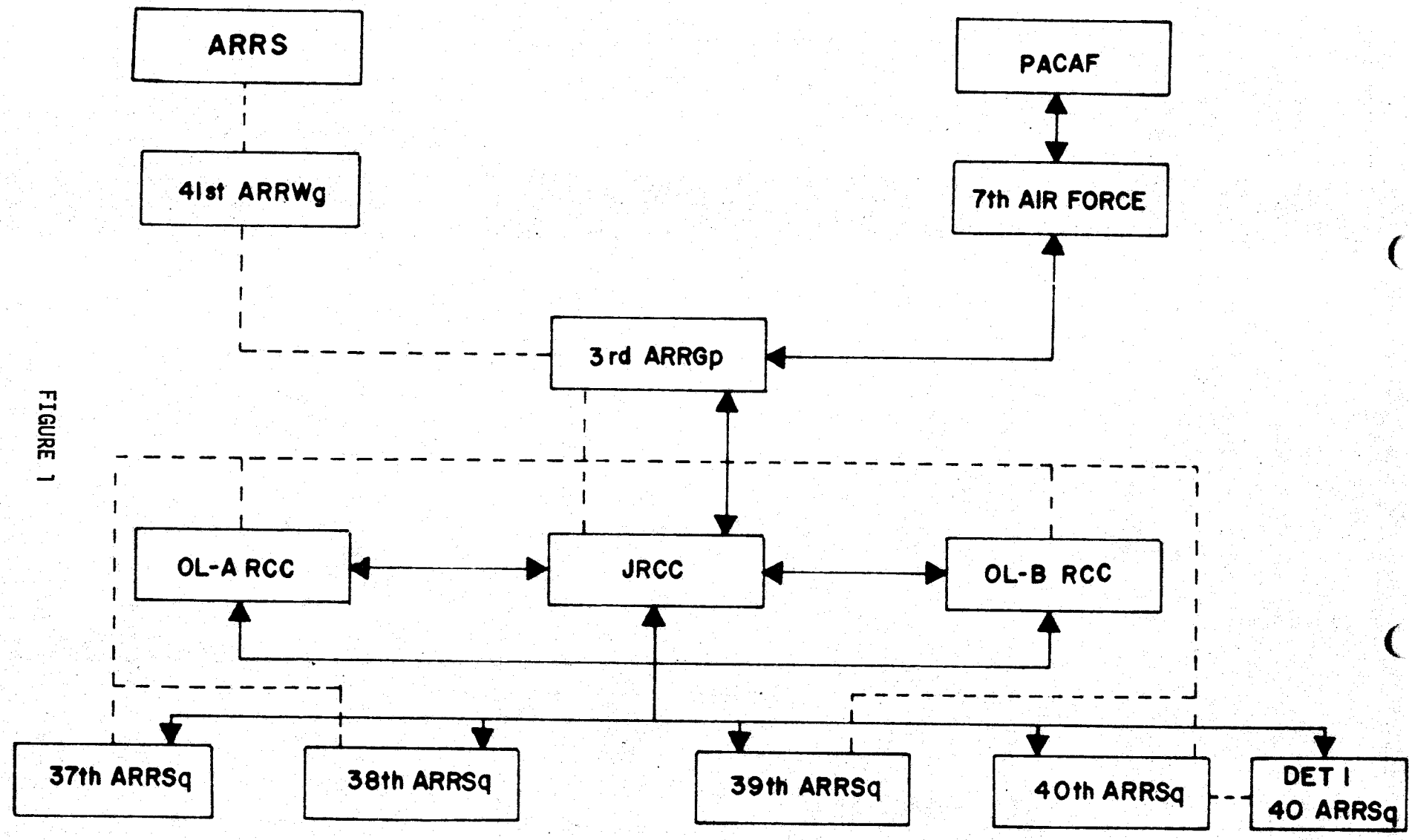

FIGURE 1

3rd ARRGp ORGANIZATIONAL STRUCTURE

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generally responsible for recovery operations in the Gulf of Tonkin, South Vietnam and the southern and eastern portions of North Vietnam and Cambodia. The 40 ARRSq, with headquarters at Udorn RTAFB and a detachment at Nakhon Phanom RTAFB, was generally responsible for recovery operations in Thailand, Laos and the western and northern sections of North Vietnam. Depending on availability of resources at any given time, it was not unusual to have an overlapping of operational areas, with location of the available aircraft with the shortest to site reaction time normally being the determining assignment criterion. The 38 ARRSq with Headquarters at Tan Son Nhut Airfield was responsible for LBR operations. With its complement of twenty-four HH-43s at ten major USAF utilized bases throughout RVN and Thailand, it was responsible for normally non-hostile recovery operations within approximately seventy-five miles of home bases. The 39 ARRSq at Cam Ranh AB, RVN, employing eleven HC-130Ps, was responsible for the airborne mission control activities for all of SEA.

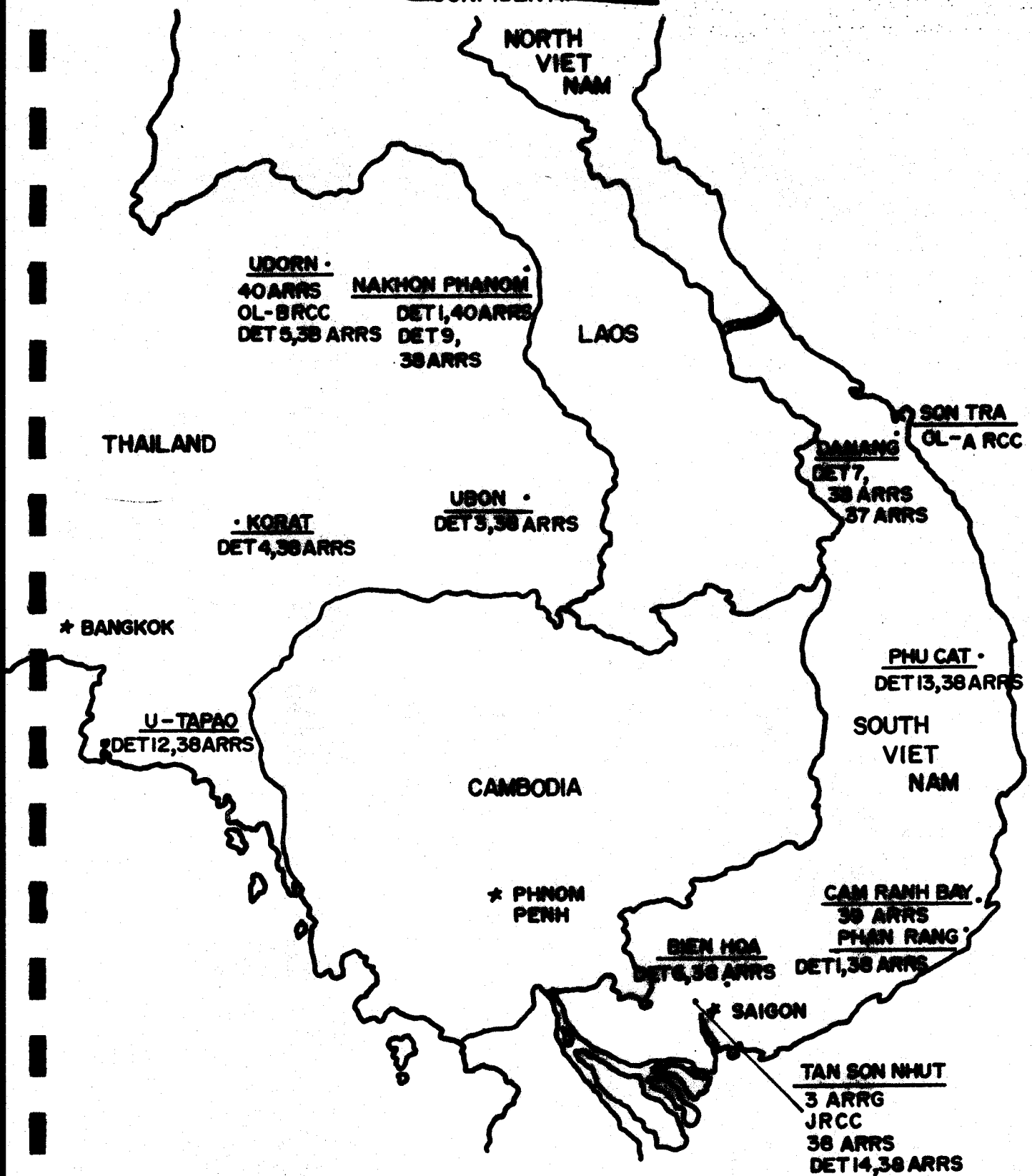
In addition to these dedicated USAF SAR units, the 3 ARRGp acting for the Commander, 7AF, as SAR Coordinator for SEA, exercised operational direction over any other available FWF resources with a capability of SAR participation or support. This responsibility and extension of the Group mission was only exercised, however, during emergency situations to supplement the inherent USAF capability in accordance with Joint Chiefs of Staff (JCS) direction for interservice support of SAR operations.[1/]

Changes in the organizational structure of the SAR forces during this reporting period generally reflected the reduction in operations which

occurred. A total of four units were inactivated - Detachments (Dets) 2, 8, 10, and 11 of the 38 ARRSq previously located at Takhli RTAFB[2/] and Cam Ranh AB,[3/] Binh Tuy AB,[4/] and Tuy Hoa AB,[5/] in RVN respectively. Additionally Det 9, 38 ARRSq was relocated from Pleiku AB, RVN, to Nakhon Phanom RTAFB[6/] and the 39 ARRSq was relocated from Tuy Hoa AB to Cam Ranh AB, RVN.[7/]

At the close of calendar year 1970, the organizational structure of SAR forces in SEA consisted of the following units and subordinate elements at the locations indicated. Figure 2 depicts these organizational components geographically.

Headquarters, 3 ARRGp	Tan Son Nhut Afld, RVN
JRCC	Tan Son Nhut Afld, RVN
OL-A	Son Tra AB, RVN
OL-B	Udorn RTAFB, Thailand
Headquarters, 37 ARRSq	Da Nang AB, RVN
Headquarters, 38 ARRSq	Tan Son Nhut Afld, RVN
Det 1, 38 ARRSq	Phan Rang AB, RVN
Det 3, 38 ARRSq	Ubon RTAFB, Thailand
Det 4, 38 ARRSq	Korat RTAFB, Thailand
Det 5, 38 ARRSq	Udorn RTAFB, Thailand
Det 6, 38 ARRSq	Bien Hoa AB, RVN
Det 7, 38 ARRSq	Da Nang AB, RVN
Det 9, 38 ARRSq	Nakhon Phanom RTAFB, Thailand
Det 12, 38 ARRSq	U-Tapao RTNA, Thailand



3RD ARRGP ORGANIZATIONAL UNITS

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FIGURE 2

Det 13, 38 ARRSq	Phu Cat AB, RVN
Det 14, 38 ARRSq	Tan Son Nhut Afld, RVN
Headquarters, 39 ARRSq	Cam Ranh AB, RVN
Headquarters, 40 ARRSq	Udorn RTAFB, Thailand
Det 1, 40 ARRSq	Nakhon Phanom RTAFB, Thailand

In addition to these established organizational elements, the 3 ARRGp maintained operations at three Forward Operating Locations (FOLs). The 37 ARRSq maintained an alert force at Bien Hoa AB, SVN, the 39 ARRSq maintained a unit at Udorn RTAFB and the 40 ARRSq had a unit at Ubon RTAFB. Utilization of these FOLs is covered in detail in Chapter IV, Operations.

(This page is CONFIDENDIAL.)

CHAPTER II

SYSTEMS AND EQUIPMENT

SYSTEMS

The most significant development, in terms of advancement, which occurred during this reporting period was the culmination of ARRS Programming Plan 69-1 to provide two full squadrons of HH-53 Super Jolly Greens or BUFFs as they were known in SEA--for Big Ugly Friendly Fellows, as one version had it. This marked the completion of a series of development plans initiated several years before and originally implemented under 3 ARRGp Plan I in 1967 and superseded by ARRS Programming Plan 589 in the summer of 1968. This action, delayed by over a year beyond its original target date for a variety of reasons, provided the SAR force with the quality and quantity of assigned aircraft which it needed, but had lacked previously for so long that the success level of SAR efforts in SEA was as high as it was can only be attributed to the ingenuity of SAR personnel over the years in utilizing equipment ill suited for the demands placed upon it. The following comments outline the situation as it existed during the period preceding the time frame covered by this report, and the impact of accession of the HH-53s on the situation.[8/]

> *The build-up of ACR helicopters and the development of an effective ACR capability in the combat environment of SEA was a slow, laborious process. The first seven HH-3Es arrived in the second quarter of CY 66 and were based at Udorn replacing the six CH-3Cs on loan from TAC. A year later, the total number had risen to 16, nine*

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of which were based at Da Nang. This was a year of very extensive tactical air operations against North Vietnam and a period of heavy losses due to the intense resistance put forth by enemy defenses. It was a period during which the disparity between aircrew rescue requirements, as a function of the number of tactical aircraft losses over NVN, and out-country rescue capability in terms of ACR aircraft available was the widest for the entire war . . . . Not until a year after the tactical aircraft losses had reached their peak in 1967 did the rescue forces reach their programmed level.

While the lack of sufficient ACR aircraft was the major obstacle to fulfilling the total rescue requirement . . . mere numbers of rescue aircraft could not, of course, close the gap between capabilities and requirements. Other factors not as readily quantifiable included: limited range, speed and endurance of the rescue force; vulnerability; lack of capability in weather and darkness; limitations in communications between rescue force and survivor; inability of survivor to evade capture; ineffective suppression of enemy resistance during rescue operations. In due time, however, as these problems were recognized through experience, the gap between capabilities and requirements was significantly narrowed. The range and endurance problem, for example, was virtually eliminated with the advent of air refueling in mid-CY 67. Speed was improved when the HH-53 became available. Vulnerability, largely a function of speed, will always confound the rescueman, especially while hovering over the survivor. Weather and darkness can become assets rather than liabilities if and when systems are developed which permit effective rescue operations in these environments. Personal radios, by far the most important item of aircrew survival equipment, had been a source of untold exasperation for survivors when weak batteries, broken antennas, unwanted volume or lack of needed channel selection resulted in unsuccessful rescue attempts.

[redacted]

Six HH-53 helicopters . . . brought to SEA the last significant increment of aircrew rescue improvement to date . . . . This aircraft featured additional speed, range and endurance, greater lifting power at extreme altitudes and temperatures, better defensive armament, and more internal space. It was not the ultimate, by any means, but it did provide a measure of enhancement over the HH-3E.

At the close of 1970 the 3 ARRGp possessed a total of twenty-one HH-53s assigned as follows: 37 ARRSq - nine HH-53Cs, 40 ARRSq - eight HH-53Cs and four of the surviving original six HH-53Bs. Completion of transforming the 40 ARRSq to an all BUFF configuration, begun in September 1967, was accomplished in February 1970. The last five HH-3Es of Det 1, 40 ARRSq were then transferred to the 37 ARRSq. Conversion of the 37 ARRSq to full HH-53C configuration, begun in April 1970 was completed the following October. The last of the HH-3Es were transferred from the 37 ARRSq inventory in December.

In terms of regression, the most significant item was the depletion of the A-1E rescue escort (RESCORT) force inventory.

The following comments by Colonel Sohle, Commander of the 3 ARRGp, commenting on principal considerations of his tour, reflect the feelings of SAR personnel regarding both of these items.[9/]

The two most significant aspects of my tour, with regards to changes taking place in SAR facilities, are the diminishing number of A-1Es available for SAR and the replacement of the HH-3Es by the HH-53s. The attrition of the A1s, and the turnover of many to the VNAF, presents a serious problem to SAR efforts in SEA. There is presently no other aircraft available with the speed, maneuverability and ordnance carrying characteristics to

replace it and the vital role it has played in the SAR program. It's possible the A-7 may provide a limited solution, or use of helicopter gunships may prove feasible, but nothing that I know of can ever do the job as well as the A-1s have. On the brighter side, the phase out of the older Jolly Greens for an all BUFF force has contributed greatly to an improved SAR posture here. It's too bad we didn't have them years ago, but considering what they had to work with, I think the men have done a magnificent job over the years.

EQUIPMENT

During this reporting period the Southeast Asia Operational Requirement (SEAOR) system was reviewed and later discontinued. Approximately half of the outstanding SEAOR's in July of 1969 were cancelled. The remaining programs approved for further development during the first half of CY 1970 were converted under revisions of AFR 57-1, to the Combat Required Operational Capabilities (Combat ROC) program (successor to SEAOR), Command ROC's or regular Class V Modifications status. The following information reflects the action taken on the equipment development programs of particular interest to SAR operations during this reporting period.

SEAOR #4 - Airborne Ground Fire Warning Device. The original SEAOR was converted to PACAF Command ROC 33-68. Attempts to satisfy this requirement were unsuccessful. Tests revealed the equipment developed was incapable of distinguishing between hostile ground fire and friendly airborne weapons. During this reporting period, the requirement was cancelled unfulfilled.

SEAOR #11 - Miniature Aircrew Survival Radio. This UHF communication requirement was completed after problems, experienced during the early portion of this reporting period, with battery leakage and short transmission life, were modified and corrected. All SEA aircrew members were equipped with either the ACR RT-10 or AN/URC-64, the former single channel units being phased out by the end of 1970, in favor of the four channel 64s as they became available. Operational characteristics of this item are described as follows: 10/

> *This solid state survival radio provides broadband frequency performance (225 to 285 MHZ) and gives the user four channels with 1200 alternatives. As frequencies are compromised in combat, they may be changed by installation of new crystals. The radio will provide a power output of 200 milliwatts across the entire frequency band, through the systems matching network. Additionally, the radio was a two way voice and beacon capability, an integral battery, quick frequency change capability and a visual indication of battery serviceability and transmitter output.*

SEAOR #17V - 622A FM Radio. This requirement, carried as a SEAOR (Class V Modification, was initiated to permit the SAR forces to communicate during SAR missions with other ground and air elements of the Army, Navy, and Marine Corps, some of which employ FM exclusively. As an interim measure to elevate this requirement, established in 1966, 3 ARRGp aircraft and coordination centers had begged and borrowed a limited number of AN/PRC-25 FM tunable portable radios from 1967 until the requirement was completed early in this reporting period.

SEAOR #27 - Foliage Penetrating Distress Signal. This requirement was established on 4 December 1965. On 16 September 1969 the status was reported as being funded for R&D activities, but that no production funds had been identified for continuation of the program for hardware.[11/] Following later review of SEAOR programs during 1970, this requirement was also cancelled unfulfilled.

SEAOR #46 - Rescue Direction Finding and Ranging System. This requirement was formally established on 3 April 1966 to overcome then current problems associated with locating and identifying downed aircrew members in minimum time. Principal problem areas included the following:

a. Current equipment did not have the capability of providing adequate location information when more than one ground locator beacon was operating in the immediate area of search. This situation caused a serious degradation of signal intelligence, thus hampering rescue efforts.

b. Current equipment required a search pattern or positive ground signal, such as a smoke flare, to pinpoint the position of the aircrewmen; thus exposing both the rescue craft and the man to enemy action.

c. Heavy voice traffic caused by radio failure on operational channels and airborne emergencies on the rescue frequency at times seriously hampered rescue attempts requiring the use of new beacon frequencies, relatively free from other traffic.

d. Adverse jungle and climatic conditions limited the useful range of available equipment.

During the latter half of CY 69 the AN/ARD-19 was modified in an attempt to satisfy this requirement providing a unit to monitor four channels with a capability to process six signals per channel. Deficiencies of this equipment included signal ambiguity and inadequate range capability. The AN/ARD-19 program was later terminated and SEAOR #46 cancelled with the original requirement to be transferred to a PACAF Command ROC. TAC later requested that MAC establish the Command ROC as a long term requirement. At the close of this reporting period, the overall requirement remained unfilfilled. The portion of the requirement covered in item c, above, was partially alleviated in completion of SEAOR #11 with the AN/URC-64 radio providing the downed airman with selection of one of three alternate frequencies in addition to the emergency frequency.

SEAOR #58 - Pararescue Transceiver Helmet. The detailed history of this program represents an interesting, and unfortunately not untypical example of the problems of response time which were experienced in developing new equipment to meet SAR requirements in SEA. In 1964, the ARS submitted in a MAC Qualitative Operational Requirement (QOR) the request for development and procurement of an integral helmet mounted radio transmitter/receiver for use by pararescue personnel to permit continuous contact with the aircraft commander during a mission. On 2-4 June 1965 this requirement was reviewed at a Hq, USAF SEA conference. On 28 September, SEAOR

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58-FY-67 was submitted re-establishing the requirement. Following another two and a half years of reviews, approvals contract negotiations and development,

> *formal testing began in April 1969. After approximately 1 month, six of the seven test items experienced failures of the audio cables. All test articles were returned to ASD in May 1969 for repair/modification. In November 1969, the test articles, with redesign (sic) audio cables, were returned to ARRS and operational testing was resumed. In January 1970, testing was again delayed due to unacceptable background noise levels within the receiver/earphones. 12/ ASD developed and implemented hardware changes to correct the problem. On 16 March 1970, all test objectives had been demonstrated with the exception of a jungle environment evaluation. However, testing was terminated since it was felt that sufficient data had been collected to adequately evaluate the item. It was recommended that the PRC-87 be approved for production. The production article must incorporate the numerous recommended modifications outlined in paragraph 7.* First article acceptance of the production model by MAC/ARRS personnel is required to verify that adequate corrective actions were taken. 13/*

One of the problems attendant in the jungle environment, amplified when it was also a combat environment for which the item was ostensibly developed, was that the pararescueman found himself in isolation more dangerous than he was in without the helmet. While he could now communicate with the aircraft, the design of the helmet precluded his hearing any of

*Paragraph 7 listed eighteen specific items requiring corrective action and three additional recommended actions.

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the sounds in his immediate vicinity, even hostile fire, which was an extremely undesirable situation from the standpoint of enhancing longevity.

When the SEAOR program was revised the requirement became Combat ROC 4-70. In August of 1970, the CSAF, relating that latest estimates placed program costs at $1,200,000 stated there would be no further action taken to procure this item without OSD approval.[14/] This message then requested CINCPACAF and MAC provide a current assessment and recommendations pertaining to the PRC-87 requirement. PACAF[15/] and MAC[16/] cited the continuing valid requirement for the item and strongly recommended procurement upon correction of deficiencies.

In November 1970, CSAF updated information on this requirement to indicate logistical support and increased costs problems and requested reevaluation of the program.[17/] At the close of this reporting period, over six years after establishing the requirement, the SAR forces were still waiting, albeit somewhat skeptically, for this item of equipment.

SEAOR #97V - HH-3/HH-53 Doppler Navigation Modifications. Following the request from 3 ARRGp in June 1967 this class V Modification was established in July based on the following requirement as outlined in the SEAOR proposal.[18/]

> *The AN/APN-175(V) Doppler system installed in the HH-3E and HH-53B helicopter uses the C-8046 control indicator. This indicator gives destination and present position indications in natural mileage readouts. The mileage readouts are related to an*

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arbitrary square grid system. This system requires a grid overlay or predrawn mileage grid on all flight maps for flight planning and in-flight programming purposes. Excessive time is spent on rescue missions converting longitude and latitude coordinates to the Doppler mileage grid coordinates. Maps with the Doppler mileage grid lines add confusion to a map already covered with important information and magnifies the possibility of navigational error. A new Doppler control indicator is required that accepts destination programming and computes present position in latitude and longitude coordinates.

This requirement was also among those cancelled unfilfilled by PACAF in July 1969, during review and revision of the overall SEAOR program.

SEAOR #102 - Automatic Integral Weight and Balance System. This item was initiated as a result of the requirement where ARRS helicopters often air evacuated personnel and removed cargo of unknown weights. These helicopters often operated from unprepared and remote locations with limited or no support facilities. Weighing devices were not normally available and the pilot had to estimate weight of the load. Accidents occurred because helicopters were loaded with heavier cargo than the pilot realized. A load and center of gravity measuring device to provide direct cockpit readout of gross weight and center of gravity was therefore requested to insure safe operations. This requirement was among those cancelled early in the reporting period.

SEAOR #102V - Lightweight Armor for HH-3E/HH-43B/F. This requirement established on 11 August 1967 as a class V Modification was initiated to provide crew and aircraft protection from .30 caliber armor piercing (AP) bullets as a minimum and preferably from .50 caliber APs. After

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two years of conducting various studies of this problem, no practical solution was found that could provide the necessary protection without imposing an unacceptable weight penalty. In August of 1969, 7 AF requested cancellation of the outstanding SEAOR and conversion of the requirement to a Command (PACAF or MAC) ROC as a long term requirement.

SEAOR #111 - Aircraft Fuel Cell Explosion Suppression. This requirement was established as a general SEA aircraft requirement with the HH-3Es and HH-53Bs assigned priorities of three and four respectively of the fifteen aircraft considered. The HH-43s and HC-130s were later included in the SEAOR coverage. Action to complete this requirement item was initiated in December 1967 on the HH-53Bs and was finally fulfilled in April 1970 by final completion of foam kit modification to all in-theater SAR aircraft.

SEAOR #114 - Night Recovery System. This represented one of the more significant areas of improvements evaluated for enhancing SAR operations during this period. The following review describes the background of the program and its status during the early portion of this reporting period.[19/]

> *SEAOR 114, dated 3 April 1967, stated the almost total deficiency of the present recovery system to effect a recovery at night and during low visibility conditions, and the need for an integrated night search and rescue system to enable rescue helicopters (HH-53s) to search for, locate and recover downed airmen at night and during low visibility conditions.*

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The SEAOR and first Best Preliminary Estimate (BPE), dated 24 April 1967, called for installation of the proposed Night Recovery System in the then contracted Aerospace Rescue and Recovery Service (ARRS) buy of eight (8) HH-53Bs. However, a review of a Sikorsky Aircraft proposal for a night recovery system indicated an excessive leadtime requirement for the proposed system, which would result in an unacceptable delay of a night rescue capability in Southeast Asia (SEA).

On 5 March 1968 a Modification Program Directive was issued to provide a Limited Night Recovery capability to SEA HH-53Bs. The operational objectives for the aircraft to be modified were to be satisfied by installation of the following equipment:

1. A passive night system, Low Light Level Television (LLLTV) with displays for the pilot and copilot.

2. An automatic hover and approach coupler to include the pararescueman cabin trim control.

3. Two (2) hand held modified starlight scopes and swivel mounts (since revised to one (1) pintle mounted Direct Viewing Device (DVD) for pararescueman use).

4. Landing light filters. (Since revised to replacement of the hover lights with infrared (IR) lights.)

5. An additional requirement, because of cabin door space limitations, brought about by installation of the DVD, has since been initiated for removal of the cabin door mini gun and its substitution with a M-60 machine gun. For day operations, when the DVD is not required, the capability to reinstall the mini gun is available.

Two HH-53Bs have been modified to the LNRS configuration and are currently being utilized by ARRS for OT&E testing and combat aircrew training.

Five additional HH-53Bs will be modified in SEA, the first to be completed in January 1970 and the remaining at the rate of one every 30 days thereafter. The eighth HH-53B was lost in combat.

The LNRS will increase rescue effectiveness by (a) allowing a rescue attempt to continue from daylight into darkness, (b) allowing a night rescue/recovery attempt

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to be initiated if no adverse weather conditions exist enroute to the rescue.

The LNRS has no terrain following/terrain avoidance (TF/TA) capability and will not allow penetration of areas where adverse weather conditions exist.

One of the HH-53Bs of the 40 ARRSq was modified starting on 18 November 1969 for limited field tests. Due to recurring component malfunctions and generally unreliable test results, the decision was made to suspend proposed modification of additional SEA aircraft. Problems encountered were mainly in the automatic approach and hover coupler functional areas of the Automatic Flight Control System (AFCS). As reported in mid 1970 the following represented the status of the Night Recovery System (NRS) program at that time.[20/]

The HH-53 Night Recovery System, PAVE STAR, has been cancelled due to a lack of additional funds required to complete the program. Efforts are being made to utilize components and materials obtained from PAVE STAR with the ultimate object being to develop an adverse weather day/night recovery capability. An improvement program for the Limited Night Recovery System (LNRS) has been directed by Headquarters, USAF. This program has been identified as PAVE IMP.

At the close of this reporting period the requirement for the LNRS had been cancelled out as a SEAOR and was being followed up as Combat ROC 11-70. Under this program eight production aircraft were to incorporate a LNRS which was to undergo an in-theater combat evaluation after delivery of six of the aircraft to the 40 ARRSq during the first half of CY 1971. The long standing requirement for a Full Night Recovery System (FNRS),

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to increase capability for recovery to approximately the same conditions as prevailed for daylight SAR missions, was cancelled.

SEAOR #123 - Discretionary Descent System. This requirement to provide an ejected aircrew member a delayed and controlled descent was established as a SEAOR on 19 April 1967 and was later converted to PACAF Command ROC 21-68. The original desired characteristics specified a capability of supporting 250 lbs, aloft for a minimum of 30 minutes at 3000 feet or more AGL with option of ascending, descending, remaining stationary or moving laterally upon command. In November 1970, the evaluation of Systems Analysis and Definition Study data was submitted to the Air Staff along with recommendations of the Major Air Commands for further programming decisions.[21/]

SEAOR #125 - Bullet Resistant Windshields and Side View Panels. This requirement, established 17 April 1967, underwent several stages of proposals and studies, but could not be satisfactorily met within weight increase limitations. During the review of the overall program this SEAOR item was cancelled in December 1969 and was converted to MAC Command ROC 28-69.

SEAOR #129V - Redundant Start System and Battery for HH-53. This item, originated as a class V Modification SEAOR on 21 February 1968, was based on the following requirement.

a. Helicopter operations in SEA dictate that they be used at forward operating locations, sites and airfields not accessible to fixed wing

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aircraft. This in turn exposes the equipment to locations devoid of facilities, maintenance or parts availability. With the advent of rescue operations in a combat environment in SEA using long range heavy lift helicopters, the extended range and endurance has pressed the machine into an environment that requires the maximum operational capability. At forward operating bases utilized by the HH-53s to prosecute the search and rescue effort, it is essential that they not only have an immediate response capability but a redundant system that can guarantee engine start. In the present operational employment the aircraft would have to be abandoned and possibly lost to hostile forces if it could not be evacuated during daylight hours.

b. To fully utilize the HH-53 in a combat environment as a Search and Rescue Recovery Vehicle during hours of darkness and instrument conditions, it is mandatory that a battery installation be provided for emergency operation in the event of generator failure. Additionally, a redundant start system requiring electrical ignition will need battery power.

In February 1970, the requirement had still not be fulfilled and PACAF requested ARRS reevaluate position on requirement. Following review the outstanding SEAOR was converted to a MAC Command ROC.

SEAOR #144 - Survival Kit and Rescue Force Gas Mask. This requirement was established on 31 January 1967 based on the following considerations: (1) The US State Department and Hq MACV had granted approval for Rescue

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Forces to employ riot control agents in specified areas of Southeast Asia. The riot control agents then in use would incapacitate any individual upon contact, thus necessitating the need for adequate aircrew protection proposed to be met by a Chemical, Biological, Radiological (CBR) Mask to be developed especially for aircrews use. (2) The use of riot control agents against enemy forces near a downed airman greatly enhanced the versatility of our combat rescue and recovery forces. It was imperative that the Air Rescue crewmembers also be provided adequate protection by a mask which would not keep the air crewmember from accomplishing his crew duties. Normal radio communications had to be maintained by use of an integral microphone, and the mask worn with the standard AF helmet. The use of riot control agents was considered so significant that the unsatisfactory and potentially dangerous M-24 CBR Mask was used until a satisfactory mask could be developed. The highest priority was requested for this SEAOR because the M-24 greatly restricted the helicopter pilot's peripheral vision in the critical approach and hover modes of flight, which are largely dependent upon unrestricted peripheral vision.

This program was developed in two phases as related items, one for SEA aircrews and one for the SARTF crews. The survival kit mask consisted of a thin plastic hood with aronasal cup. The rescue forces mask was to be a modified version of the standard M-17 gas mask to accommodate the headgear and communications requirements of the SAR personnel. At the close of the reporting period, the requirement was still involved in test evaluation.[22/]

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SEAOR #147V - Voice Recorders for HC-130P Rescue Aircraft. Although the original statement of requirement for this equipment was initiated in May of 1967, the class V Modification SEAOR was not established until 5 August 1968. The recorders were to provide a permanent record of all transmissions made and received by the Airborne Mission Commander aircraft on HF, UHF, VHF (AM and FM) radios and the aircraft interphone during SAR missions. During the early portion of this reporting period, the requirement was partially met on an interim basis through employment of small portable cassette recorders. In October of 1969 a review of the program requirement indicated an estimated cost of over $600,000. Based primarily on this escalated cost, the SEAOR was cancelled 1 May 1970 based on findings of the PACAF SEAOR review of April.

In addition to these established SEAORs the 3 ARRGp submitted requests for the following additional equipment development programs during this reporting period.

1. Improved Armament System on HH-53 Helicopters. The requirement for this development program was outlined in 10 September 1969 as follows:[23/]

> *The current armament configuration on SAR HH-53 helicopters does not provide adequate defensive firepower during the most critical phases of a SAR mission - final approach, extraction and departure. The current system consists of three mini-guns - one each firing from left side, right side and rear ramp. During hoist operation, the weapon on the right side is useless - due to congestion at the door and hoist cable interference. In effect, the protective fire of the helicopter is limited to a narrow field of fire on the left side and a 160° arc from the rear during the most critical phase*

of the SAR mission. Recommended the attached SEAOR proposal be approved and submitted for funding and implementation.

Since SEAOR funds were near depletion at this time, 7AF forwarded the endorsed requirement to PACAF recommending development under MAC Command ROC, which action was followed up by PACAF recommendation to MAC on 20 October 1969.

2. Visual Reference Light on SAR Helicopters. This requirement was initiated on 11 September 1969. As stated:[24/]

Current aircrew recovery tactics employ two helicopters; one flying high, the other low - at tree top level. Fixed wing aircraft (A-1s) are also part of the SAR task force. These elements generally lead or direct the helicopter force to the incident area. In the event the area is hostile, these A-1s and frequently other tactical aircraft in the area including high performance vehicles provide suppression support against the hostile fire areas. It is imperative for mission success and safety that all aircraft involved continually maintain visual contact with the low helicopter. Recommend the attached SEAOR proposal be approved and submitted for design, funding and implementation.

The requirement was not considered as a combat deficiency and fell within the class V Modification SEAOR category, and since these funds had been exhausted, it was recommended for consideration as a PACAF or MAC Command ROC.

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3. Oxygen System for HH-53 Helicopters. On 15 November 1969 3 ARRGp initiated this requirement based on the following considerations:[25]

> *HH-53B/C helicopters currently do not have any oxygen system. In prosecuting SAR missions in a high threat area, it is often necessary to fly at 14-15,000 feet. Exposure to physiological stress effects aircrew members efficiency. Recommend the attached SEAOR proposal be approved and submitted for finding and implementation.*

On recommendations of 7AF, based on the same rationale as in the above two items, PACAF recommended on 7 January 1970 the program be followed up as a MAC Command ROC.

4. Crash Net Communications for HH-43 Helicopters. This resulted from the inability of the Pedro LBR aircraft to communicate directly with other elements of joint air-ground crash and rescue operations. Following the loss of an HH-43B while on a crash coverage mission at U-Tapao RTN Airfield on 19 July 1969, the accident investigation board listed the following factors as contributing causes to the loss.[26]

> *1. Miscellaneous Unsafe Condition in that lack of compatible communication equipment precluded a coordinated, controlled rescue effort between the helicopter and the on-scene crash/rescue agencies.*
>
> *2. Miscellaneous Unsafe Condition in that there is unsufficient detailed guidance to insure effective integration of the LBR into the host base crash/ rescue system; especially on bases involving numerous AF Commands.*

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3. Supervisory Personnel in that the Detachment Commander failed to effect the necessary coordination and cross-training to meet operational requirements and the Commander, 38th ARRSq failed to insure necessary coordination had been completed prior to the unit becoming operational.

Included in the recommendations of the board was the following: 27/

Hq USAF designate specific FM frequency band for all fire/crash control. Further recommend that Hq USAF take immediate action to provide HH-43 aircraft with radio equipment capable of operating in the designated frequency band. This action would insure communications continuity in the event of redeployment of rescue helicopters world wide. In the interim, recommend Hq ARRS task its subordinate units to insure that firm procedures are in effect which provide for communication of essential information from the on-scene fire/crash commander to the rescue helicopter.

During the briefing of the accident report at Hqs MAC in October 1969, General Catton, Commander, MAC, directed that action be taken to implement this recommendation for all ARRS LBR aircraft on a worldwide basis.

During this reporting period, all LBR Detachments were provided with Motorola Mod P33 DEN Single channel transceivers to provide this capability.

5. Secure Communications for HH-53 Helicopters. This requirement for airborne communications security (COMSEC) originated in 1965 with the program to provide secure voice communications for COLLEGE EYE aircraft in support of the Command and Control mission in SEA. Subsequent developments and expansion of requirements into the SEEK SILENCE program

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included 7 AF Operations Plan (OPLAN) 575-69 and PACAF Programming Action Directive (PAD) 69-8 of February and March 1969 respectively.

The particular application of this requirement to SAR operations in SEA were detailed as follows:[28/]

> *With minor exceptions, all communications concerned with SAR operations are in-the-clear on unprotected radio and land lines. From the moment a SAR breaks, a stream of valuable information for the enemy begins to flow, such as: (1) The position of the survivors; this information is broadcast widely on UHF, VHF and HF, in initiating the SAR effort and at times, from 30 to 60 minutes before the first SAR forces are in the area. Position data could be valuable to enemy area control stations and agencies in organizing and dispatching resistance teams to the area of the SAR. Conversations with SAR aircrews indicate that the enemy is directing a major effort against SAR forces, often using the downed crew members as bait. (2) Composition of SAR forces during a SAR effort; this is a subject of almost continuous in-the-clear discussion between the A-1, HC-130, RCC and JRCC. Discussion reveals numbers of aircraft as well as types of ordnance to be used and frequently discloses planned actions as much as three to four hours in advance. The enemy gets some bonus effects when these exchanges expand to include discussions of characteristics and limitations of new weapons. (3) Routes of approach; after scrambling, Jolly Green and Sandy pilots discuss routes to the SAR area with special emphasis on crossing points along the "trail" where the enemy antiaircraft defenses are the weakest. Our knowledge of the enemy's weaknesses is of interest and value to him. In addition, when circumstances permit, the enemy may close one of these gaps and make the crossing by SAR forces more costly. (4) Holding point for SAR forces; holding points for various types of SAR forces are discussed and established by Sandy lead early in the SAR effort. If the enemy plans to employ counter measures against SAR forces, knowledge of where the various types of aircraft are holding is obviously of value in planning attacks. Recognizing that SAR forces may be within enemy radar coverage, the knowledge of holding points nevertheless allows the enemy*

to pick the most advantageous attack and choose the most profitable target. (5) Plan of attack; once the SAR forces are in the area, complete details of preparations and pick-up operations are discussed over unsecure radio channels. At times such discussions may be two to three hours in advance of the planned action so that the enemy had ample time to take counter action. Even lesser amounts of warning can be used by the enemy. (6) Detailed activity reports; during the entire period of a SAR operation, a current and detailed description of the SAR activities is given in-the-clear on HF radio. This broadcast originates from the HC-130 that is acting as the airborne mission control and is required by 7 AF Regulations to permit supervision of the SAR effort by the RCCs and JRCC. This broadcast could provide the enemy with a detailed report on the progress and effectiveness of the SAR effort, giving the enemy the opportunity to initiate counter actions, take cover to minimize the effects of smoke or C/S agent and withhold gunfire to decoy forces into exposing themselves prematurely. It is realized that some actual or potential sources of enemy foreknowledge cannot be totally eliminated due to logistical limitations or operational necessity.

A change in operational requirements eliminated the need for secure voice capability aboard the HH-43 rescue helicopter, but not before the secure voice equipment was installed. The primary LBR mission of the HH-43 rarely required aircrews to talk to stations other than the control tower or ground teams, none of which had secure voice capability. The secure voice system was used only for test purposes. Therefore, approval was obtained from CSAF to direct the detachments to turn in their KY-28 encryption equipment. This eliminated unnecessary classified storage and relieved the detachments of accountability for this equipment.

The modification of the A-1s required the replacing of the installed UHF RT units with SEEK SILENCE modified UHF RT units. As of 31 December

1970, seven of the ten A-1Es assigned to the 56 SOW at NKP had been equipped with SEEK SILENCE modified UHF RT radios. None, however, had encryption devices installed. All HC-130P aircraft had been modified and were equipped with the AN/ARC-133 UHF radio and the FM 622. None of the aircraft were equipped with the Y-8 encryption device. Only the installation of the KY-8 was required to make the secure voice system operational. The KY-8s were on hand but were not installed.

A combat ROC 60-70, was initiated in September 1970 for class V Modification to provide tactical secure voice for twenty-four HH-53s. The Combat ROC was validated by PACAF who recommended installing AN/ARC-133 (V)s in all the helicopters.[29/] This action represented the final status of this requirement at the close of the reporting period.

6. UHF LBR Detachments Transceivers. This requirement was established on 16 July 1969.[30/] It was initiated to satisfy the requirement for direct communications between Rescue Operations Control Centers of the detachments and the LBR aircraft.

The LBR aircraft on crash/fire suppression missions normally were only in contact with the control tower and/or other elements of the mission. On ACR missions their contacts were with the JRCC, the RCCs or the AMC supervising the mission. They had no capability to communicate with their detachments directly. The requirement was confirmed by PACAF, but later cancelled unfilfilled in requirements review meeting of 12 February 1970.

In summary, of the twenty-one requirements outstanding at the beginning of, or introduced during this reporting period, only four were completed, five were cancelled unfulfilled and twelve were converted to Combat or Command ROCs and were still outstanding at the close of the reporting period.

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CHAPTER III

PERSONNEL

MANNING

During this reporting period, 3 ARRGp, including subordinate units, personnel authorized and assigned decreased by ten and nineteen per cent respectively to reach the lowest levels in four years. As may be seen from data of Table A.2. (Appendix A) the percentage of manning also decreased substantially during the period, recovering slightly in the last quarter. Unfortunately the low level of manning was not evenly distributed by Air Force Specialty Code (AFSC), but was most critical in the areas directly affecting flight operations. Typical examples of this problem are indicated in the following.

> *During the quarter, 3 ARRGp experience two major manning problems.*
>
> *1. A293X2 (Airborne Radio Operator). This AFSC at the 39 ARRSq continued to be critically manned for the third straight quarter. Projected inbounds are arriving very late after their TED date. This problem is caused by the losing CBPO as it does not figure enroute training and leave time against the TED date when the PCS orders are published. The 39 ARRSq is presently receiving TDY assistance from 41 ARRWg resources. The estimated get-well date on this problem is 30 May 1970, provided projected inbounds arrive on time.*
>
> *2. A923X0 (Pararescueman). At the end of the quarter, 3 ARRGp's total authorization was 92 versus 60 assigned. Higher headquarters has been briefed on this situation but are unable to provide assistance due to the shortage in pararescue manning worldwide. There is no get-well date projected at this time. 3 ARRGp will closely monitor the status of this manning problem and keep higher headquarters fully advised.* 31/

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During the quarter, 3 ARRGp experienced four major manning problems.

1. 431XOB and A431XOB (HH-43 Mechanic and Airborne Mechanic). At the end of the quarter, 3 ARRGp's total authorization in these AFSC's was 121 versus 91 assigned. Numerous attempts have been made to procure additional personnel having these AFSCs and an estimated get-well date of November 1970 is programmed, provided projected inbounds arrive on schedule.

2. A431XOC (HH-53 and HH-3 Flight Mechanic). The continued debilitation of the 37 ARRSq and 40 ARRSq in this career field has levied a critical problem on 3 ARRGp. At the end of the quarter, the total authorization for 3 ARRGp was 42 versus 32 assigned. A projected get-well date for this AFSC is November 1970.

3. A435XOA (Flight Engineer). At the end of the quarter, 3 ARRGp had a total of 33 authorized versus 22 assigned. 39 ARRSq is presently receiving manning assistance from the 41 ARRWg. No projected get-well date is known at this time.

4. A923XO (Pararescueman). Again this quarter PJ manning has been very critical... No get well date is projected at this time. 32/

This was not a problem unique to this reporting period, but one that plagued the SAR forces since inception of SEA operations. The causes of the problem were twofold - one past and one current. Originally caused by the extent to which worldwide USAF rescue forces were virtually eliminated between the Korean and SEA conflicts, the training of sufficient SAR personnel to meet requirements was not able to keep up with what had been, up until the latter portion of this reporting period, an ever increasing demand. The reasons for this were many and varied, but some

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of the principal considerations were that helicopter operations were an unusual facet of the overall USAF mission, the requirements of training were extensive (see following section) and one of the positions which had presented continuing shortages over the years--the pararescueman or PJ was still a 100 percent voluntary AFSC and unique to the ARS. The problem was further amplified by the inefficiencies in use of the trained personnel available inherent in one-year SEA tours. To the further credit of the SAR personnel in their devotion to duty was the fact that their rate of extended and return tours in SEA was among the highest of any combat units in the theater.

TRAINING

SAR AFSCs

Prior to assignment to SEA, all SAR aircrew personnel had to complete their advanced specialty code SAR training course at the Aerospace Rescue and Recovery Training Center (ARRTC), Eglin AFB, Florida. This was either the Commander/Co-pilot, Navigator, Flight Engineer, Pararescue/Recovery Specialist, Radio Operator or Loadmaster course for the particular aircraft for which he was to be qualified; HH-3, HH-43, HH-53 or the HC-130. This training was in addition to all the normal basic AFSC courses which must have been completed prior to assignment to the ARS.

Each of these ARRTC training courses included from 10 to 13 days of academic training and 27 to 29 days of flight training to provide a practical knowledge of operational Rescue Procedures, Aircrew Survival and

[redacted]

Mission Orientation and Indoctrination.[33/] In addition, each of the courses provided a comprehensive description of the particular aircraft and a practical knowledge of the normal and emergency functions of the aircraft and its systems.

PACAF Jungle Survival School (PJSS)

Since 1968 it had been a requirement that all USAF aircrew members must attend PJSS prior to reporting for SEA assignment.[34/] The PJSS provided the student with an intensified training period covering all aspects of Survival, Evasion, Resistance and Escape (SERE) and the elements of SAR which he would expect to count on, and also the specific phases which he was expected to assist in to enhance his chances of rescue. The program of four days duration during the latter part of this reporting period was divided into two days of academic training and two days of jungle exposure to supplement as well as put to practical use the information gained in the classroom.

During the five and a half years which had passed since the first class was graduated from PJSS on 12 April 1965, more than 42,000 personnel, for an average of over 600 per month, had completed this jungle survival training at the close of this reporting period. In addition to members of the other U.S. Armed Services, which accounted for approximately ten percent of the student body, personnel from many other free world nations were found among the alumni of the "College of Jungle Knowledge." At the end of this reporting period, two classes were conducted every week, averaging

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roughly a hundred students per class. Facilities were available for training up to a 130 students per class. This was not an unusual occurrence, since PJSS had no indication whatsoever of how many students would be sent in for training at any given time, until registration the first day of class. This resulted from variations in SEA personnel assignment levels, and when more applied than could be accommodated, those who were not enrolled were placed at the head of the following class roster. This way no one was delayed for more than three or four days due to limited facilities. One class was in academic session on Monday and Tuesday and the other class on Thursday and Friday.

Throughout the entire course, the students were instilled with the philosophy of SAR in SEA. As stated by one of the PJSS instructors, TSgt Wayne G. L. Russell, to the author's class, "Remember, rescue will not give up on you. For all practical purposes, when you go down, the war stops to provide every necessary resource to get you out so long as there is any reasonable hope of locating you."[35/] Of the total number of personnel attending PJSS, approximately 25-30 percent had no previous survival training such as provided at the other formal Arctic, Desert, Land and Water Survival Training Centers at Homestead, Fairchild, Ladd and other USAF bases.

In order to provide the students with a maximum amount of information in the short period permitted during such an accelerated course, the students were briefed on SAR procedures and equipment and also underwent actual equipment operation familiarization sessions. Class instruction

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was provided through instructor presentations of SAR procedures, life support equipment demonstrations and descriptions of operational characteristics, and use of slides and motion pictures where appropriate. Equipment familiarization included parachutes utilized in SEA, Personnel Lowering Device (PLD), the principal USAF aircraft recovery equipment, the forest penetrator, and various other items of equipment utilized by other aircraft which may have been encountered during rescue operations in SEA.

One of the more important aspects of this training was the exposure to actual vectoring of helicopters by the students employing their life support equipment, recovery by helicopter and general exposure to helicopter operations during the equipment familiarization session and during transit to and from the Jungle Survival Field Training Area. Until early in 1970, PJSS had maintained an internal CH-19 capability to provide a dedicated force for this phase of training. Since that time their Table of Equipment (TOE) had deleted these aircraft and the local (Clark Air Base) Aerospace Rescue and Recovery Squadron had been assigned responsibility for providing PJSS with aircraft as required. Commitments were not always met because of the low priority assigned to school support among the LBR units various missions and an inadequate number of aircraft to support all the mission requirements.

The PJSS had an assigned complement of about fifty personnel of whom approximately two-thirds were Rescue and Survival Instructors. The remaining specialties included Medics, Operational Intelligence Specialists and various

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administrative and supervisory skills.

The value of the PJSS is difficult to measure in terms of an exact contribution to SAR in SEA. However, the extremely high percentage of saves achieved in SEA, roughly 60 percent of all situations were a recovery was considered possible, compared to about 10 percent during the Korean conflict, was greatly enhanced by this SEA aircrew training program. Some of the comments of successfully recovered aircrew members attest to their opinion of the excellence of the training received and esteem in which they regarded the PJSS.

"The SAR procedures was excellent," Captain Trible, BARRACUDA 3, 14 September 1968.[37/]

Major Albright (WALT 30A, 12 November 1968) stated that his survival training was excellent, and that the PACAF Jungle Survival School had prepared him to face being alone in the jungle.[38/]

"I tied myself to the tree... and made myself as comfortable as possible... I knew that if I moved I would betray my position. I just sat, listened and thought for the next 15 hours... The night in the jungle at Clark really helped me. I knew the sound of the jungle and realized any change in the pattern would alert me," Lieutenant Boone, WOLF 2B, 18 November 1969.[39/]

"I believe the survival training I received at Clark and Fairchild was invaluable," Lieutenant Shepherd, 26 November 1968.[40/]

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Recondo Training (RT)

In addition to this formal training for all SAR personnel at the ARRTG and PJSS prior to their SEA assignment, selected pararescuemen attended the U.S. Army Special Forces Recondo School, formerly at Nha Trang, RVN, and relocated to CONUS in December 1970. This three-week course included rugged physical training and conditioning and review of specific SEA area infiltration/exfiltration procedures, reconnaissance patrol operations, map reading and actual patrols in known VC/NVA territory. Following the graduation in June of 1968 of Sergeant Harwell P. Quillian, Jr., the first USAF man to attend the course, the 3 ARRGp had a quota of two slots for each class, which was later increased to three. However, due to manning problems and operational requirements this quota was later reduced to one per class and was used only intermittently. During the first seven months of participation from June to December 1968, an average of three or four personnel per month attended the course, compared with one per month during the next six-months period. During the eighteen-month period covered by this report, twenty-one PJs attended this course.

Informal Training

Personnel of the 3 ARRGp JRCC and RCC units also provided SAR briefings on a regular basis to the various USAF units in SEA for newly arrived personnel. Teams were also dispatched to Subic Point, Philippine Islands, to conduct briefings for Yankee Station personnel upon rotation of carriers and also to Ching Chuan Kang Air Base, Taiwan, and Clark Air Base, Philippine Islands, to brief personnel from these stations conducting air operations in the SEA theater. Wherever preplanned missions were scheduled,

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such as a known first light effort, they also conducted briefings to the various unit personnel composing the SARTF. In addition, the individual unit's Life Support Equipment and Mission briefings continually updated the aircrews on SAR equipment, tactics and requirements.

AWARDS AND DECORATIONS

During this reporting period, the personnel of the 3 ARRGp received almost five thousand awards and decorations as indicated below by quarter.

AWARD*	AFC	SS	LOM	DFC	AMN	MSM	BS	AM	AFCM	TOTAL
Jul-Sep 69		11		108	9		25	916	121	1190
Oct-Dec 69		2		37			12	416	53	520
Jan-Mar 70	6	44	2	264	10		83	967	154	1530
Apr-Jun 70	3	11	1	234	11	1	39	525	99	924
Jul-Sep 70	1	18	3	134	5		32	406	110	709
Oct-Dec 70				4	1		6	101	1	113
Totals	10	86	6	781	36	1	197	3331	538	4986

This brings the total awards and decorations received by SEA rescue forces in 3 ARRGp to over 13,000 since January of 1966. These figures do not include individual Purple Hearts and other awards such as the Cheney and

* AFC--Air Force Cross; SS--Silver Star; LOM--Legion of Merit; DFC--Distinguished Flying Cross; AMN--Airman's Medal; MSM--Meritorious Service Medal; BS--Bronze Star; AM--Air Medal; AFCM--Air Force Commendation Medal

Avco citations and unit awards received including the Presidential Unit Citations, Outstanding Unit Awards and the Vietnamese Gallantry Cross with Palm.

While these figures are indeed impressive, it was the praise and respect of recovered personnel which had a far greater meaning to the members of the Rescue Service. As expressed by Lieutenant Woodrow Bergeron, Jr., after a fifty-one hour ordeal on the ground in enemy territory, "I was just confident that they would get me out."[41/]

CIVIC ACTION PROGRAM

While the number of "saves" will never be recorded in the history of the 3 ARRGp, the success of the "rescues" of hundreds of lost individuals through the efforts of members of the 3 ARRGp are nonetheless important. Exemplifying the finest tradition of the ARRS, 3 ARRGp personnel extended the motto of their service to their off-duty activities as well as the execution of their professional assignments.

Since its formation in 1966, the members of this organization actively supported the CHO-NHI-VIEN-VIET-HOA Orphanage located in the Cholon District of Saigon. Founded in 1869 by French nuns, the operations of the Orphanage were taken over by Vietnamese sisters of the Catholic Congregation of St. Paul de Chartres in 1954. During this reporting period, there were approximately 150 children in the orphanage, ranging in age from a few weeks to teenagers who had known nor had no other home.

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Monetary contributions to the orphanage by the SAR units totaled over $3,000.00. More than 1,800 pounds of clothing, food, toys, cloth and medical supplies were also donated. In addition, many "self-help" projects were completed that greatly enhanced the facility. The following is only a partial list:

a. Ceiling fans installed in classrooms
b. Floor tile installed
c. Refrigerator purchased and repaired
d. Lighting installed in classrooms
e. Painting and general maintenance performed

Group personnel visited the orphanage on a weekly basis. In addition, an English class for the Sisters was conducted from 1967 to 1971. Annual Christmas and Tet parties were held and various trips arranged for the children to local zoos, fairs and expositions. The words of Sister Robert, Order of the Sacred Heart and Director of the orphanage, in an interview during the 1968 Christmas party summarize what these efforts accomplished and meant to the orphanage. "We call him /Major Carroll Shershun/ our little father. He and his men gave us a Lambretta you know, which, for us, is the most wonderful thing that could happen. We used to have to take the sick children to the doctor by taxi or bus and it took a lot of money and much of the day. These last three years /1966-1968/ they have been the very best the orphanage has ever known. War brings sadness, but it also brings good. These Americans have been wonderful to us."[42/]

[redacted]

In addition, many other similar activities were conducted by individual units in their locations throughout Vietnam and Thailand too numerous to cover in detail in this report. The presentation by members of the 37 ARRSq of Da Nang Air Base of 131 scholarships to students of Hoa Vang High School, valued at over $1,500 raised during the base's "Dollars for Scholars" drive in 1969, was only one example of this outstanding effort.[43/]

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CHAPTER IV

OPERATIONS

TACTICS AND TECHNIQUES

Rotary Wing SAR Aircraft

During the early portion of this reporting period, the helicopter complement of the 3 ARRGp consisted of the HH-43 Pedros, HH-3E Jolly Greens and the HH-53 BUFFs. By this time, the Pedros were assigned primarily to the LBR mission. While the 38 ARRSq had been assigned thirty aircraft with which to operate fourteen detachments on 1 July 1969, they had been reduced to twenty-one aircraft assigned to ten detachments by the close of 1970. This resulted from the inactivation of Detachments 2, 8, 10 and 11. Although the primary mission was LBR, the Pedros accomplished a total of two hundred and two saves during this period, one hundred combat and one hundred and two non-combat. Their continued use in the SAR role was occasioned by their locations scattered throughout SVN and Thailand, where (1) they were often able to respond to downed aircrew members or others requiring air recovery more readily than the Jolly Greens or BUFFs and (2) the expected level of enemy activity would permit their employment within an acceptable risk factor level.

The nineteen HH-3Es assigned to the 37 ARRSq and Det 1, 40 ARRSq, phased out during conversion to an all BUFF configuration, constituted the most significant change influencing SAR operations. This conversion

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provided the SAR forces with (1) an increased performance envelope, (2) a greatly improved load capacity, and (3) improved armament.

The increased performance, compared to that of the HH-3E is reflected in the following table:

Characteristic	HH-3E	HH-53C
Weight (pounds) normal gross (with crew, fuel and ammo)	18,000	36,000
Useful Load Capacity	3,000	13,000
Engines		
Number/Type	(1) T-58-GE-5	(2) T-64-GE-7s
Available Horsepower (SHP)	1,250	3,925
Speed (knots)		
Normal Cruise Limit	120	140
At Maximum Military Power	143	170
Altitude (feet ASL)		
Cruise ceiling	12,000	16,000
Hover Limit	4,000	6,500
Crew Complement	4	5-6
Armament		
Number/Type	(2) M-60 .30 Cal Machine guns	(3) GAU-2B/A 7.62mm Mini guns

Since both aircraft were refuelable, the range and endurance were not normally a significant consideration, although the greater

reaction speed of the BUFFs and their twin 450 gallon external tank configuration against the limited 200 gallon tip tanks of the HH-3Es did provide the HH-53s with an added advantage when necessary. The increased power and size which permitted taking on bigger loads at higher altitudes was of major significance as indicated from the following description of the type of problems encountered by the smaller Jolly Greens:[44/]

> *At a 4,000 foot operating elevation and an ambient air temperature of 20 degrees C, the HH-3 is limited to an 18,000 pound hover weight out of ground effect. The basic weight of the helicopter is 14,000 pounds. With the crew, equipment, guns, ammunition and 2,000 pounds of fuel, the gross weight is 18,000 pounds. With this air temperature and altitude, an HH-3, to effect a successful rescue, must dump fuel to reduce poundage to an allowable hover weight. As the aircraft burns 1,400 pounds per hour of fuel while in a hover, a delicate balancing act is waged between dumping enough fuel to accomplish the rescue, and retaining enough to make it to friendly territory and the tanker for top off. At times, this balancing act is so critical and the fuel so valuable, the crew is obliged to throw equipment overboard.*

As a result of the greater size and load capacity, the BUFFs also carried two PJs in lieu of the one limited to the H-3s, for a standard crew of five. On many recovery missions, a combat photographer was also carried as a sixth crew member, normally just on the high bird, but occasionally on both high and low. The lesser degree of vulnerability of the HH-53 was also an important factor. This resulted from its increased defensive fire power, the higher ingress and egress speed available and ability to just take a lot more punishment. It could

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lose complete use of one engine, which spelled destruction for an HH-3, and although at reduced speed and load capacity, still make it safely back to base. These advantages were only obtained, however, at the expense of providing the enemy with a larger target.

The operational procedures developed during this reporting period reflected a southern deployment of SAR alert forces, in response to a similar shift in tactical air operations. The use of Lima Site 98 in North Central Laos as a FOL was discontinued, as was the use of Quang Tri AB in SVN. The culmination of these developments is presented in Figure 3, reflecting disposition of the command and control centers and normal ground alert and airborne orbit locations.

Under normal day posture alert, the 37 ARRSq maintained two BUFFs on a fifteen-minute ground alert at Da Nang AB from first light to forty minutes prior to sunset. Depending on strike mission considerations these two aircraft were directed by the JRCC to fly airborne alert on INDIA orbit in the vicinity of coordinates 16° 55' N 107° 25' E in lieu of maintaining ground alert for selected time periods, to provide the tactical strike force with an increased reaction capability. Two aircraft were also maintained on a 45-minute night ground alert as a "feet wet" only recovery reserve force. Since no RESCORT was normally required for Tonkin Gulf operations these two BUFFs and one AMC aircraft constituted the only night alert force since no capability existed for conducting night SAR. The 37 ARRSq also maintained two HH-53s on

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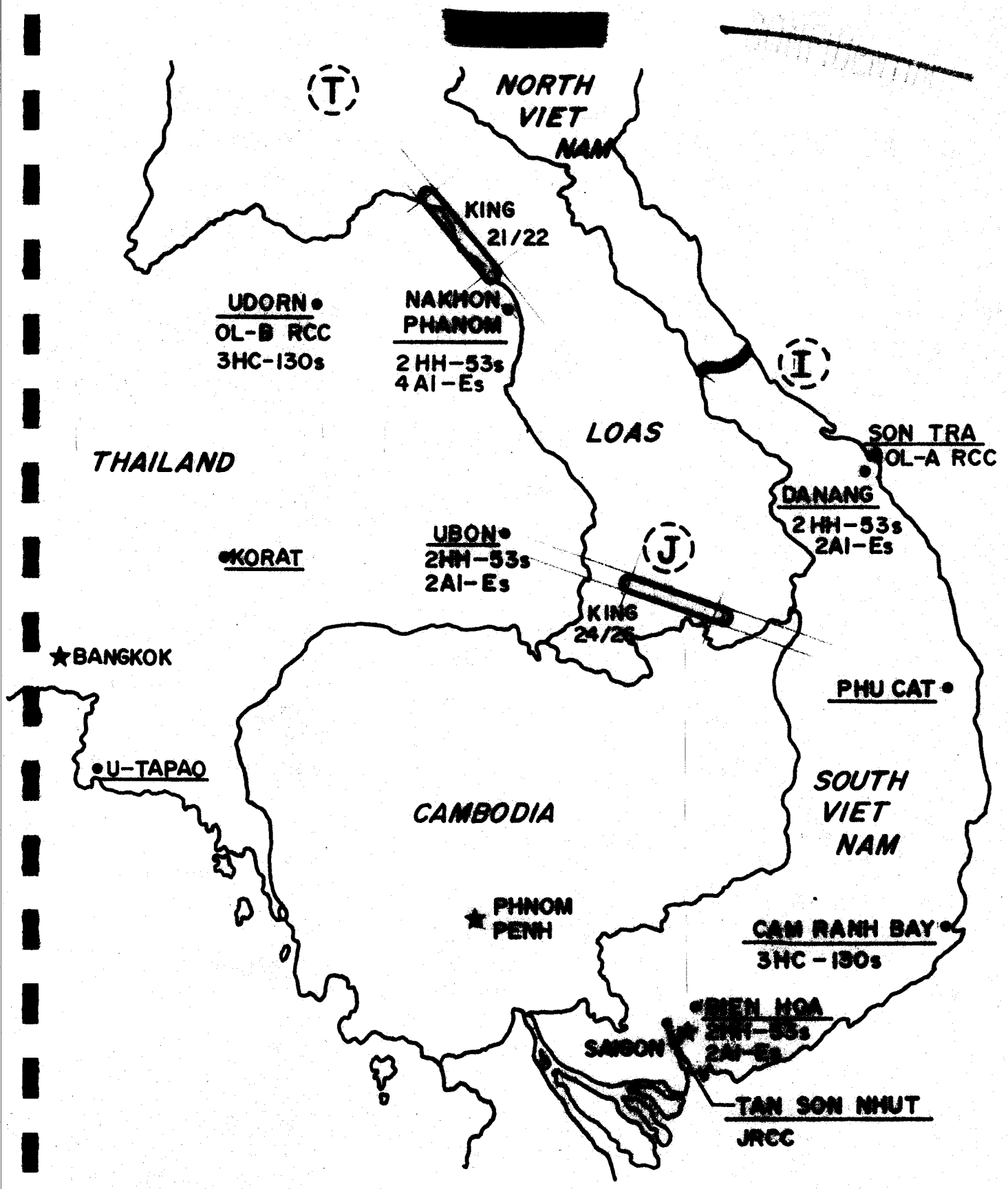
fifteen-minute ground alert at its FOL at Bien Hoa AB from first light to forty minutes prior to sunset. The pair of aircraft at Bien Hoa AB was rotated every three days. The 40 ARRSq supported the normal day posture with two BUFFs at its Det 1 location, Nakhon Phanom RTAFB and two more at its FOL at Ubon RTAFB on fifteen-minute ground alert from first light to one hour before sunset. During the latter part of the reporting period, these pairs of aircraft were normally also rotated on a three-day assignment cycle as follows:

Day 1 - Two JGs proceed from Udorn RTAFB at 0600 hours to Ubon RTAFB for fifteen minutes ground alert from arrival till one hour prior to sunset. Aircraft at Nakhon Phanom RTAFB in place on same ground alert status.

Day 2 - Aircraft at Nakhon Phanom RTAFB stand fifteen-minute ground alert from first light until takeoff for airborne alert in TANGO orbit, in the vicinity of coordinates 19° 16' N 102° 56' E, from two and a half hours prior to sunset till one hour before sunset and then return to Udorn RTAFB if not mission assigned. Aircraft at Ubon RTAFB in place on fifteen-minute ground alert from first light until one hour prior to sunset.

Day 3 - Two JGs proceed from Udorn RTAFB at 0600 hours to Nakhon Phanom RTAFB for fifteen-minute ground alert from arrival till one hour prior to sunset. Aircraft in place at Ubon RTAFB stand fifteen-minute



SAR ALERT POSTURE

FIGURE 3

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ground alert from first light until takeoff for airborne alert in JULIET orbit in the vicinity of coordinates 15° 30' N 106° 00' E, from two and a half hours prior to sunset to one hour prior to sunset and then return to Udorn RTAFB if not mission assigned.

This procedure insured that four sets of SAR aircraft were available during all daylight hours on either immediate call, when in airborne orbit, or on fifteen-minute call on ground alert to respond to emergencies throughout SEA from their separate geographic locations. The orbits indicated in Figure 3 were the most commonly used although several others were available and used when variations in strike force disposition dictated. The most commonly used alternate was the November orbit in the vicinity of coordinates 17° 00' N 105° 40' E, due west of the DMZ. Prior to October 1970, the helicopters flew the evening orbits on a daily basis with the A-1 RESCORT aircraft but for the last two and a half months of the reporting period, they were only able to maintain the three-day cycle outlined above, due to limitations of personnel and equipment.

The tactics/techniques employed by the primary recovery helicopters while on SAR mission continued through this reporting period from those developed previously, with a few variations based on the alert status evolved during the period. The High/Low approach enroute to and after arrival in the immediate recovery area was executed as follows:[45/]

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[redacted]

When a mission broke, and the helicopters were called in, the high bird would orbit over the pickup area between 5,000-6,000 feet. If weather or hostile activity prevented orbiting directly over the area, he would orbit at a position from which the recovery operation could be observed. He would advise the SARTF of enemy activity and could act as a forward air controller if called upon. If the low helicopter were disabled, the high helicopter would attempt the recovery, unless denied by hostile activity. The low helicopter Aircraft Commander would determine his best course of action while proceeding to the recovery site. ...Normally the best approach was a high speed, descending pass over the survivor's position, and then a teardrop turn to arrive back over the survivor's position headed into the wind. Ideally, the survivor would then use a smoke flare, pen flare, or some other visual signal to pinpoint his position. The helicopter crew would be alert for hostile fire during the approach; and the gunners would return the fire if encountered. RESCORT or RESCAP aircraft would then take the necessary action to suppress the hostile fire, if any occurred. When the helicopter came to a hover, the flight engineer would provide directional information to the pilot to position the helicopter for the recovery. During the approach and recovery, the pararescuemen would stand at their positions prepared to return enemy fire. The flight engineer would be in position by the open cabin door with his weapon readily accessible. Meanwhile, the high bird Aircraft Commander would determine the heading and estimated time en route (ETE) to the land or air refueling location. After the survivor had been recovered, the pararescueman would administer first aid if necessary. The flight engineer would check the helicopter for battle damage, and report to the Aircraft Commander. The copilot would report pertinent information to the AMC to include ETE to the refueling point, condition of the survivor, damage to the helicopter and so on. Normally, the helicopter would return to its home base; however, fuel status, weather or medical condition of the survivor might require a deviation. If the survivor required medical attention, the Aircraft Commander would notify the AMC to arrange to have an ambulance waiting at the recovery base.

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As an example of tactics developed, the low helicopter approach described above was modified as a result of hostile fire threat to provide a high speed descent to an IP followed by a high speed-low altitude run straight into the survivor as directed by the RESCORT aircraft to reduce helicopter vulnerability.

Normally when the first set of BUFFs was assigned to the SAR mission, another set would be taken from their ground alert status and execute an airborne alert orbit, at a location convenient for dispatch to the recovery area, in the event it became necessary to replace the primary force. This technique was instituted as SOP in October 1969 following experienced gained from the KNIFE 61/62 recovery mission where such an immediate backup force could possibly have spelled the difference between success and failure of the mission. To maintain a maximum readiness posture at all times, whenever the aircraft on alert status were committed to an SAR mission, their alert positions would be assumed by replacements from other squadron aircraft at Da Nang AB or Udorn RTAFB, respectively, to the extent that OR aircraft and available crews permitted.

Fixed Wing Airborne Mission Commander Aircraft

During this reporting period, the transfer of 39 ARRSq from Tuy Hoa AB to Cam Ranh AB in September 1970, without loss due to a single interruption in the assigned mission, was indicative of the quality of operational performance provided in execution of the SAR AMC function.

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As shown in Figure 3, the 39 ARRSq maintained an alert force of six HC-130Ps, three out of Cam Ranh AB and three out of their FOL at Udorn RTAFB.

The assignment of aircraft at Cam Ranh AB was as follows: One aircraft designated KING 27, was maintained on a day status thirty-minute ground alert and a forty-five-minute night ground alert. A second aircraft, call sign KING 24, maintained airborne orbit roughly between Channels 82 at Pakse, Laos and 107 at Pleiku AB, RVN from first light to midday. The third HC-130P, KING 26, maintained this airborne orbit relieving KING 24 at midday and staying on station till last light.

A similar assignment of duties was divided among the FOL aircraft, with KING 23 maintaining a thirty-minute ground alert from first light to one hour prior to sunset. KING 21 performed the early airborne orbit on the Laos/Thailand border in the area of Paksane, Laos from first light to midday, relieved by KING 22 which continued the orbit through last light.

Rotation of assignment at the FOL was cycled so that the aircraft on departing Cam Ranh AB at 0600 hours would proceed to Udorn RTAFB to assume the KING 23 ground alert the first day. The second day it would stand the KING 21 early orbit and on the third day, the afternoon KING 22 position, and then return to the squadron at Cam Ranh AB following pickup of the maintenance personnel at Udorn RTAFB. The primary mission

of the ground alert HC-130Ps was to provide the aerial refueling capability for the BUFFs upon initiation of a SAR mission, the airborne orbit bird assuming the AMC role. As individual aircraft were diverted from their alert assignment they would also be replaced to the extent that available aircraft and crews permitted to maintain a maximum alert posture.

As was the case with the BUFFs, the role of the AMC remained much the same during this reporting period as it had been previously developed. When a SAR mission was launched, the AMC aircraft closest to the indicated recovery area would immediately proceed to an orbit location which would afford the best position considering communications requirements, SAR and support forces to be utilized and vulnerability to hostile action either from the ground or airborne attack. In the role of coordinator of the overall SAR operations, the AMC maintained communications with the survivor, whenever radio contact was possible, with each of the aircraft constituting the SARTF, the JRCC and the RCC concerned, and other ground and airborne units as necessary. The AMC in addition to monitoring current activities was also responsible for anticipating and providing for changes in tactics, ordnance and/or additional force requirements, preplanning AR rendezvous requirements, and alerting the JRCC/RCC of all significant developments in conduct of the mission.

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RESCORT Aircraft

As indicated in Chapter II, it was the universal opinion of the SEA SAR personnel that the reduction of the A-1 force was the severest blow to the SAR posture during this reporting period. It would be impossible to overstate the importance of the role of these aircraft as an element of the SARTF.

To complete the SAR alert posture configuration, the A-1Es stood alert in much the same form as the HH-53s. Two aircraft, call sign SANDY 9/10, stood fifteen-minute ground alert with the JGs at Da Nang AB from first light to forty minutes prior to sunset. There was a difference in employment in that the A-1s would remain on ground alert during the airborne orbit of the BUFFs on INDIA station. In the event of assignment to a SAR mission, the SANDIES would be scrambled from ground alert and rendezvous with the BUFFs enroute to the recovery site. Two other birds, SANDY 7/8, maintained the same three-day cycle ground alert as the JGs at the Bien Hoa AB FOL from first light until forty minutes before sunset, arriving early the first day and departing late the third day.

The arrangement of the Thailand A-1 alert forces differed from that of the helicopters to a larger degree. Two aircraft, designated SANDY 1/2 were maintained on a fifteen-minute ground alert status from first light to one hour before sunset as an independent RESCORT reserve force normally at Nakhon Phanom RTAFB but frequently at Ubon RTAFB depending

[redacted]

on changes in tactical strike force commitment. Additionally, SANDIES 3/4 stood ground alert in conjunction with the JGs at Nakhon Phanom RTAFB from first light until takeoff for airborne alert orbit on TANGO station on a daily basis from two and a half hours to one hour prior to sunset. On the third day cycle when the BUFFs flew orbit, they flew as a team. Similarly SANDY 5/6 maintained the same three-day assignment period to Ubon RTAFB as the JGs, standing ground alert from first light until takeoff for daily orbit in JULIET from two and a half till one hour prior to sunset. Again on the three-day cycle which saw the BUFFs on orbit, they flew as a team. When flying orbit, if a SAR mission had not been assigned thirty minutes prior to completion of normal orbit assignment, the SANDIES were considered available to expend ordnance as strike aircraft. This policy permitted the dedicated SARTF crews to maintain attack proficiency during periods of intermittent SAR mission assignment.

During the early portion of the reporting period, the A-1 force aircraft call signs employed SPAD for in-country (SVN) assets and SANDY to designate the out-country (Thailand) based aircraft. However, this was changed and the single call sign SANDY was later used to indicate all 56 Special Operations Wing (SOWg) dedicated SAR support aircraft. Figure 4 and 5 indicate the visual weapons configuration of the two, the slight difference being continued although they both later had the same call sign.

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The reduction of the A-1 force did not seriously jeopardize their alert status function outlined above. The outcome was to effectively wipe out the reserve force posture they had previously maintained. It was not at all unusual for a SAR mission to employ between six and ten RESCORT aircraft. During larger efforts many more were required. The following account provides an example of such employment.[46/]

> *For three more hours, the area was sanitized with smoke, CBU-30 and ordnance. By 1140 hours, the armada was formed for another attempt. Ten A-1s formed a daisy chain on the west side of the river and 12 others set one up on the east side. The Jolly Green began its descent on the east side with A-1s circling above and around it, using their ordnance to form a protective ring around the survivor.*

During the period of this operation (December 1969), there were over sixty A-1 aircraft available for all mission roles. Approximately half of this total force was SAR qualified and available for assignment to SAR missions. In addition to normal force attrition due to combat and operational losses, the loss of twenty-eight additional A-1s to the VNAF during the latter portion of the reporting period (as part of the VNAF I&M Program), found that one year later in December 1970, the total force had been reduced to thirty-nine aircraft. Almost half of this number were still committed to other critical mission roles, which created a situation where it would have been impossible to any longer conduct such a SAR operation if necessary.

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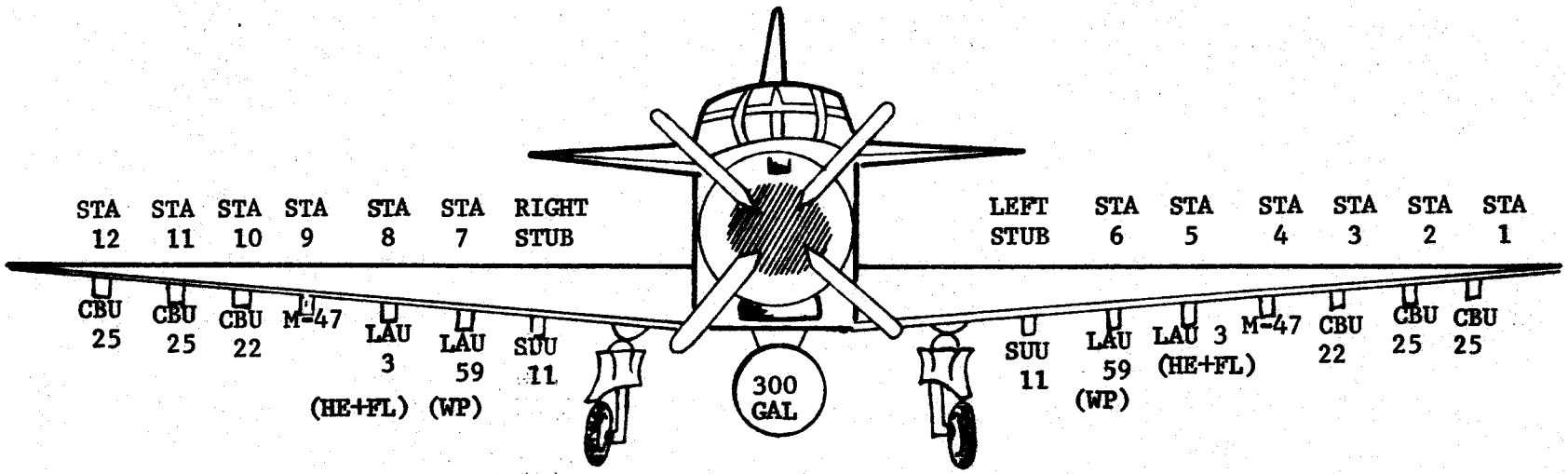


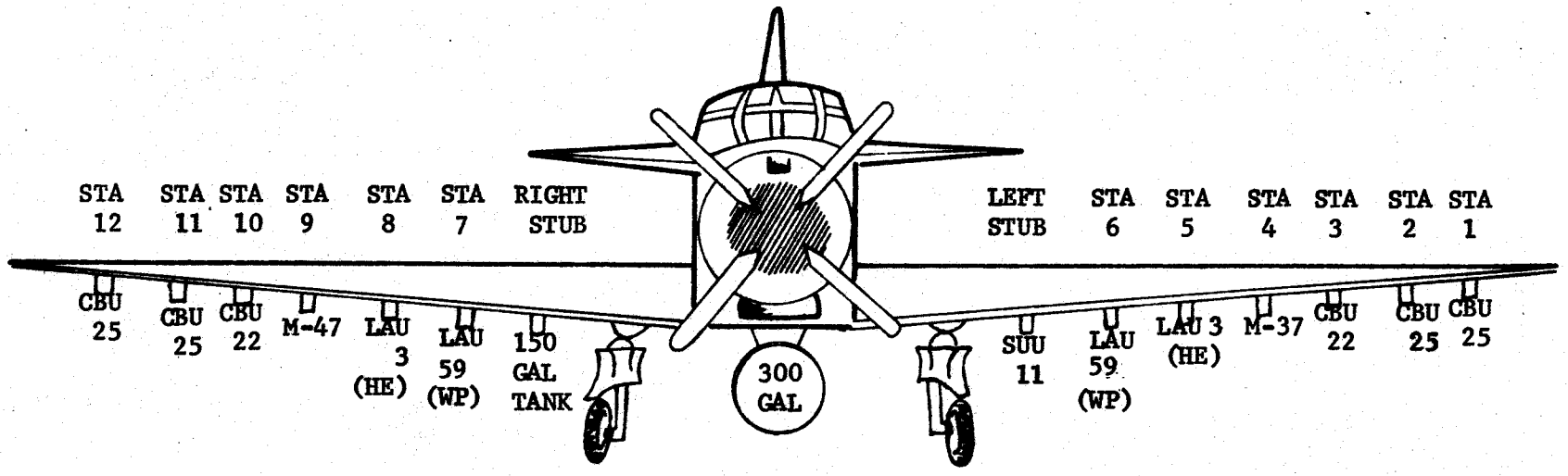
FIGURE 4

* Includes aircraft basic weight, crew, #2 fuel load, and 20 mm ammo.

H/J LOAD ONLY	WEIGHT	DRAG
AIRCRAFT*	19847	55
4 CBU-25	1000	140
2 CBU-22	450	70
2 LAU-3	850	56
2 M-47	210	20
2 LAU-59	368	22
2 SUU-11	650	44
	23375	407

A-1E Spad Configuration

FIGURE 5



H/J LOAD ONLY	WEIGHT	DRAG
AIRCRAFT*	19847	55
4 CBU-25	1000	140
2 CBU-22	450	70
2 LAU-3	850	56
2 M-47	210	20
2 LAU-59	368	22
1 SUU-11	325	22
1 150 GAL TANK	1102	29
	24152	414

* Includes aircraft basic weight, crew, #2 fuel load, and 20 mm ammo.

NOTE: When available, tracer mixture will be loaded on one outboard and one inboard gun; other two will be loaded with 2+3 INC/HEI.

A-1E Sandy Configuration

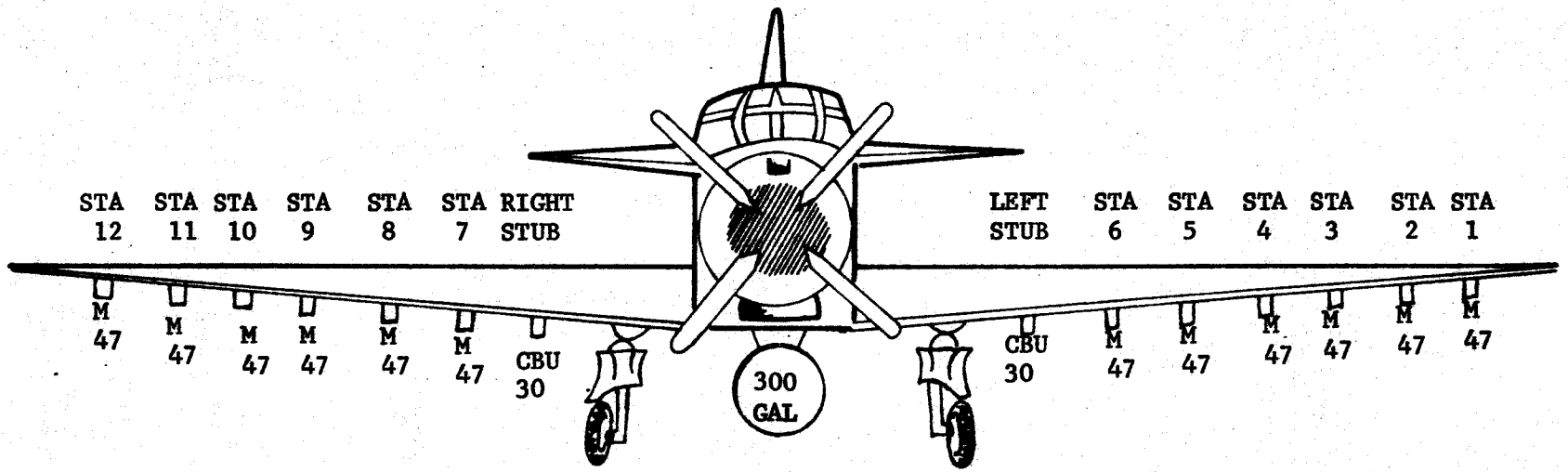


FIGURE 6

H/J LOAD	WEIGHT	DRAG
AIRCRAFT *	19802	55
12x M-47	1260	120
2x CBU-30	1124	54
	22186	229

E/G LOAD	WEIGHT	DRAG
AIRCRAFT *	20455	135
12x M-47	1260	120
2x CBU-30	1124	54
	22839	309

* Includes aircraft basic weight, crew, #2 fuel load, and 20 mm ammo.

A-1E SAR Support Configuration

[redacted]

[redacted]

RESCAP Aircraft

The RESCAP force during this reporting period consisted of specially configured A-1s as shown in Figure 6 and additional fast movers, normally F-4s, for special coverage as required. The fast movers provided defense from MIG and SAM attack, saturation ground fire suppression and special weapon delivery not available with the A-1s. A typical example of these combined efforts in support of the SAR mission quoted above was described as follows:[47/]

> *Between rescue attempts, the A-1s rebuilt the smoke walls while the jets used air-to-ground missiles against the heavier guns. Walleye and Bullpup missiles struck the guns to the north. Paveways were delivered against the guns in the cave behind the survivor... A total of 154 sorties were flown on this second day [of the three day mission].*

The SARTF

The integration of these individual components under the appropriate command and control activities constituted the SARTF. Operations involved in the initiation, direction and execution of the SARTF were documented during this report period, to provide a firm outline for all activities concerned with SAR in SEA.[48/] In the words of Colonel Sohle,

> *Our tactics are now as well documented as it is possible to prescribe tactics and techniques for SAR operations, where each mission presents a unique situation. Our development of present SAR capability has been a history of relearning lessons already learned by someone else, but who unfortunately could not or did not document it for others to profit by. We feel that in 7AF Manual 64-1 [Search and Rescue - Southeast Asia] this has been overcome or at least*

[redacted]

minimized. Of course, it is impossible to substitute any document for actual experience. You could read every item ever written on SAR, but there is no alternative to the learning process of involvement in a combat recovery mission.

The tactics and techniques documented in the above referenced 7AF manual[49] outline the individual operational procedures to be employed by each of the individual components of the SARTF, and the overall command and control relationships of the integrated force.

ACCOMPLISHMENTS

Combat Saves

During the eighteen-month period of this report, the 3 ARRGp was officially credited with two-hundred-twenty-four combat saves bringing its total over the five-year period to 2,039. A break-down by quarters is contained in Table A.2. This represents approximately thirty-four combat saves a month, or the recovery of an average of better than one individual who would have otherwise faced death or capture by hostile forces for every day of their activation in SEA. Colonel Pinyerd, Commander, 3 ARRGp at the close of this reporting period had the following comments regarding these accomplishments:[50]

The accomplishments of the SAR forces during this conflict in SEA have been achieved only through overcoming what at times have seemed like insurmountable odds. During the first few years, the available facilities - both in terms of systems and personnel - could not keep up with the developing demands. There was the continuous strain of playing catch-up ball all the time. Another thing that has hampered our activities until relatively recently, is the amount

[redacted]

of lost effort in relearning lessons, which resulted from inadequate opportunities to document what predecessors had previously learned. This resulted from the tremendous efforts required to build up a combat recovery capability from scratch, and everyone immediately involved was so concerned with day-to-day operations there was little time for anyting else.

Now it seems that having at long last developed all the individual elements of the SARTF during the last year to a fully effective and integrated team, we are losing it again. Having gained the all BUFF helicopter force we are faced with a diminishing RESCORT force to the point where once again it will not be possible for the SAR forces to meet demands due to lack of facilities, in this case the required A-1 force. The accomplishments to date have been achieved only through a total team effort, and the contributions of each element are equally important to the success of the overall mission. As a chain, the SARTF can only be as strong as its weakest link. Unfortunately I do not see how this particular link can be replaced by a substitute. There just isn't another aircraft in our inventory with the performance characteristics and the capacity and diversity of weapons load available that can come close to meeting the particular needs of RESCORT.

As shown in Table 1, of the total number of combat saves, forty-eight percent represented the recovery of downed aircrew members. Within the 980 ACR combat saves, Air Force personnel constituted 58.2 percent of the total group. It is also interesting to note that the HH-3s accounted for more combat ACR than all other aircraft combined. The values also indicate the lateness of introduction of the HH-53s into the SEA conflict. When considering their superiority in the combat SAR role, it is interesting to note that they accounted for less than twelve percent of the combat ACR and only 18.2 percent of all combat saves.

[redacted]

[redacted] [redacted]

Non-Combat Saves

The information on Table 2 reflects a similar breakdown of non-combat saves. Again it may be seen that the old reliables, the HH-43 PEDROS, bore their share of the SAR effort over the years in SEA, accounting for over seventy-one percent of the non-combat saves. Here again the largest numerical group by personnel category, was the US Air Force.

Combining these figures with those of Table 1, it can be seen from Table 3 that the PEDROS accounted for more saves, 52.5 percent, than all the other aircraft categories collectively. Along with the HH-3s, with approximately 32 percent of all saves, the large numerical values were accumulated during the large-scale air operations through October of 1968, prior to the bombing halt restricting operations over North Vietnam. A comparison of these figures with the HH-53s is therefore impossible, since the 53s were not presented the same operational environment for a relative analysis on the basis of number of saves. The greater capability of the BUFFs, outlined in previous sections, and their performance wherein similar environments were presented leave no doubt that had they been available earlier, the accomplishments summarized in these tables would have been even more spectacular.

It is impossible to evaluate the success of SAR in monetary terms with a very high degree of accuracy, but if no other factor than personnel

[redacted]

TABLE 1

3 ARRGp COMBAT SAVES

	1966		1967		1968		1969		1970		TOTALS		
	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ALL
HH - 3	92	38	122	68	163	138	72	1	47	14	496	259	755
HH - 43	65	186	68	147	79	92	94	102	37	18	343	545	888
HH - 53	0	0	1	0	21	79	48	164	46	12	116	255	371
HU - 16	22	0	1	0	0	0	0	0	0	0	23	0	23
HC - 130	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER 1/	0	0	0	0	0	0	0	0	2	0	2	0	2
TOTALS	179	224	192	215	263	309	214	267	132	44	980	1059	2039

1/ CREDIT OF 2 COMBAT SAVES TO PJ RON ON GROUND WITH SURVIVORS

	1966		1967		1968		1969		1970		TOTALS		
	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ALL
USAF	117	1	99	43	129	12	138	6	87	3	570	65	635
USA	27	169	45	66	80	47	46	32	17	21	215	335	550
USN	29	3	42	55	47	69	26	45	6	0	150	172	322
FWMF	6	23	2	43	6	45	4	181	0	7	18	299	317
CIVIL	0	10	4	4	1	136	0	2	0	0	5	152	157
OTHER	0	18	0	4	0	0	0	1	22	13	22	36	58
TOTALS	179	224	192	215	263	309	214	267	132	44	980	1059	2039

3 ARRGp NON COMBAT SAVES

	1966		1967		1968		1969		1970		TOTALS		
	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ALL
HH - 3	7	0	18	63	22	54	14	23	1	3	62	143	205
HH - 43	17	49	49	100	45	213	31	116	18	50	160	528	688
HH - 53	0	0	1	0	5	5	4	1	8	11	18	17	35
HU - 16	0	0	0	7	0	0	0	0	0	0	0	7	7
HC - 130	0	0	0	0	0	0	0	1	0	30	0	31	31
OTHER	0	0	1	0	0	0	0	0	0	0	1	0	1
TOTALS	24	49	69	170	72	272	49	141	27	94	241	726	967

	1966		1967		1968		1969		1970		TOTALS		
	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ALL
USAF	18	2	47	8	43	35	36	29	18	7	162	81	243
USA	5	1	16	39	9	38	2	21	0	29	32	128	160
USN	0	5	2	72	18	65	6	36	9	4	35	182	217
FWMF	1	3	2	11	1	55	2	19	0	2	6	90	96
CIVIL	0	38	1	39	1	74	3	36	0	46	5	233	238
OTHER	0	0	1	1	0	5	0	0	0	6	1	12	13
TOTALS	24	49	69	170	72	272	49	141	27	94	241	726	967

TABLE 2

replacement and retraining costs are considered, a figure on the order of $100,000,000 represents a minimum value attributed to the ACR phase alone. In addition to the 1188 US and FWMF ACR saves, the 1352 non-ACR recoveries of US and FWMF (armed forces) personnel constitute the return to duty of 2540 military personnel whose services may have, or in many cases it is known they would have been otherwise lost.

Other Air Operations

While the recovery of downed aircrewmen and other personnel exposed to danger in hostile areas, has represented one of, if not the most, exemplary chapters of USAF operations in the SEA conflict of itself, the personnel of the 3 ARRGp have not contented themselves with anything less than the maximum possible effort in emulating the code of the air rescue man. As expressed by Lieutenant Colonel Tomlinson, Chief of the JRCC, during the end of this reporting period:[51/]

> *While we have a unique status within the worldwide ARRS organization, that of maintaining as a primary mission a combat SAR readiness posture to support the US strike forces at all times throughout the SEA theater of operations, we are also committed to the general policies and objectives of the ARRS. To the extent that our primary mission is not degraded, we are always ready to lend assistance to anyone in distress requiring the special services normally only available from the 3 ARRGp resources. To not include such operations in any discussion of SAR in SEA would provide a less than complete picture of the subject. While there are no hard and fast regulations or directives covering such operations, we have over the years had to use our heads on initiating such missions, all decisions subject to the requirements of maintaining a combat SAR posture. In the northern area of*

operations, we have a little more leeway in dispatching resources on such missions because of the normal reserve forces in being at Udorn and Da Nang. However, in the geographical area of Military Regions III and IV of SVN and the remainder of Southern SEA, the only force we maintain are the BUFFs and SANDIES at Bien Hoa AB. On several occasions we have recovered personnel from Con Son Island off the Southern coast of SVN, due to reluctance of the Vietnamese to fly helicopters over water, primarily due to requirements for immediate medical evacuation to a mainland hospital, but normally our operations are more often concerned with rescue activities off the East coast of SVN or in isolated mainland locations.

Some of the more spectacular as well as typical examples of this activity include the following episodes:

As a result of an unexpected level of attack by enemy forces, personnel at Lima Site 108 at Muong Soui in Laos were faced with being overrun with no possibility of escape by land, having been completely surrounded. As a result the 40 ARRSq was requested and authorized to proceed with the aerial evacuation of the friendly troops. At the end of the single day's operation three BUFFs had successfully evacuated a hundred and eleven personnel to safey, once again demonstrating the excellent capabilities of the HH-53s.

An example of both the tenacity of SAR operations and the effective coordination of efforts of many organizations was displayed in the execution of Mission Number 3-022-29 Nov 70. At 0855L on the 29th of November 1970, the JRCC was notified by the 834th Air Division Command

TABLE 3

3. ARRGp TOTAL SAVES

	1966		1967		1968		1969		1970		TOTALS		
	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ALL
HH - 3	98	38	140	131	185	192	86	24	48	17	557	402	959
HH - 43	82	235	117	247	124	305	125	218	55	68	503	1073	1576
HH - 53	0	0	2	0	26	84	52	165	54	23	134	272	406
HU - 16	22	0	1	7	0	0	0	0	0	0	23	7	30
HC - 130	0	0	0	0	0	0	0	1	0	30	0	31	31
OTHER	0	0	1	0	0	0	0	0	2	0	3	0	3
TOTALS	202	273	261	385	335	581	263	408	159	138	1220	1785	3005

	1966		1967		1968		1969		1970		TOTALS		
	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ACR	NAC	ALL
USAF	135	3	146	51	172	47	174	35	105	10	732	146	878
USA	32	170	61	105	89	85	48	53	17	50	247	463	710
USN	29	8	44	127	65	134	32	81	15	4	185	354	539
FWMF	7	26	4	54	7	100	6	200	0	9	24	389	413
CIVIL	0	48	5	43	2	210	3	38	0	46	10	385	395
OTHER	0	18	1	5	0	5	0	1	22	19	23	48	71
TOTALS	203	273	261	385	335	581	263	408	159	138	1221	1785	3006

SECRET

TABLE 4
3RD ARRGP AIRCRAFT LOSSES IN SEA

DATE	TMS	SER NR	LOSS	AREA	CREW	UNIT	REMARKS
14-3-66	HU-16B	51-0071	CMBT	NVN	2KIA	1/38	DESTROYED BY MORTAR HIT IN TONKIN GULF
8-7-66	HH-43B	59-1587	OPRTNL	SVN	N/A	10/38	DESTROYED BY MORTAR HIT ON PAD
1-9-66	HH-3E	64-14227	ACDNTL	LAOS	RCVD	5/38	CRASHED DUE TO PILOT ERROR. 1 PAX KIA
18-10-66	HU-16B	51-7145	CMBT	SVN	7KIA	37	LOST ON TONKIN GULF CROWN ORBIT MISSION
20-10-66	HH-3E	65-12778	CMBT	LAOS	RCVD	5/38	HIT BY ENEMY GROUND FIRE
28-10-66	HH-43F	62-4511	CMBT	SVN	2KIA	9/38	HIT BY ENEMY GROUND FIRE. 3 PAX KIA
29-11-66	HH-3E	64-14231	OPRTNL	LAOS	RCVD	5/38	AIRCRAFT LANDED IN DUST AND ROLLED OVER
6-2-67	HH-3E	65-12779	CMBT	NVN	3KIA	2/37	HIT BY ENEMY GROUND FIRE. 1 PAX KIA
8-5-67	HH-43F	63-9715	CMBT	SVN	RCVD	7/38	HIT BY 37/57MM DURING ATTEMPTED TAKE OFF
21-5-67	HH-43F	63-9711	CMBT	SVN	RCVD	6/38	HIT BY 37/57MM RECOVERING RAMROD 2 CREW
27-10-67	HH-3E	66-13283	CMBT	LAOS	RCVD	37	HIT BY 37/57MM DURING HOVER TO PICK UP CREW
9-11-67	HH-3E	66-13279	CMBT	LAOS	3KIA	37	HIT BY 37/57MM DURING TAKEOFF FROM MEDEVAC
15-1-68	HH-3E	64-14233	CMBT	NVN	RCVD	1/37	HIT BY 37/57MM, LOST POWER AND CRASH LANDED
8-2-68	HH-43F	62-4525	CMBT	SVN	1KIA	9/38	HIT BY 37/57MM ON INGRESS, CRASHED AND EXPLODED
9-6-68	HH-3E	67-14710	CMBT	SVN	4KIA	37	HIT BY SA/37MM DURING EGRESS, EXPLODED AND CRASHED
28-7-68	HC-130P	66-0214	OPRTNL	SVN	N/A	39	DESTROYED BY SAPPERS ON PAD AT TUY HOA AB
28-7-68	HC-130P	66-0218	OPRTNL	SVN	N/A	39	DESTROYED BY SAPPERS ON PAD AT TUY HOA AB
5-10-68	HH-3E	65-12782	CMBT	LAOS	2KIA	37	HIT BY AW ARE, CRASHED AND BURNED

SECRET

TABLE 4 CONTINUED

DATE	TMS	SER NR	LOSS	AREA	CREW	UNIT	REMARKS
10-10-68	HH-43B	65-1845	ACDNTL	SVN	4KIA	1/38	COMPONENT FAILURE DUE TO INADEQUATE MAINTENANCE DOCS
16-10-68	HH-3E	65-12786	OPRTNL	SVN	RCVD	37	LOST XMSN OIL PRESSURE OVER WATER AND SANK
19-10-68	HH-3E	66-13282	CMBT	NVN	RCVD	37	HIT BY 37MM DURING WATER RECOVERY AND SANK
18-1-69	HH-53B	66-14430	CMBT	LAOS	RCVD	40	HIT BY AW FIRE, LOST HYD PRSR AND LATER DESTROYED
26-1-69	HH-43F	63-9712	CMBT	SVN	RCVD	9/38	HIT BY SA AND LOST ENGINE POWER, CRASHED
28-6-69	HH-43B	59-1590	CMBT	SVN	RCVD	1/38	HIT BY UNKNOWN GROUND FIRE AND CRASHED AT SEA
10-7-69	HH-43B	60-0278	ACDNTL	SVN	RCVD	12/38	LOST DUE TO PILOT ERROR DURING LANDING
19-7-69	HH-43B	59-1562	OPRTNL	THAI	2KIA	12/38	CRASHED FROM HITS FROM EXPLODING B-52
7-8-69	HH-43B	60-0282	OPRTNL	SVN	RCVD	11/38	ENGINE FAILURE OVER WATER AND SANK
24-10-69	HH-3E	66-13281	CMBT	LAOS	RCVD	37	HIT BY SA/AW, CRASH LANDED, DESTROYED BY FRIENDLIES
17-1-70	HH-3E	66-13278	ACDNTL	SVN	N/A	37	DROPPED BY CH-54 SKYCRANE
28-1-70	HH-53B	66-14434	CMBT	LAOS	6KIA	40	DISINTEGRATED IN MID AIR FROM MIG-21 AIM
15-4-70	HH-3E	66-13280	CMBT	SVN	3KIA	37	HIT BY SA FIRE, CRASHED AND BURNED
30-6-70	HH-53C	68-8283	CMBT	LAOS	6KIA	40	HIT BY SA/AW, ROLLED OVER AND CRASHED

NON 3RD ARRGP SAR AIRCAFT LOSSES IN SEA

2-6-65	HH-43F	63-9713	CMBT	SVN	RCVD	7/38	HIT BY 37/57MM AND CRASHED
3-7-65	HU-16B	51-0058	OPRTNL	SVN	RCVD	NDA	LOSS ATTRIBUTED TO WEATHER CONDITIONS
20-9-65	HH-43B	62-4510	CMBT	NVN	1KIA 3CAP	5/38	HIT BY 37/57MM AND CRASHED
6-11-65	CH-3C	63-9685	CMBT	NVN	3CAP	1/38	CREW BAILED OUT WHEN HIT BY 37/57MM

Post that one of its C-123s, Call Sign Bookie 540, was overdue while en route from Phan Rang AB to Cam Ranh AB. The last contact with the aircraft had been received at 0736 with a last known position (LKP) of 11° 46' N 109° 08' E. At 0930 KING 24 was diverted to the LKP to perform visual and electronic search, with a PEDRO from Det 1, 38 ARRSq, joining the search force at 0943. By the end of the day the airborne search effort had included the following units, and the status of the mission when darkness dictated its suspension was as follows:[52/]

> *39 ARRS/2 Sorties/14.8 hours; Det 1, 38 ARRS/2 Sorties/ 2.2 hours; 21 TASS/1 Sortie/1.3 hours; 4 Inf Div/1 Sortie/2.0 hours; 254 Aeromed Det/5 Sorties/8.2 hours; 48 Avn Co/3 Sorties/2.4 hours...12 helicopter sorties were flown during daylight hours with negative results. The Helo's searched the ridge line surrounding the LKP to an elevation of 1100FT. The LKP is at the 3000FT level. The coast line was searched from Phan Rang to Cam Ranh Bay. Low ceilings and visibility hampered today's efforts. The weather is not expected to improve until 30/1400Z. An HC-130 will launch after first light tomorrow to continue visual and electronic search. Helos from Det 1, 38 ARRS and I Field Force will be on standby for search should weather improve.*

The next day KING 24 and KING 26 continued the search for the forty-four missing personnel - five USAF crewmembers and thirty-nine passengers, including twelve foreign nationals. Activity of the day was described as follows:[53/]

39 ARRS/2 Sorties/17.3 hours; 48 Avn Co/12 Sorties/ 24.5 hours; 247 Med Det/10 Sorties/10.8 hours... Weather hampered visual search efforts throughout the day. Search was concentrated primarily in vicinity of LKP since this position was a positive fix by Cam Ranh Bay RAPCON. Coastline from Phan Rang to Cam Ranh Bay was searched twice today. One hour prior to sunset a large burned out area was sighted at 11° 43' N 109° 10' E. Burned area extended up the ridge into the cloud cover. No wreckage was sighted. A ground team was alerted at Nha Trang but clouds obscured the area within minutes preventing visual search. A ground team is on standby for tomorrow and will be inserted as soon as weather permits. Weather forecast for the area is 100FT scattered, 2500FT scattered variable broken, visibility 7 miles in rain, wind NE 15 to 20 KTS.

On the third day of the search KING 24 and KING 26 directed 23 helicopter sorties for a total of 47.4 flying hours in spite of continued bad weather in the area.[54/]

The planned search area...has been searched with 100% effectiveness with the exception of a "home plate" shaded area... The western half of the "home plate" area has been searched to an elevation of 1600FT/ 100% effective, 1600FT to 2000FT 60% effective. Above 2000FT/100% effective, 2000FT to 2500FT/75% effective. Above 2500FT/20% effective. The LKP of Bookie 540 lies within this area. However, weather has prevented searching the higher elevations. A villager living near the LKP reported hearing a loud explosion the morning of 29 Nov which suggests Bookie 540 may be located near the LKP. Weather forecast for tommorow's search is 1000FT scattered variable broken, 3000FT broken, visibility 3 to 5 miles, wind NE at 10 KTS. The large burned area mentioned in progress report #1 was closely examined today and no wreckage of any kind was sighted. Area had been purposely burned by local farmers.

On the fourth day total SAR activity was restricted to less than 30 minutes of air effort consisting of two short electronic search attempts by KING 24 and KING 26. The entire area was visually unworkable due to low cloud cover obscuring the ground. The following day, 4 December,[55]

> *King 24 performed visual and electronic search and directed 6 aircraft on visual search. 39 ARRS/1 Sortie/ 6.2 hours; Det 1, 38 ARRS/1 Sortie/1.7 hours; 247 Med Det/2 Sorties/4.5 hours; 21 TASS/1 Sortie/2.0 hours. Weather permitted only limited visual search today. A circular area with a radius of 2 kilometers at 11° 46' N 109° 08' E was searched with 90% effectiveness. Parts of wreckage were sighted in this area. PEDRO 20 (HH-43) lowered his flight mechanic to the ground to examine the wreckage and retrieve some readily movable parts. Parts were flown to Phan Rang AB and serial numbers on the wreckage parts were put into the computer for identification. Items were identified as parts from an F-4C type aircraft. The PEDRO flight mechanic closely examined a C-123 aircraft at Phan Rang and confirmed that none of the wreckage sighted on the ground was part of a C-123. No significant improvement in the weather is forecast for tomorrow. Terrain to be searched is above 25000FT MSL broken to overcast, wind east 10-15 KTS...Future plans: KING 24 and DUSTOFF 58 (UHIH) will be on scene after first light to check weather in the SAR area. SAR forces will be standing by for immediate response should weather permit. An ARVN ground party with MACV Advisors will begin searching on foot tomorrow.*

The following day further airborne SAR efforts were precluded by weather conditions, but a ground team was inserted as close to the estimated crash site as possible at 0905L. Details of the discovery of two survivors and related activities of the day[56] are contained in Appendix E. The last large effort on the part of the SAR forces was

executed the next day, 5 December, with the PJs assisting in the evacuation of the two survivors.[57/] The complete text of this mission report is also included in Appendix E to provide the reader with a detailed review of the SAR participation and examples of SAR action reports.

For the next several days AMC aircraft provided communications relay facilities between airborne and ground elements in the effort to insert the graves registration team and security force to confirm that no other survivors had been missed. Continued bad weather in the rugged terrain severely hampered the efforts of the ground elements in getting to and from the scene of the crash, locating and identifying the remains of personnel aboard. The mission was not closed out until all survivors had been accounted for and recovered on 17 December 1970. During the execution of this mission nine organizational units, three of which were from the 3 ARRGp, had conducted ninety-nine sorties consisting of over two hundred flying hours, over half of which were flown by the USAF SAR aircraft as outlined in Appendix E.

To attest to the ability of the SAR forces to deploy throughout the SEA operational area simultaneously on varied missions, on the same day the above mission was initiated, a second SAR effort was begun which involved the coordinated efforts of USAF SAR and US Navy aircraft, three US Naval Ships and three other surface vessels. At approximately 1100 local on the 29th of November, the Indonesian registered tanker SS Langir,

transmitted distress signals stating that she was sinking in heavy seas and the crew was abandoning the ship at position 10° 10' N 101° 10' E. The first ship to reach the area was the SS Bencleuch shortly after 1500 local. Upon receipt of the original distress signal by the USNS Muskingum COMUSNAVPHIL assumed controlling agency direction and ordered the Muskingum along with the USNS Sgt Kimbro and USNS Sgt Miller to proceed to the area. Upon arrival of the Muskingum after dark, the Bencleuch departed the area and the Muskingum assumed OSC duties. During the early morning hours, the German registered vessel B C Rickmers joined the search effort. Initial 3 ARRGp participation was described as follows:[58/]

> *At 30/0043Z 7AF JRCC notified OL-B, 3 ARRGp that an Indonesian registered tanker, call sign LAGIR [sic] was in distress and the crew had abandoned the vessel. COMUSNAVPHIL reported at 30/0249Z to proceed to the area. KING 23 established contact with the USNS Miller at 30/0440Z NA D arrived on scene at 30/0445Z. The OSC was USNS Muskingum until 30/0633Z. USNS Kimbro assumed OSC at that time. KING 23 departed SAR area at 30/1000Z and arrived Udorn RTAFB at 30/1145Z. A debrief with KING 23 crew indicated a sighting of one survivor drifting on debris. Position was marked with smoke and sea marker. A German vessel, call sign Rickmers, was directed to the area for a successful pickup of survivor. Search was hampered by low visibility due to frequent rain squalls. KING 23 reported excellent communications with USN ships on 3023.5 KHZ. Per conversation with duty officer at COMUSNAVPHIL, four survivors have been picked up as of 30/1020Z. A first light effort search will be conducted on 1 Dec 70.*

During the closing daylight hours of the 30th, the surface vessels were joined by the SS Tun Ming of Nationalist Chinese registry. At 0545L on 1 December KING 27 departed Cam Ranh AB arriving in the search area at 0715 and initiated an area search at 500 feet AGL.[59/]

At 0900 King 27 located what appeared to be a life jacket in the water, the position was marked with a smoke float and a sea dye marker. This was passed to the Kimbro who in turn notified the Tun Ming, the vessel closest to the sighting. This first sighting was later confirmed by the Kimbro as being one of the crewmen from the Langir and he was recovered by the Tun Ming. The search was continued and at 0920L KING 27 sighted a life boat with nine persons aboard. This position was marked with smoke floats and sea dye markers. The Kimbro was advised of the sighting and position of the survivors. KING 27 then deployed an MA1 kit which was immediately recovered by the nine survivors in the life boat. After making certain the crewmen in the life boat were reasonably secure, KING 27 proceeded back to the vicinity of the Kimbro and the Rickmers. Vectors were passed to the Kimbro who in turn notified the Rickmers, the ship closest to the second sighting. By 1010L the Rickmers had recovered the nine survivors and the MA1 kit. Radio communications with the Rickmers via the survival radio from the MA1 kit revealed that the Captain of the Langir was on board the Rickmers and that 10 additional crewmen had abandoned the Langir with only life jackets for survival equipment. KING 27 continued the search and at 1030L two more survivors were spotted standing on a small wooden raft. This position was marked and the information passed to the Kimbro who in turn notified KING 27 that the USNS Muskingum was the vessel closest to the third sighting. The Muskingum was vectored toward the two survivors on the raft and had them in sight by 1050L. At 1131L the Muskingum had put a small boat over the side and was in the process of recovering the two crewmen and the raft. At 1123L, KING 27 passed a request to JOKER for another aircraft to assist in the search. By 1158L KING 27 had received confirmation that an additional aircraft...IC [call sign INDIA CHARLIE] 347, a Navy P3V, would proceed to the area. The search continued with negative results until about 1540L when KING 27 spotted an area of extensive debris and possibly a body in a life jacket at 10° 00' N 100° 43' E.

The Kimbro, the Muskingum and the Rickmers were notified of this fourth sighting and were vectored into the area by KING 27. Some of the debris and the life jacket had been marked with sea dye and smoke floats. KING 27 continued to search the area of the fourth sighting and requested IC 347 to proceed to that area to aid in the search. By 1640L the endurance of KING 27 was down to approximately 3+00 and the decision was made to RTB to CH 71. IC 347 was notified and agreed to remain in the area to work with the Kimbro. At 1645L the Kimbro was notified of KING 27's intentions and at that time KING 27 departed the area. The Kimbro confirmed that 12 survivors had been located by KING 27 and all 12 had been recovered by the surface vessel in the area. Flying time 12.6 hrs.

On 3 December KING 27 was launched from Cam Ranh AB at 0555 arriving at the search area shortly after 0700L. Efforts by both airborne and surface units throughout the day yielded the recovery of one body found in life jacket by the USNS Sgt Kimbro. Having completed a 100% search coverage, with no further survivors discovered the OSC USNS Muskingum recommended termination of search effort and COMUSNAVPHIL terminated the mission at 1830L. As a result of this combined effort the 3 ARRGp was credited with 12 non-aircrew members non-combat saves having flown three sorties for a total of 33.7 hours. At the close of the mission seven personnel of the original crew of twenty-four remained missing.

Three months earlier, during the period from the eighth through the thirteenth of October 1970, members of the 3 ARRGp had completed a series of more typical missions of this nature.[60/]

Tan Son Nhut - Helicopter crewmen saved four lives in six days last week. George Mardkis, a Liberian seaman suffered an acute attack of appendicitis and the Liberian freighter Buena Ventura, requested immediate assistance. The ship was about 200 miles off the Vietnam coast. An HH-53 Buff on alert at Bien Hoa AB rushed to the scene. Sgt Ervin Petty, a medical technician, assisted in bringing the seaman into the helicopter.

The patient was brought to 3d Field Hospital near here, just over six hours after the request was made.

The Buff made two inflight refueling with HC-130 Hercules from Cam Ranh Bay. The C-130 was also the airborne command post during the mission.

Three days earlier, two badly burned Norwegian sailors from the M.V. Tore Knudsen were airlifted to Cam Ranh Bay's hospital. The freighter was damaged by an explosion and fire that killed two others.

An HH-53 Buff was also used for that mission. MSgt Malcolm E. Williams descended to hoist the man off the freighter. Again an HC-130 served as airborne command post.

Another HH-53 picked up a sailor on a British ship 110 miles from Cam Ranh Bay. The injured man was taken to the 483d USAF Hospital at Cam Ranh Bay. An HC-130 fired parachute flares to light the area while coordinating the rescue effort.

Another operation which constituted a very significant achievement within the ARRS was conducted in August of 1970. This involved the transcontinental and transPacific ferry flight of two HH-53C helicopters from Eglin AFB, Florida, Florida to Da Nang AB, RVN. The trip covered almost 9,000 nautical miles and was completed in seven days involving seven stopovers en route. During the 71 hours and 11 minutes of flight time

logged during the trip, a total of thirteen aerial refuelings were accomplished. A breakdown of the flight itinerary is presented in the following summary:

FLIGHT LOG	DATE	DISTANCE	DURATION	REFUELINGS
Eglin AFB				
	15 Aug	1353	10:28	2
Minot AFB				
	16 Aug	1850	14:10	3
Elmendorf AFB				
	17 Aug	1272	9:56	1
Shemya AFS (Int'l Dateline)				
	18/19 Aug	1514	14:18	4
Misawa AB				
	20 Aug	1137	8:51	1
Kadena AB				
	21 Aug	815	7:18	1
Clark AB				
	22 Aug	798	6:10	1
Da Nang AB				

Each of the helicopters carried a special configured crew of an Aircraft Commander/Pilot, two additional Pilots and two Flight Engineers. Due to the extent and importance of this mission, additional BUFF special crewmembers included an overall Mission Commander, Major James A. Butera, an ARRS helicopter standardization officer; a Mission Navigator, Captain Robert J. Meyer, Assistant Director for Current Operations, ARRS; and an attendent Flight Surgeon, Dr. (Major) Gordon K. Lochridge, the ARRS Staff Surgeon.

Crewmembers of the accompanying HC-130N aircraft provided long range communications facilities, navigation information and in-flight refueling. This successfully concluded mission emphatically demonstrated the operational capability of the ARRS to meet SAR requirements in a minimum response time as a completely integrated and independent organizational element to support tactical forces deployment throughout the world. Having learned the lessons of the last decade, the ARRS hoped that this capability, the culmination of many years of development and dedication, would not again be allowed to disintegrate as it had before.

LOSSES

Aircraft

During the period of this report a total of eight SAR aircraft were lost - two accidentally, two attributed to operational related factors, and four in combat due to enemy action. Two of these losses were the first experienced in their respective categories. On 19 July 1969 an HH-43B was lost while on a routine LBR mission covering the crash and crew recovery of a B-52 which had crashed on takeoff from U-Tapao RTNA. Due to lack of proper communications between the PEDRO and other elements covering the crash, the bomb load aboard the B-52 exploded without the crew of the HH-43 knowing of the immediate threat. As a result of this

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loss, additional communications equipment was provided the LBR units and improved procedures for integrating the PEDROs into the overall base rescue operations were instituted throughout SEA. On 28 January 1970, an HH-53B was shot out of the air by a MIG during a recovery mission in Laos. The BUFF was on low bird orbit when it took a direct hit from an air-to-air missile and disintegrated in midair. The information of Table 4, outlining these as well as previous SAR losses, indicates a total of thirty-two during the activation of 3 ARRGp and four during previous assignment of 38 ARRSq as the principal SEA SAR organization.

Of the total of thirty-six losses two-thirds were attributed to combat loss from enemy action during conduct of a SAR mission. Of these fourteen were HH-3Es and one CH-3C, for 41.7% of all losses. These also accounted for 45.9% of the combat losses. The HH-43s, seven Bs and six Fs, comprised 36.1% of total losses and 33.3% of combat losses. In terms of monetary value these losses represented an expenditure of approximately 33.4 million dollars. This figure represents total wipe-out costs, and on many occasions it was possible to salvage portions of aircraft, such as engines, avionics and armament sub-systems, which would reduce the net loss figure to a level closer to 30 million. The additional losses incurred by RESCORT and RESCAP aircraft were not within the scope of this report.

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Personnel

During this report period, the 3 ARRGp sustained the loss of fourteen personnel during conduct of SAR missions. Added to the previous loss of thirty-two personnel, as indicated in Item 4 of Table A.2, this brought the total number of 3 ARRGp personnel KIA, MIA or captured to forty-six. No data were available on losses incurred by SAR forces prior to re-activation of the 3 ARRGp. As in the case of aircraft losses, no attempt was made to determine personnel losses resulting from RESCORT or RESCAP participation.

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CHAPTER V

VIETNAMIZATION

HISTORICAL DEVELOPMENT

On 15 November 1962, a joint United States - Vietnamese Search and Rescue Agreement was consummated designating the Vietnamese Air Force (VNAF) as the responsible agency for direction and execution of all civil and military SAR activities in RVN. It was many years, however, before this paper designation would extend to any semblance of a SAR capability. As noted five years later:[61/]

> *The Republic of Vietnam, a signatory state to the convention of International Civil Aviation Organization (ICAO), is obligated to provide assistance to aircraft in distress within its territory. In order to fulfill this obligation, the Republic of Vietnam should possess a Rescue Coordination Center and have trained forces identified to perform the SAR mission. To the best of my knowledge, they possess neither. Presently, the Joint Vietnam/US Search and Rescue Agreement that is in effect satisfies the ICAO obligations with the use of USAF SAR forces. Therefore, upon the withdrawal of US forces from Vietnam, the Republic of Vietnam will be unable to accomplish its SAR mission.*

In June of 1964 a field detachment of the Air Training Command (ATC) was assigned to Tan Son Nhut Airfield, SVN to assist the VNAF in developing a professionally trained helicopter force.[62/] Although helicopters were made available to VNAF they did not devote any significant attention to developing a SAR capability. What limited helicopter capability the VNAF developed during the mid 1960s was concentrated on offensive

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operations, by increasing their tactical strike capability with anything they could get airborne. In spite of TAC and other USAF efforts to assist the VNAF in developing a viable SAR capability, their endeavors created very limited interest beyond acquisition of additional aircraft based on SAR requirements. The general lack of VNAF interest in providing even a basic medevac capability is reflected in the following account:

> *Throughout 1964, US Army and Air Force officers reported that two VNAF H-34 helicopter squadrons were not providing adequate medical evacuation service. Medical evacuation and aerial resupply were the main missions for these squadrons. Nearly every afteraction report from the IV Corps area made some comment critical of VNAF performance. Either the helicopters were late or did not arrive; when they did arrive, they departed sometimes without carrying away the wounded. There were 189 requests from IV Corps area during the months of August, September and October 1964 for med-evac, of which only 38 were honored. The number of requests would have been higher had it not been for the support of Army UH-1Bs. The practice was for the Army helicopters to support the VNAF when needed; however, they took a large part of the VNAF responsibility.*

The comments of several officers sum up the VNAF performance in this area:

> *The ARVY appears to have a definite lack of confidence in the VNAF H-34 med-evac operation . . . . (The US Army UH-1Bs) particularly make the VNAF look bad by making night med-evacs of ARVN in the battle zone . . . .*
>
> *They can think of many reasons not to fly and appear to wait out the US Army to do the work . . . they are a slovenly lot in appearance . . . in*

contrast to the ordinary ARVN troops in combat boots, the aircrews look terrible, many wearing blue suede low cut shoes . . . .

Inadequate med-evac continued to be a serious problem that is pointed out in nearly every after-action report.

On 24 April 1965, the Commander, 2d Air Division reported to MACV on difficulties experienced in eliciting cooperation of RVN forces as follows:[63/]

A most important facet related to casualty reporting and disposition of remains is that of the search for and recovery of missing persons. The in-country environment often dictates the participation of ground forces as well as airborne forces . . . . Considerable difficulty and extensive delays have been incurred in obtaining the ground force support to effect timely and appropriate resolution of SAR endeavor . . . . Request the issuance of instructions or policy for Corps Senior Advisors which will promote more positive and aggressive reaction to requests for assistance in recovering missing personnel.

The reader unfamiliar with the oriental environment should also understand that the humanitarian aspects of US SAR operations was a concept foreign to oriental philosophy. While our development as a society stresses the team effort and responsibility to others, the oriental culture is basically individual in emphasis. It is also fatalistic with no particularly deep rooted drive to influence circumstances, especially resulting from combat operations. The failure to recognize these very basic differences in outlook led one observer of the SEA conflict to describe as "Two different worlds . . ... Our error

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begins with the assumption that ARVN shares our objective. Everything that follows, no matter how well-intentioned, takes us further from their goal." 64/ Recognizing this, we must view any departure from their natural inclinations, which were the antipathy of the philosophy fundamental to the allocation and expenditure of valuable resources to SAR, as either a temporary and expedient concession or one of the greatest psyops accomplishments to come out of the conflict.

In March of 1967, the VNAF published the first indication of a possible shift in viewing the SAR function as a firm responsibility and commitment. 65/ Although it would be several years before any positive implementation would be realized, it did provide a sufficiently hopeful basis for renewed USAF efforts to develop an internal VNAF capability. Over a year later, however, this capability was still non existent in terms of either combat SAR as we know it, or even in the more limited area of routine medical or natural emergency situation evacuation.

On 20 June 1968, Hq 3 ARRGp entered into an agreement with RVN Joint Forecasting Service, Directorate of Meteorology for the emergency evacuation of Pattle Island. 66/ Pattle Island is a Vietnamese manned weather station located 210 N.M. east of Da Nang AB, RVN. Emergency evacuation is construed to mean in the agreement evacuation of Vietnamese personnel due to serious illness/injury/ and/or severe weather conditions. 67/

It was not until 1969 that, with the exception of the 1967 SAR Reg 64-1, the VNAF began to seriously approach the problem of establishing

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a SAR force within RVN resources. An early indication of this emerging interest is reflected in the following briefing note:[68/]

> *During March, the most significant briefing conducted was one held for the combined VNAF/AF Advisory Group Staffs. Both Major General Minh, the VNAF Chief of Staff and Brigadier General Carson, Commander, AF Advisory Group and their key staffs - numbering around 40 people - were in attendance for the briefing on Saturday morning, 22 March at the Officers Open Mess. As a result of the briefing, General Minh expressed great interest in the Air Rescue mission, and requested the VNAF view Rescue with considerably more interest than in the past. General Carson indicated that his staff would work closely with our personnel at each of the detachments in RVN.*

CURRENT ACTIVITIES

During this reporting period, the first significant action in terms of Vietnamization of SAR activities began. The first significant action was concerned with the turnover of several bases to the VNAF where SAR had previously been provided by USAF units. This action was initiated late in 1969 and continued throughout 1970.[69/]

> *Det 10, 38 ARRSq, Binh Thuy AB, RVN, was inactivated on 27 December 1969 by MAC Special Order G-311, 15 December 1969. Detachment 10 was equipped with two HH-43F "Pedro" helicopters with a LBR mission. The aircrew rescue mission will be assumed by units of the US Army and the Vietnamese Air Force equipped with helicopters in the delta area. Coordination and control of aircrew rescue missions remain with the 7th Air Force JRCC at Tan Son Nhut AB, RVN. HC-130P "King" aircraft of the 39 ARRSq will continue to provide electronic and extended search capability and act as Airborne Mission Commander as required.*

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On 16 February 1970, Det 9, 38 ARRSq left Pleiku AB and was reassigned to Nakhom Phanom RTAFB as Pleiku was turned over to the VNAF. Det 9 had provided the same mission operations in this area of SVN as Det 10 had provided in IV CTZ, and these activities were assumed in a similar breakdown of responsibility as in the case of Det 10.

Det 8, 38 ARRSq at Cam Ranh AB was inactivated in place on 15 September 1970 following relocation of the 12 TFW to Phu Cat AB.

During the last quarter, Det 11, 38 ARRSq was inactivated as responsibility for the operation of Tuy Hoa was assigned to the US Army.

As a result of this realignment of responsibilities as a part of the overall VNAF Improvement and Modernization Program, the nine in-country detachments of the 38 ARRSq in being at the beginning of the reporting period were reduced to five. It should be noted that in those instances where USAF responsibility was relinquished to the VNAF, i.e., Binh Thuy and Pleiku Air Bases, there was no comparable transfer of capability. Whereas USAF has previously maintained a dedicated force of two HU-43s, the VNAF had only one UH-1 manned by a crew unqualified in SAR procedures and operations, and this was not employed on a dedicated basis.

The second significant area of activities during this reporting period was concerned with documentation. As mentioned previously, publication of VNAF Reg 64-1 in 1967 was the original documentation covering SAR operations for SVN forces. This document was republished on 1 May

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1970,[70] during a period of renewed interest and efforts in behalf of initiating a SAR capability. This was initiated locally by 7 AF Chief of Staff (C/S) letter to all 7 AF staff agencies outlining goals and responsibilities for implementation of the Vietnamese Air Force Improvement and Modernization (VNAF I&M) Program.[71]

On 16 December 1969, 3 ARRGp replied outlining the approach to establishing a SAR capability felt to be realistic in terms of current and proposed facilities and capabilities on the basis that "SAR missions within the Republic of Vietnam would essentially group into two basic categories: (1) Search, rescue and recovery over aerial routes, costal [sic] waters and in remote areas, and (2) Recovery of military personnel from hostile areas."[72]

On 30 December, C/S 7 AF followed up the letter of 28 November amplifying the training requirements inherent in accomplishing the goals of the VNAF I&M Program. 3 ARRGp then presented on 14 February 1970, a detailed draft Concept of Operations for inclusion, as the SAR Annex, in the proposed Programmed Action Directive (PAD) 70-105 citing current status as follows:[73]

> *a. Current VNAF regulations direct the establishment of a complete VNAF SAR capability.*
>
> *(1) VNAF Regulation 64-1 establishes a VNAF SAR organization which includes both Mainland and Navigation SAR zones, a SAR Mobilization Center in TACC, SAR Mobilization Offices in each DASC and SAR standby forces near each SAR Mobilization Office.*

[redacted]

(2) VNAF Regulation 64-3 establishes a Search and Rescue Training Program to exercise and test the SAR organization and forces.

(3) VNAFM 55-1/34 establishes Aircrew Operational Procedures for conducting Search and Rescue Operations.

(4) VNAF Regulation 51-5 establishes ground and flying training requirements for VNAF helicopter aircraft commanders. Search and Rescue training is included.

(5) VNAF 50 series regulations direct training for all VNAF aircrew members in survival techniques and associated rescue procedures.

b. Although the framework for a VNAF SAR organization exists, its viability has not yet been tested. Management of the Southeast Asia SAR sub-region, including management of the VNAF Mainland SAR Zone has been vested in 7th AF.

This and related activities of the period were summarized as follows:[74/]

During the reporting period, 3 ARRGp became an active participant in the program to improve and modernize the Vietnamese Air Force SAR organization. Although titled otherwise, the program is actually one of creating a viable SAR organization rather than improving an existing one. Heretofore, no force had existed except on paper. An initial proposal which includes the organization, concept of operations, aircraft modifications, additional equipment requirements, crew complements and training requirements has been forwarded to the Air Force Advisory Group where it is being staffed before being submitted to VNAF Headquarters for approval.

Following several months of defining concepts and establishing materiel and training requirements, 3 ARRGp in August 1970 also submitted to the Air Force Advisory Group (AFGP), a draft proposal for

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publication as revised VNAF Manual 64-1, "Search and Rescue - Mainland SAR Force." At the end of this reporting period, this proposal was still being coordinated with AFGP and VNAF elements.

In summation, this reporting period saw (1) an increased responsibility placed upon Republic of Viet Nam forces to assume SAR operations in various areas of SVN through the turnover of previously maintained USAF bases, (2) a significant increase in documentation of this responsibility and the actions required to implement it under the VNAF I&M Program, (3) a very slight material indication of actual development of any limited SAR capability, and (4) the renewed all-consuming desire and hope that sometime in the not too distant future, the efforts of six and a half years would bear fruit.

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FOOTNOTES

CHAPTER I

1. (U) Unified Action Armed Forces, Joint Chiefs of Staff Publication 2, JCS, Washington, D.C., dated November 1959, para 40405, p 89.

2. (U) Military Airlift Command (MAC) Special Order (SO) G-324, Hqs MAC, Scott AFB, Ill., dated 30 October 1970. Document (DOC) 1.

3. (U) MAC SO G-262, Hqs MAC, Scott AFB, Ill., dated 4 September 1970. Doc 2.

4. (U) MAC SO G-311, Hqs MAC, Scott AFB, Ill., dated 15 December 1969, Doc 3.

5. (U) MAC SO G-263, Hqs MAC, Scott AFB, Ill., dated 4 September 1970, Doc 4.

6. (U) Pacific Air Forces (PACAF) Movement Order (MO) 4, Hqs PACAF, Hickam AFB, Hawaii, dated 26 January 1970, Doc 5.

7. (U) PACAF MO 24, Hqs PACAF, Hickam AFB, Hawaii, dated 21 August 1970, Doc 6.

CHAPTER II

8. (S/NF) Aerospace Rescue and Recovery in Southeast Asia. Project CORONA HARVEST Special Report #70-18, Aerospace Studies Institute, Air University, Maxwell AFB, Ala., dated April 1969, pp 24-27, Doc 7.

9. (C) Interview by the Author with Colonel Frederick V. Sohle, Jr., on 13 October 1970 at Hq 3 ARRGp, Doc 8.

10. (U) Combat Search and Rescue Joint Development Committee Report. Hqs ARRS, Scott AFB, Ill., dated 31 October 1969, p B-5. Unclassified Supplement. Doc 9. Hereafter cited as Combat SAR Joint Dev Comm Report.

11. (C) SEAOR - 27. Letter 69ASJT-1343 from Hqs, Aeronautical Systems Division (AFSC), Wright-Patterson AFB, Ohio to Hqs, PACAF (DORQ), dated 16 September 1969. Doc 10.

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(This page is UNCLASSIFIED.)

12. (U) ARRS Test Plan 430, OT&E PRC-87 Pararescue Radio/Reference SEAOR 58. Hqs ARRS Unclassified EFTO AROPP 281540Z January 1970. Doc 11
    (S) Hq PACAF DOQ Ltr, 3 Jun 71.

13. (FOUO) Operational Test and Evaluation Report 6-1-68 AN/PRC-87 Pararescue Radio. Directorate of Operational Requirements, DCS/Operations, Hqs MAC, Scott AFB, Ill., dated April 1970. Doc 12

14. (U) 7AF Combat ROC 4-70: Pararescue Helmet Transceiver. CSAF MSG RDQPS 051557Z Aug 70. Doc 13

15. (U) Same Subject. CINCPACAF Unclassified EFTO DOQ 142100Z Aug 1970. Doc 14

16. (U) Same Subject. Hqs MAC Msg DOQS 261640Z August 1970. Doc 15

17. (U) Same Subject. CSAF Msg RDQPS 092209Z November 1970. Doc 16

18. (U) SEAOR 102 FY67. 3 ARRGp Msg 20261 to ARRS dated 12 September 1967.

19. (C) Combat SAR Joint Dev Comm Report. Hqs ARRS, Scott AFB, Ill., dated 31 October 1969. pp D-3, D-3/2, SECRET Supplement. Doc 17

20. (S) History of the Headquarters, 3d Aerospace Rescue and Recovery Group, 1 April - 30 June 1970, dated 31 July 1970, p 30. Doc 18 Hereafter cited as 3 ARRGp History April-June 1970.

21. (U) Combat SAR Joint Dev Comm Report, dated 31 October 1970, pp E-1, E-1/2, Unclassified Supplement. Doc 19

22. (C) Combat SAR Joint Dev Comm Report. Dated 31 October 1970, p G-5, SECRET Supplement. Doc 20
    (S) Hq PACAF DOQ Ltr, 3 Jun 71.

23. (S) SEAOR on Improved Armament for HH-53 Helicopter. Hqs 7AF (DSR) letter AD-69-1862 dated 10 September 1969 to DPLR (Hqs 7AF). Doc 21

24. (S) SEAOR Request for Visual Reference Light on SAR Helicopters. Hqs 7AF (DSR) letter AD-69-1861 dated 11 September 1969 to DPLR (Hqs 7AF). Doc 22.

25. (S) SEAOR DRAFT - Oxygen System for HH-53B/C Helicopters. Hqs 7AF (DSR) letter AD-69-2434, dated 15 November 1969 to DPLR Hq 7AF. Doc 23

26. (SHR) Major Aircraft Accident Report HH-43B SN 59-1562. Det 12, 38 ARRSq. U-Tapao RTNA, Thailand, dated 19 July 1969, p 6, TAB A

27. (SHR) Ibid.

28. (S) Operations Security (OPSEC) Survey of Search and Rescue Operations. CINCPAC Msg 220005Z March 1970

29. (S) Combat ROC 7AF 60-70, Class V Modification, Tactical Secure Voice for HH-53s. CINCPACAF Msg 121942Z, September 1970.

30. (U) Program Document AF Forms 524, CSOs 70-3609 through 3621. Dated 16 July 1969.

CHAPTER III

31. (S) 3 ARRGp History, January-March 1970, p 8

32. (S) 3 ARRGp History, April-June 1970, p 8

33. (U) Course Curriculum and Job and Course Training Standards, Aerospace Rescue and Recovery Training Center, Eglin AFB, Florida

34. (U) PACAF Formal Survival Schools and Aircrew Continuation/Refresher Training Programs. PACAF Regulation 501-4, para 5.6, p 4

35. (S) Search and Rescue, Evasion and Escape Course presentation during PJSS academic session, PJSS, Clark AB, P.I., 3 November 1970

36. (S) SERE Newsletter No. 28. Fleet Intelligence Center, Pacific Box 1275, FPO 96610. Dated April 1969, p 17
(U) Hq PACAF DOS Ltr, 1 Jun 71.

37. (S) SERE Newsletter No. 29. Fleet Intelligence Center, Pacific, Box 1275, FPO 96610. Dated June 1969, p 11

38. (S) Ibid. p 20

39. (S) Ibid. p 22

40. (S) Ibid. p 24

41. (U) Boxer 22 Mission. 5, 6, 7 December 1969

42. (U) UPI News Release, Helen Gibson, Saigon, 15 December 1968. Doc 24

43. (S) 3 ARRGp History, January-March 1970, p 49

CHAPTER IV

44. (S) USAF SAR, July 1966-November 1967. Project CHECO SEA Report, dated 18 January 1968. p 5

45. (S) USAF SAR, November 1967-June 1969. Project CHECO SEA Report, dated 30 July 1969. pp 24-26

46. (S) Rescue at Ban Phanop, 5-7 December 1969. Project CHECO SEA Report, dated 15 February 1970. p 11

47. (S) Ibid. pp 8-9

48. (C) Interview with Colonel Sohle. (See Footnote 9)

49. (S) Seventh Air Force Manual 64-1, Search and Rescue - Southeast Asia. Hq 7AF, APO 96307, dated 15 January 1971. pp 3-4 thru 3-8. Doc 25

50. (C) Interview by the Author with Colonel George C. Pinyerd on 15 December 1970 at Hq 3 ARRGp. Doc 26

51. (C) Interview by the Author with Lieutenant Colonel William W. Tomlinson on 1 December 1970 at JRCC.

52. (U) Rescue Opening Report, Mission Number 3-022, 3 ARRGp UNCL EFTO 291751Z Nov 70

53. (U) Rescue Progress Report #1, 3 ARRGp UNCL EFTO 301905Z Nov 70

54. (U) Rescue Progress Report #2, 3 ARRGp UNCL EFTO 011621Z Dec 70

55. (U) Rescue Progress Report #4, 3 ARRGp UNCL EFTO 031959Z Dec 70

56. (U) Rescue Progress Report #5, 3 ARRGp UNCL EFTO 042100Z Dec 70

57. (U) Rescue Progress Report #6, 3 ARRGp UNCL EFTO 052100Z Dec 70

58. (U) Rescue Opening Report, Mission Number B-3-045, 3 ARRGp UNCL EFTO 010356Z Dec 70

59. (U) AMC Mission Report, Mission Number B-3-045, submitted by Capt John S Parmeter USAF, 39 ARRSq, AMC KING 27, dated 8 Dec 70

60. (U) Seventh Air Force News, dated October 21, 1970. p3

CHAPTER V

61. (U) SAR Forces. Letter from Commander, 3 ARRGp to the Air Force Advisory Group, dated 23 September 1967. TAB A

62. (S) 2d Air Division History, January-June 1964. Volume 1, p 2

63. (S/NF) USAF SAR IN SEA 1961-66. Project CHECO Report, dated 24 October 1966. pp 10-11

64. (U) Ground Support of SAR Endeavor. Letter from Commander, 2d Air Division to MACV-JO, dated 24 April 1965.

65. (U) Vinh Long. Harvey Myerson, Houghton Mifflin Co, Boston, 1970, p 112

66. (U) AF Regulation on the SAR Organization for the RVN Territory. Republic of Vietnam, Department of Defense, Joint General Staff, Hqs VNAF Regulation 64-1, dated 23 March 1967

67. (U) Joint Forecasting Service, Directorate of Meteorology/3 ARRGp Agreement for Emergency Evacuation of Pattle Island. Dated 20 June 1968

68. (S) 3 ARRGp History, April-June 1968.

69. (S) 3 ARRGp History, January-March 1969. p 16

70. (S) 3 ARRGp History, October-December 1969. p 30
(U) Air Force Regulation on the SAR Organization for the Republic of Vietnam. RVN Department of Defense, Joint General Staff, Hq VNAF AF Regulation 64-1, dated 1 May 1970. TAB B

71. (S) Vietnamese Air Force Improvement and Modernization (VNAFI&M) Program. C/S 7AF letter dated 26 November 1969. TAB C

72. (S) VNAFI&M Program, 3 ARRGp letter AD-69-2753 to AFGP, dated 16 December 1969. p 2, TAB E

73. (S) VNAFI&M Program, 3 ARRGp letter AD-70-9454 to AFGP. Dated 14 February 1970. pp 1-2, TAB J

74. (S) 3 ARRGp History, January-March 1970. pp 29-30

[redacted]

APPENDIX A

SUMMARY OF SAR DEVELOPMENT AND ACTIVITIES IN SEA

1 April 1962

Detachment 3 (Det 3) of the Pacific Air Rescue Center (PARC) was activated by MATS Special Order (SO) G-27, dated 23 March 1962. Det 3 was established to coordinate SEA SAR activities from the Search and Rescue Coordination Center (RCC) to be located at Tan Son Nhut AB. Since Det 3 was without aircraft, initial operations were largely confined to collection and dissemination of SAR information and investigation of aircraft accidents. During the following two-year period of U.S. forces in SEA, the USAF personnel had to rely on the U.S. Army, Navy and Marine Corps and Vietnamese Air Force (VNAF) for implementation of actual SAR operations. On many occasions the lack of professionally trained SAR personnel contributed to the loss of downed aircrews.

19 June 1964

Initial deployment to SEA of a USAF SAR force of 36 TDY personnel of the 33rd Air Rescue Squadron (ARSq) from Naha AB, Okinawa, with two HH-43B helicopters was completed to Nakhon Phanom Airport, Thailand. During this same time frame two HU-16s were assigned to Korat, Thailand to provide an airborne SAR mission control capability. This original force was deployed to support U.S. personnel engaged in the RANCH HAND and YANKEE TEAM missions. This force was later supplemented in August with another TDY unit sent to Da Nang AB, SVN, with three HH-43Bs to provide SAR capability

[redacted]

[redacted]

for the northern portion of SVN and the Gulf of Tonkin and in October with three additional HH-43Bs, which had staged at Bien Hoa AB, SVN, and transferred to Nakhon Phanom in November.

21 May 1965

The ARS request to assign pararescue volunteers from the Pacific area to Vietnam was indorsed by MATS to USAF. MATS supported the ARS position of providing a 100% volunteer pararescue core in Vietnam. This situation prevailed throughout the SEA conflict.

2 June 1965

The first SAR aircraft, an HH-43F, 63-9713, was shot down in SEA by enemy 37/57mm AW fire during execution of a combat recovery mission. All crewmembers were recovered.

June 1965

The Thailand based HU-16s at Korat were replaced by the HC-54s to provide an improved SAR airborne mission control capability, and the HU-16s were relocated to Da Nang AB, SVN.

1 July 1965

The TDY helicopter SAR detachments on duty in SEA from PARC and parent rescue squadrons in the Pacific area, were consolidated organizationally as PCS detachments of the reactivated 38th Air Rescue Squadron with headquarters at Tan Son Nhut AB, SVN. Locations of detachments as directed in

[redacted]

MATS SO G-18, dated 25 June 1965, were as follows:

Det One, Nakhon Phanom Aprt, Thailand

Det Two, Takhli AB, Thailand

Det Three, Ubon Afld, Thailand

Det Four, Korat RSI, Thailand

Det Five, Udorn Afld, Thailand

Det Six, Bien Hoa AB, Vietnam

Det Seven, Da Nang AB, Vietnam

The two fixed wing units, at Korat and Da Nang AB, SVN, continued in a TDY status from the parent PACAF organizations.

3 July 1965

Det 1 of the 38 ARSq received the first two CH-3s (series C) from the Tactical Air Warfare Center (TAWC). From that time on, the Jolly Green Giants became one of the most welcome sights a downed airman ever saw. By the end of the year the total of six CH-3s on loan from TAC had been transferred to SEA.

August 1965

The 602nd Air Commando Squadron (602 ACSq) began taking its A-1E's from Bien Hoa AB, SVN to Udorn RTAFB to provide cover escort for the two CH-3s from NKP and HH-43s, now four in number, at Udorn. By February of 1966 the 602 ACSq had completed movement of all operations to Udorn with SAR RESCORT as one of its primary missions. This capability has proved, over the years, to be one of the most vital and integral elements of the SAR mission.

[redacted]

20 Sept 1965

First loss of a USAF SAR aircraft in North Vietnam (NVN). An unmodified HH-43B, 62-4510, of Det 5, 38 ARSq was hit by 37/57mm AW fire during attempted SAR mission to recover downed F-105 crewmember. SAR crew listed as one killed in action (KIA) and three captured as intensity of ground fire from enemy forces necessitated suspension of SAR mission. This incident also claimed the first combat personnel losses of the SEA SAR forces.

1 Oct 1965

The following ARS units were designated and organized, IAW MATS SO G-123, 15 Sep 65:

Det Nine, 38th ARSq, Pleiku Aprt, Vietnam

Det Ten, 38th ARSq, Binh Thuy AB, Vietnam

6 Nov 1965

First Jolly Green (JG) lost due to forced bail out of crew after the aircraft, one of Detachment 1 CH-3Cs from NKP, was hit by enemy ground fire while attempting to locate an A-1E lost to automatic weapons (AW) fire during a SAR mission. One crewmember was later recovered, but remaining three crew men were listed as captured.

Dec 1965

The first two HC-130H aircraft arrived in SEA on a TDY basis from the 36 ARSq at Tachikawa and the 79 ARSq at Guam. Stationed at Udorn RTAFB, these aircraft provided a new dimension to SAR operations. The HC-54Cs which

[redacted]

they replaced, and which were phased out of SEA by April of 1966, as well as the HU-16 albatrosses, were extremely limited for SAR use. Due to limitations of equipment their principal contribution had been to provide a communication link between the low flying helicopters and the Joint Search and Rescue Center (JSARC) or RCCs which would otherwise have been impossible due to terrain interference. Although the two original HC-130 birds had little more in the way of communications equipment, they did have an aerial tracker, the ARD-17, which enhanced survivor location, and they proved to be much more reliable and versatile. Through periodic development the HC-130s were gradually modified to provide a complete airborne command post facility to allow them to effectively assume the role of SAR Airborne Mission Controller, serving as the communication link between the JSARC, RCCs and others comprising the Search and Rescue Task Force (SARTF).

8 Dec 1965

The 33 ARSq was awarded the Air Force Outstanding Unit Award for exceptionally meritorious service in support of military operations in SEA during the period 15 Jun 64 to 31 May 65. This was the second such award received by the 33 ARSq. The first, for the period of 1 July 1956 - 31 December 1958, was received on the Department of the Air Force General Order (GO) 56 in 1959.

3 Jan 1966

MAC Special Order G-2, this date, directed organization of two additional detachments to the 38 ARRSq as follows:

[redacted]

Det 8	Cam Ranh AB, SVN	Effective 18 Jan 66
Det 11	Tuy Hoa AB, SVN	Effective 18 Feb 66

Although SO G-7, dated 11 January later amended effective date for Det 11 to also read 18 January 1966, it did not become operationally ready until 15 November 1966, due to limitations of personnel and aircraft.

8 Jan 1966

The Third Aerospace Rescue and Recovery Group (3 ARRGp) was activated at Tan Son Nhut AB, SVN to establish more effective command and control through the JSARC over the increasing number of scattered SAR activities. At the time these included the RCCs at Da Nang AB, SVN and Udorn RTAFB designated as Dets 1 and 2, respectively, of the 3 ARRGp. The 37 ARRSq with Hqs at Da Nang AB, SVN was activated concurrently with the 3 ARRGp. The 38 ARRSq, with Hqs at Tan Son Nhut AB and outlying Dets at several SVN and Thailand bases was the redesignated and reassigned 38 ARRSq. At this time 3 ARRGp and all subordinate units, comprising the total dedicated USAR SAR effort in SEA, consisted of less than 400 officers and airmen.

Feb 1966

Lt Col Edward Krafka, first commander of the 38 ARSq received the Distinguished Unit Citation award from President Johnson on behalf of the 38 ARSq for outstanding SAR operations from 1 August 1964 through 31 July 1965.

18 March 1966

Det 1, 38 ARRSq became operationally ready at Phan Rang AB, SVN following inactivation of the Det 1, 38 ARRSq unit previously assigned to Nakhom

[redacted]

[redacted]

Phanom Airport, Thailand which became Det 1, 37 ARRSq upon establishment of 3 ARRGp in January.

April 1966

The overall command facilities for control and coordination of SAR efforts were greatly enhanced by relocation of the JSARC, 3 ARRGp and the 38 ARRSq into a consolidated area with improved communications equipment and operations monitoring aids.

8 April 1966

Det 12, 38 ARRSq was designated by MAC Special Order G-59, dated 18 March 1966, and organized at Nha Trang Airport, SVN.

4 July 1966

Detachment 1, 37 ARRSq located at Udorn AB, was declared OR. Although attached to the 37 ARRSq the unit reported directly to the Commander, 3 ARRGp. The initial complement of four HC-130s comprised the skeleton force of what was to later become the 39 ARRSq with responsibility for airborne command and control of SAR missions.

July 1966

The first group of the HH-3Es, a specially modified helicopter specifically intended for a primary SAR sole, were assigned to Det 7, 38 ARRSq at Da Nang. Improvements over the cargo model CH-3Cs previously employed included increased survivability due to armor plating and armament. Other operational improvements included an increased speed and altitude capabilities resulting from a 20% increase in engine power, and a 240-foot, 600-pound

[redacted]

load limit cable/forest penetrator. The latter was extremely significant in terms of the triple canopy jungle cover in many parts of SEA, often attaining heights of over 200 feet.

16 Jan 1967

The 39 ARRSq was activated at Udorn RTAFB by MAC SO G-10, dated 13 Jan 67. Concurrently Det 1 of the 37 ARRSq at Udorn was discontinued, and Det 2, 37 ARRSq was designated and organized at Udorn RTAFB. During this period a realignment of SAR responsibilities was completed which resulted in the following assignments. All recovery operations were normally assumed by the HH-3E Jolly Green Giants of the 37 ARRSq. The twenty-eight HH-43B/Fs of the 38 ARRSq were primarily responsible for Local Base Rescue (LBR) operations which included crash rescue and aircraft fire suppression within the immediate area of their respective bases. The ten F series 43s with armor plating, self-sealing tanks and auxiliary fuel tanks were capable of combat rescue and occasionally continued to be utilized in this role where conditions permitted; limited primarily by the Pedros speed, range and load capacity. The fact that during the first two and a half years of employment in SEA in the combat Air Crew Recovery (ACR) role, they were credited with over 350 saves can only be explained by the dedication, ingenuity and extraordinary heroism of their crews. To complete the SAR operational assignments the newly formed 39 ARRSq was assigned the Airborne Mission Control function with the six HC-130Ps at Udorn RTAFB and the six HU-16Bs of the 37ARRSq at Da Nang AB, SVN.

[redacted]

10 Mar 1967

The President of the United States, at a White House ceremony, presented the Presidential Unit Citation to the 3rd ARRGp for exceptional gallantry in assisting fliers downed in the Vietnam war. The unit was specifically cited for the rescue of 339 friendly troops of whom 304 would have faced almost certain death or capture by the enemy from 1 August 1965 through 30 June 1966.

23 April 1967

The rescue Coordination Center, OL-1, 3 ARRGp was relocated from Da Nang AB, to Son Tra AB, SVN as directed by MAC SO G-110, dated 5 June 1967. The two bases are physically adjacent, but the new location provided better access to centralized communications facilities at Monkey Mountain. On this date Det 13, 38 ARRSq was established and assigned to Phu Cat AB, SVN by MAC SO G-62, dated 27 March 1967. This activation was timed to coincide with the activation of Phu Cat AB.

28 May 1967

One of the first efforts to investigate the possibility of providing the SEA SAR forces with Night Recovery System (NRS) Capability was initiated on this date and is described as follows in the 3 ARRGp History April-June 1967.

> *This project was conducted at Udorn AB, Thailand and lasted five days. Participating units were Det 2, 37 ARRSq, 602 Air Commando Squadron and a TAC G-130*

[redacted]

'Lamplighter' aircraft. During the exercise, the C-130 'Lamplighter' aircraft dropped parachute flares from various altitudes, directions, and distances in relation to the helicopter and simulated rescue scene. Simultaneously to this, the A-1E aircraft flew simulated ground fire suppression passes to evaluate their capability to support the helicopter during this type of operation. From these tests, several recommendations were made to the Commander 7th Air Force on the aspects of night SAR recovery in a combat environment. The results presented in a briefing for General Momyer accepted the feasibility of the method evaluated, but contained several inherent risks involved with night operations involving aircraft at low altitudes operating around high intensity flares, and disclosing the exact position of the downed airman and the probability of his being captured if the rescue was not immediately effected was pointed out as a major problem.

As it turned out the disadvantages were sufficient to prohibit the use of this approach in a hostile environment and in a nonhostile environment it would only be required on rare occasions where a first light effort would not suffice due to medical considerations.

8 June 1967

The 39 ARRSq was relocated from Udorn RTAFB, due to the overdemand placed on facilities there by expanded tactical fighter and other support operations, to Tuy Hoa AB, SVN, in accordance with MAC SO G-105 dated 24 May 1967. By MAC SO G-115 dated 9 June 1967, OL-1, 39 ARRSq was also established on this date at Udorn RTAFB and Det 2, 39 ARRSq was established at Clark AB, P.I. with the assigned task of providing organizational maintenance on the HC-130 aircraft of the 39 ARRSq. This odd arrangement was brought about by the troop ceiling limitation in Vietnam being exceeded by the relocation

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and accompanied transfer of manning spaces of the 39 ARRSq. Permanent assignment of the maintenance personnel to Det 2 in the Philippines was the means employed to circumvent this problem.

21 June 1967

Airborne Refueling (AR) of the HH-3Es was instituted in SEA and provided the SAR forces with a new dimension of ACR capability. The following excerpt from the 3 ARRGp History April-June 1967 describes this significant event.

> *The quest for a new concept in rescuing downed pilots in hostile territory was culminated on 21 June, when the first operational mission to utilize the air-to-air refueling capability of the HH-3E helicopter and the HC-130P tanker was accomplished in the Gulf of Tonkin. The 'Jolly Green' from the 37th ARRSq flew the north orbit mission formerly performed by the HU-16B. By employing this new concept in helicopter operations, the SAR force has enhanced their rescue capability by gaining the almost unlimited range and flight time and versatility of the helicopter in one package.*
>
> *Piloted by Colonel Albert P. Lovelady, Commander 3rd ARRGp, the 'Jolly Green' was refueled twice in flight by an HC-130P of the 39th ARRSq. It was significant that one of the pilots who was responsible for the original concept was aboard for this historic flight. Major John H. McLeaish, Group Plans Officer, was the prime exponent of this idea while assigned to Plans, Hq ARRS in 1964. In the short time span of 2 1/2 years, Major McLeaish saw his dream grow from a plan to a reality.*

With the advent of air-to-air refueling the Jolly Greens were able to effectively eliminate a range limitation. It also provided them with an increased capability to remain in orbit at preselected locations, thus

[redacted]

[redacted]

reducing their response time to reach a downed crewmember to a minimum. This factor has proven to be most important factor in determining the success of SAR missions in a hostile environment. Within six months 3 ARRSp units were averaging 120 air-to-air refueling operations per month.

14 Aug 1967

The previously unnumbered LBR unit stationed at Tan Son Nhut AB, was re-designated as Det 14, 38 ARRSq. This action completed the organizational development of the 38 ARRSq LBR function in SEA.

15 Sep 1967

First group of two HH-53B Super Jolly Green Giants (or BUFFs for Big Ugly Friendly Fellows) arrived in SEA. Concurrently Det 1, 37 ARRSq was organized at Nakhon Phanom RTAFB, and consisted of the HH-3E aircraft and personnel which had previously been assigned to Det 2, 37 ARRSq, which in turn received the HH-53s and personnel newly arrived from CONUS. Two more aircraft were received in October and two in December for a total of six assigned to Det 2 at the end of the year.

15 Oct 1967

Lt Col John J. Collins, U.S. Army, joined the JSARC staff as the first joint service representative. This position has provided the SAR forces with a valuable source of information and has been instrumental in effecting more efficient SAR operations, since the Army Aviation Units maintain about 3,000 helicopters in SEA, they are in a position to provide for recovery of their own and other friendly ground forces personnel, on most occasions.

[redacted]

[redacted]

[redacted]

They were however, limited by lack of a dedicated SAR force with appropriately equipped aircraft. Typical U.S. Army rescue operations required landing the helicopter and loading personnel on board from the ground. When landing is impossible they do have limited retrieval capability with horse collars, rope ladders, slings and other improvised apparatus. In those cases where more sophisticated rescue procedures are required, the 3rd ARRGp forces are called upon, and it is during these operations that the presence of the USARV Liaison Officer at JSARC has immeasurably benefited SAR in SEA.

10 Jan 1968

The JSARC was collocated with the 7AF Command Center to provide a much improved capability for total coordination of all available resources assigned to SAR operations. This move resulted in much better communications, intelligence, and weather information availability to the JSARC coordinators and dissimination to units involved. It also enabled a much closer relationship between the other services liaison officers, located in the Command Center, and the JSARC operations.

28 Feb 1968

Major Dale Oderman and his Jolly Green crew of Det 1, 37 ARRSq at Nakhon Phanom made the 1000th combat save since rescue operations started in Southeast Asia in 1964. The recovery was made near the Mu Gia pass separating North Vietnam and Laos. The F-105 pilot, Captain Gene I. Basol, from the 355 Tactical Fighter Wing was picked up on his 79th combat mission. As a result of his misfortune he received two broken legs and during the

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course of the rescue the pararescueman, Sergeant Joseph M. Duffy, made a hoist descent into the jungle to assist in recovering the pilot. This was Major Oderman's first pickup and Sergeant Duffy's 21st. Other crewmembers of Det 1 making the save were Capt George W. Greer, Copilot and Sergeant Mickey D. Berry, Flight Mechanic.

18 Mar 1968

Det 2, 37 ARRSq at Udorn RTAFB was discontinued and activated as the 40th ARRSq. This organization change had no effect on the ARRGp mission or overall SAR operations which at this time were distributed as follows: the 11 HC-130Ps assigned to the 39 ARRSq operating out of Tuy Hoa AB, SVN and Det 1, 39 ARRSq at Udorn RTAFB: the 31 HH-43s (24 B and 7 F series) operating from the 14 Dets of the 38 ARRSq scattered throughout South Vietnam and Thailand; the 22 HH-3Es assigned to the 37 ARRSq and Det 1, 40 ARRSq and the six HH-53-B in the 40 ARRSq.

1 May 1968

The Rescue Coordination Center, OL-2, 3 ARRGp at Udorn RTAFB, Thailand was relocated from the 7/13 Tactical Air Control Center building to the new Seventh Air Force Alternate Tactical Air Control Center, North Sector (ATACC, NS) complex at the same base. The new facility provided expanded working space, better radio and land line communications, immediate access to computerized aircraft command and control equipment, and radar scopes for tracking aircraft experiencing emergency conditions.

[redacted]

14 May 1968

President Johnson presented the Medal of Honor to Captain Gerald O. Young for his heroic actions on 8 and 9 November 1967 as an HH-3E Rescue Crew Commander. Captain Young was shot down on a combat rescue mission while serving with the 37 ARRSq. This was the first time the nation's highest honor had been awarded to any one for actions while assigned to U.S. Air Force Search and Rescue Operations.

31 May 1968

This date marked initiation of the greatest SAR effort to be conducted in SEA to date. The SAR operation was triggered when a Navy A-7 Corsair, call sign STREET CAR 304, was shot down in the Steel Tiger area of Laos. When the survivor was finally rescued by a Det 1, 40 ARRSq HH-3E on 2 June, this mission had involved an estimated 109 aircraft flying 189 sorties and delivering 86 tons of ordnance on enemy defenses.

9 June 1968

The riot Control agent CS was employed for the first time during an attempted SAR mission. This mission was later canceled, following the loss of an HH-3E and 11 crewmen on board, KIA, preventing a full evaluation of its effectiveness. However, later application of CS to the immediate area of a downed crewman enhanced SAR operations considerably by reducing the survivor's chance of being captured and hostile groundfire as well. This date also marked the loss of the nineteenth SAR aircraft in SEA; 9 C/HH-3s, 7 HH-43s and 3 HU-16s.

[redacted]

[redacted]

Oct 1968

The intial USAF/US Navy Rescue helicopter exchange program was completed with four personnel from each service serving a 30-day TDY transfer. Both the USAF and Navy rescue personnel considered the program very beneficial, but recommended reducing the period to 15 to 20 days, and the number of personnel to two for each exchange phase.

14 Feb 1969

On this date the 3 ARRGp celebrated its Silver Anniversary. Older than both parent services, the Air Rescue Service and the U.S. Air Force, the unit had its inception as the 3rd Emergency Rescue Squadron at Gulfport, Mississippi on 14 February 1944.

28 Feb 1969

Det 12, of the 38 ARRSq was relocated from Nha Trang AB, SVN to U-Tapao Royal Thai Navy Airfield, Thailand in accordance with PACAF MO 2 dated 1 February 1969. This transfer was occasioned by the dual consideration of activation of USAF units based at U-Tapao and transfer of base facilities at Nha Trang AB to the Vietnamese Air Force (VNAF) following transfer or deactivation of USAF operational units at Nha Trang AB.

18 March 1969

Det 1 of the 37 ARRSq located at Nakhon Phanom RTAFB, was redesignated as Det 1, 40 ARRSq by MAC SO 6-40 with no other attendant changes in personnel, location, assigned aircraft or mission. As a detachment of the 37 ARRSq

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[redacted]

it had previously functioned as essentially an independent unit, reporting directly to 3 ARRGp for operational command and control, and it continued to do so as the redesignated Det 1, 40 ARRSq. The effect of the redesignation merely enhanced administrative liaison with the more conveniently located Hqs, 40 ARRSq at Udorn RTAFB; 37 ARRSq Hqs was at Da Nang AB, SVN. This change also provided supervision for the phaseout of HH-3 helicopters in Thailand. During this same time frame the 3 ARRGp recommended changes to effect the beddown of all HH-53s at Udorn RTAFB, and to use Nakhon Phanom RTAFB as a FOL. This action, later approved by higher commands, was initiated to consolidate and enhance maintenance in particular, but also to facilitate personnel activities such as training, crew rotation and assignment.

27 Dec 1969

Det 10, 38 ARRSq was inactivated at Binh Tuy AB, SVN in accordance with MAC SO G-311 dated 15 December 1969. The aircrew rescue mission was to be assumed by U.S. Army and VNAF helicopter equipped units in the delta.

16 Feb 1970

Det 9, 38 ARRSq was relocated from Pleiku AB, SVN to Nakhon Phanom RTAFB as directed by PACAF Movement Order 4, dated 26 January 1970. This resulted from withdrawal of USAF units from Pleiku AB, which was turned over to the VNAF, as part of the Vietnamization program.

[redacted]

[redacted]

Feb 1970

The 40 ARRSq at Udorn RTAFB received the last of its assignment of twelve HH-53 aircraft as the first phase of ARRSq Programming Plan 69-1 was completed. Future SEA HH-53E deliveries were to be assigned to the 37 ARRSq then equipped with the HH-3Es, until it had received its complement of nine HH-53s under phase two of the plan.

15 Sep 1970

Det 8, 38 ARRSq was inactivated at Cam Ranh AB, SVN in accordance with MAC SO G-262, dated 4 Sep 1970. This was a result of deactivation of the 12 Tactical Fighter Wing (TFWg) which Det 8 had been supporting previously.

16 Sep 1970

Transfer of the 39 ARRSq from Tuy Hoa AB to Cam Ranh AB was completed on this date. This PCS move, directed by PACAF MO 24, dated 21 August 1970, was successfully accomplished without interruption of the function. This move resulted from withdrawal of USAF units from Tuy Hoa AB.

15 Oct 1970

Det 11, 38 ARRSq was inactivated at Tuy Hoa AB, SVN per MAC SO G-263, dated 4 Sep 1970. This resulted from withdrawal of USAF units from Tuy Hoa AB, as was the case with the 39 ARRSq.

15 Nov 1970

Det 2, 38 ARRSq was inactivated at Takhli RTAFB, Thailand by MAC SO dated

[redacted]

[redacted]

30 October 1970. This action resulted from a withdrawal of USAF units from Takhli to either other Thailand bases or to CONUS as part of the U.S. reduction of forces in Thailand program.

[redacted]

SEA SAR DIRECTORS

Det 3, PARC - - - - - - - - 1 April 1962

Major E J Trexler

Fall of 1963

Major Alan W Saunders

Fall of 1964

Lieutenant Colonel Edward Krafka

38 ARRSq - - - - - - - - - 1 July 1965

Lieutenant Colonel Edward Krafka

3 ARRGp - - - - - - - - - - 8 January 1966

Colonel Arthur W Beall

1 November 1967

Colonel Albert P Lovelady

6 October 1967

Colonel Paul E Leske

20 September 1968

Colonel Hollon H Bridges

17 June 1969

Colonel Rayvon Burleson

17 August 1969

Colonel Malcolm C Frazee

17 July 1970

Colonel Frederick V Sohle, Jr.

18 October 1970

Colonel George C Pinyerd

TABLE A.1

~~CONFIDENTIAL~~

TABLE A.2

3 ARRGP PERSONNEL DATA

	1966				1967				1968				1969				1970			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
1. PRSNL AUTHORIZED 1/	513	765	1012	1157	1227	1241	1255	1224	1186	1195	1170	1201	1183	1186	1197	1103	1093	1081	1112	1069
2. PRSNL ASSIGNED 1/	415	508	689	781	966	1059	1152	1226	1135	1116	1113	1118	1149	1190	1184	1088	1077	957	952	969
3. % MANNED	81	66	68	68	79	85	92	100	96	93	95	93	97	100	99	99	99	89	86	91
4. PRSNL LOSSES 2/	2	1	0	9	4	0	0	3	1	4	1	7	0	0	2	0	6	6	0	0
5. COMBAT SAVES	85	145	100	73	100	87	108	102	264	111	50	148	143	190	39	109	51	82	9	34
6. NON COMBAT SAVES	7	12	10	44	41	57	94	47	103	79	65	97	79	66	26	19	33	19	17	52
7. TOTAL SAVES	92	157	110	117	151	144	202	149	367	190	115	244	222	256	65	128	84	101	26	86

1/ THESE FIGURES WERE OBTAINED FROM VARIOUS DATA SOURCES AND ARE PRESENTED AS BEST AVAILABLE INFORMATION CONSIDERED ACCURATE TO WITHIN ± 5%

2/ KIA/MIA/CAPTURED DURING RESCUE MISSION - DOES NOT INCLUDE ACCIDENTAL OR GROUND ATTACK LOSSES

~~CONFIDENTIAL~~

TABLE A.3

3 ARRGP AIRCRAFT DATA

	1966				1967				1968				1969				1970			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
1. ASSIGNED AIRCRAFT	38	44	48	47	50	57	62	64	70	70	71	69	71	68	64	65	62	62	61	53
HU-16B	4 3/	4 3/	5	5	6	X														X
HH-43B	16	18	17	18	18	22	23	23	24	24	24	25	25	24	22	23	21	20	19	15
HH-43F	9	10	11	10	10	8	8	8	7	8	8	7	6	6	5	6	6	6	6	6
HH-3E	6	8	11	10	10	16	18	16	22	21	22	20	20	19	18	17	12	9	5	X
HH-53B	X					X	2	6	6	6	6	6	5	5	5	5	4	4	4	4
HH-53C	X											X	4	3	3	3	8	12	16	17
HC-130 H/P 1/	3 3/	4 3/	4	4	6	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2. MISSIONS FLOWN	62	160	132	107	148	144	176	160	145	166	128	172	181	139	62	62	76	73	32	59
3. SORTIES FLOWN	269	601	515	376	429	481	480	530	442	420	323	466	493	357	153	142	302	286	113	204
4. HOURS FLOWN x 1000	3.1	3.5	5.7	7.0	6.7	7.4	8.6	9.0	9.8	9.4	10.7	10.6	11.0	11.1	10.2	9.8	8.8	9.0	8.5	7.7
5. ACFT BATTLE DAMGD 2/	NDA	12	2	7	5	4/	4/	4/	2	13	5	6	4	0	3	24	8	7	1	2
6. ACFT BATTLE LOSSES 2/	1	0	0	3	1	2	0	2	2	1	0	2	2	1	0	1	1	2	0	0
7. OTHER ACFT LOSSES	0	0	2	1	0	0	0	0	0	0	2	2	0	0	3	0	1	0	0	0
8. TOTAL ACFT LOSSES	1	0	2	4	1	2	0	2	2	1	2	4	2	1	3	1	2	2	0	0

1/ REDESIGNATED TO P SERIES EARLY IN 1967 WHEN MODIFIED FOR AIR-TO-AIR REFUELING
2/ DURING RESCUE MISSION-DOES NOT INCLUDE ACCIDENTAL OR GROUND ATTACK LOSSES
3/ ASSIGNED ON TDY BASIS
4/ NO DATA AVAILABLE

CONFIDENTIAL

APPENDIX B

RESCUE PROGRESS REPORTS

1. Rescue Progress Report #5/4 Dec 70.

2. Mission Number: 3-022-29 Nov 70.

3. Situation: C123, Bookie 540 missing.

A. Description of SAR Objective:

(1) C123/55-0649/Camouflaged/Bookie 540

B. Actions taken:

(1) KING 24 as AMC and DUSTOFF 58 as OSC and coordination between aircraft and ground party.

C. Personnel Information:

(1) 44 involved/UNK missing/19 located/17 deceased/2 known survivors not yet recovered. Ground team performed body count but was only able to confirm 17 bodies. Portions of the wreckage were consumed by fire.

(2) Location agency was ground party, 401st RF Co (Vietnamese Regional Forces with US MACV Advisors) at 04 0700Z. Wreckage site at 1145N 10907E.

(3) None recovered at this time.

D. Flying Activity:

39ARRS/2 Sorties/14.2 Det 1, 38ARRS/1 Sortie/1.7 247 Met Det/2 Sorties/ 7.8 192 AHC/2 Sorties/3.8

F. Future Plans:

(1) Weather permitting, DUSTOFF 58 (UHIH) and 2 Jolly Greens (HH-53s) will rendevous [sic] at 04 2315Z. DUSTOFF will lead the Jolly

Greens to the site, and then PJs will be lowered to attempt to raise the two survivors by hoist. It is quite probable the survivors may have to be moved further down the ridge due to the rough terrain and weather. PJs will assist in this movement. In the event weather does not permit these flights, a ground medical team is being moved into the area during the night. Members of the ground party will have to lead the medical team in during daylight hours tomorrow. KING 24 (HC-130) will be on scene to provide weather recon and communications.

(2) SAR Forces available:

(A) 1-HC-130 FM 39 ARRS

(B) 2-HH-53 FM 37 ARRS

(C) UHIDS FM 17 BRIG/17CAV

(D) AUIGS FM 17 BRIG/17CAV

(E) UHIDs FM 192 AHC

(F) I Field Forces ground party (Vietnamese Regional Forces with MACV Advisors) number classified.

G. Summary of Today's SAR actions:

At First Light this morning KING 24 evaluated the weather in the area as being unsafe for SAR operations. At 04/0022Z DUSTOFF 58 entered the search area and reported weather conditions as impossible for search operations. A ground team was inserted as close as possible to the last known position at 04/0105Z. At 1632Z the lead element reported seeing aircraft wreckage and at 0700Z reported finding one person alive. 20 minutes later 2 US personnel were reported alive, but seriously

injured with multiple broken bones and delirious. Bodies were found in a 30 yard area around the site. The DUSTOFF helo was unable to get to the site due to weather ceilings varying between 200FT and 2300FT. The crash site was at 2320FT in extremely rough terrain. The ground party reported taking 5 hours to cross a one kilometer area between a landing zone and the crash site. A medical team from the AF Dispensary at Phan Rang was placed aboard an HH-43 and transported to an area down the ridge from the crash site. However, they were unable to reach the survivor's site, and had to be extracted due to approaching darkness. One element of the ground party is with the survivors at this time, and the rest of the ground party is camped around their position. No hostilities have been reported. Several pickup attempts were attempted by Capt Hartman (US Army) as DUSTOFF 58. This is his 4th day on this SAR effort and he will again be on-scene commander tomorrow. His efforts are to be commended.

1. Rescue Progress Report #6/5 Dec 70.
2. Mission Number: 3-022-29 Nov 70.
3. Situation: C123, Bookie 540, Recovery of 2 Survivors.
   A. Actions Taken: Team departed landing zone at 05/0020Z.
   B. Personnel Information:
      (1) 44 involved/25 missing/19 located/17 deceased/2 survivors. Due to conditions of bodies on scene, a definite determination as to number of deceased personnel will have to await the insertion of graves registration team.

(2) Location agency was ground party, 401st RF Company (Vietnamese Regional Forces with US MACV Advisors) at 04/0700Z. Wreckage site at 1146N 10907E (UTM BP 961 015).

(3) Recovery Agency: US Army Helicopter UH-IH from 192d Assault Helicopter Company (AHC). Survivors were treated and then moved to landing zone by 5 USAF pararescue technicians. This landing zone was accessible to the UH-IH, and the Helo picked up the two survivors.

D. Flying Activity:

(1) 39 ARRS/2 Sorties/13.6 hours

(2) 37ARRS/7 Sorties/21.7 hours

(3) 192AHC (US Army)/4 Sorties/4.5 hours

(4) 247 Med Det (US Army)/10 Sorties/9.5 hours

E. Saves Data:

(1) USAF Pararescue Team from the 37 ARRS and 38 ARRS enabled the survivors to be picked up. (Ref Item C(3)).

Members of the Team:

(A) MSgt James F Scott, 37 ARRS

(B) SSgt Robert T Martin, 38 ARRS

(C) A1C Donald J Recoraro, 37 ARRS

(D) A1C Randy Zoniker, 37 ARRS

(E) A1C William McDonald, 37 ARRS

(F) Capt R N Montemayor, USAF Flt Surgeon from 6251 CSGP, Bien Hoa AB, RVN

Pilot accomplishing pickup was Capt Malcolm Hartman, 247 Med Det, US Army, Phan Rang AB, RVN.

(2) Names of personnel saved have not been released at this time, but are available through 7th AF Personnel Affairs.

(3) 2 combat saves credited to pararescue team and Capt Hartman, 247 Med Det.

F. Future Plans:

(1) Graves registration team will be inserted at the earliest possible time. Due to weather and terrain, the ground party on scene recommended the grave registration party not be inserted today.

(2) No future Search and Rescue Forces will be committed until grave registration has been able to count and identify remains on scene. Conversation with US members of ground team indicate that the possibility of more survivors is extremely remote.

G. Summary of SAR actions:

(1) Jolly Green (JG) 72 and JG 65 departed Bien Hoa at 04/2100Z (0500LOCAL) in order to be on scene at First Light. The JGs established radio contact with the ground party and learned that both survivors were okay. One man had a broken leg, but was in good spirits, the other was sleeping and his condition was serious. At 04/2315Z DUSTOFF 58 (DO 58, Capt Hartman in his (UH-IH) arrived on scene to meet prearranged rendezvous. DO 58 was at first unable to locate the landing zone (LZ) due to the LZ being in the clouds. Weather lifted slightly and DO 58 dropped off maps and radios for the pararescue technicians (PJs) on the landing zone. The JGs were unable to land due to the size of the Helos and closeness of the cliffs. The PJs picked up the radios and maps

by descending on the JG hoist and then returned to the Helos. They were then moved at 05/0020Z by Helo to a point just at the bottom of the cloud layer and 500 yards from the survivors, where they were lowered by hoist along with the Flt Surgeon. Terrain was extremely rough. The PJs reported the underbrush was so thick their feet were not touching the ground. The ground party and PJ Team established direction to one another by firing shots. At 05/0215Z the two parties made contact. At 05/0240Z the PJs reached the survivors and with the Flight Surgeon started intravenous injections of dextrose, splinted injuries and generally prepared the survivors for the trip out. After the survivors were prepared, DO 58, both JGs and Polecat 320 (another US Army UHIH) attempted to lower hoists and pickup patients from the site. Due to weather and terrain, and after many attempts this action was deemed impossible. The PJs and doctor then moved the survivors, down the path hacked out of the jungle on the way up, to the LZ. At 05/0722Z DO 58 picked up the survivors and transported them to the Cam Ranh Bay Hospital. The condition of the survivors was reported as both suffering from shock, exposure and exhaustion. One definitely had a broken leg and the other quite probably does also. Later, the Hospital reported the condition of one as fair and the other as serious. KING 24 in the morning and KING 26 in the afternoon (HC-130s) remained overhead to provide communication relays. Upon debriefing the PJs reported the terrain as sloping at 45 degrees and a solid wall of vines and jungle growth. The Army ground team is remaining on the scene overnight.

(2) Total Flying activity to date:

ORGAN	SORTIES	FLYING HOURS
39 ARRS	13	78.6
Det 1, 38 ARRS	4	5.6
21 TASS	7	16.1
4th Inf Div	1	2.0
254 Aeromed Det	5	8.2
48 Avn Co	15	26.9
247 Med Det	29	40.6
192 AHC	17	22.6
37 ARRS	7	21.7

GLOSSARY

AB	Air Base
AC	Aircraft Commander
ACR	Aircrew Recovery
ACSq	Air Commando Squadron
ADF	Automatic Direction Finder
Aeromed	Aeromedical
AF	Air Force
AFB	Air Force Base
AFCS	Automatic Flight Control System
AFGP	Air Force Advisory Group
AFM	Air Force Manual
AFR	Air Force Regulation
AFSC	Air Force Specialty Code
AGL	Above Ground Level
AHC	Assault Helicopter Company
AIM	Air Intercept Missile
AM	Amplitude Modulation
AMC	Airborne Mission Commander
AP	Armor Piercing
AR	Air Refueling
ARRGp	Aerospace Rescue and Recovery Group
ARRS	Aerospace Rescue and Recovery Service

ARRSq	Aerospace Rescue and Recovery Squadron
ARRTC	Aerospace Rescue and Recovery Training Center
ARRWg	Aerospace Rescue and Recovery Wing
ARS	Air Rescue Service (now ARRS)
ARSq	Air Rescue Squadron (now ARRSq)
ASL	Above Sea Level
ATACC-NS	Alternate Tactical Air Control Center -- North Sector
ATC	Air Training Command
Avn	Aviation
AW	Automatic Weapons
BPE	Best Preliminary Estimate
BUFF	Big Ugly Friendly Fellows (HH-53 Helicopter)
C	Centigrade
CAP	Combat Air Patrol/Captured
CBPO	Consolidated Base Personnel Office
CBR	Chemical, Biological, Radiological
CHECO	Contemporary Historical Examination of Current Operations
CINC	Commander-in-Chief
COC	Combat Operations Center
COMSEC	Communications Security
COMUSNAVPHIL	Commander, US Naval Forces, Philippines
CROWN	Call Sign, Airborne Mission Commander (now KING)
C/S	Call Sign/Personnel Incapacitating Agent

CSAF	Chief of Staff, USAF
CSGp	Combat Support Group
CY	Calendar Year
DASC	Direct Air Support Center
Det	Detachment
DMZ	Demilitarized Zone
Doc	Document
DOCC	7th AF Combat Operations Center
DSR	Director Search and Rescue (now Director Aerospace Rescue)
DVD	Direct Viewing Device
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
ETE	Estimated Time Enroute
Evac	Evacuation
F	Fahrenheit
FIR	Flight Information Region
FL	Fletchet
FM	Frequency Modulation
FNRS	Full Night Recovery System
FOL	Forward Operating Location
Ft	Feet
FWF	Free World Forces

FWMF	Free World Military Forces
FY	Fiscal Year
GO	General Order
HE	High Explosive
HELO	Helicopter
HF	High Frequency
HQ	Headquarters
I&M	Improvement and Modernization
IAW	In Accordance With
ICAO	International Civil Aviation Organization
Inf	Infantry
IR	Infrared
IRAN	Inspection and Repair as Necessary
JACK	Call sign OL-B Rescue Coordination Center
JCS	Joint Chiefs of Staff
JG	Call sign Jolly Green (HH-53 helicopters)
JOKER	Call sign Joint Rescue Coordination Center
JRCC	Joint Rescue Coordination Center
JSARC	Joint Search and Rescue Center (now JRCC)
KIA	Killed in Action
KING	Call sign Airborne Mission Commander (HC-130P aircraft)

LBR	Local Base Rescue
LKP	Last Known Position
LLLTV	Low Light Level Television
LNRS	Limited Night Recovery System
M	Manual
MAC	Military Airlift Command
MACV	Military Assistance Command, Vietnam
MATS	Military Air Transport Service (now MAC)
Med	Medical
MIA	Missing in Action
MHZ	Mega Hertz (10^6 cycles per second)
mm	Millimeter (10^{-3} meters)
MO	Movement Order
Mod	Model/Modification
NAC	Nonaircrew
NKP	Nakhom Phanom, Thailand
NRS	Night Recovery System
NVA	North Vietnamese Army
NVN	North Vietnam; North Vietnamese
OL	Operating Location
OR	Operationally Ready
OSC	On Scene Commander

OSD	Office of the Secretary of Defense
OT&E	Operational Test and Evaluation
PAC	Pacific Area Command
PACAF	Pacific Air Forces
PAD	Programmed Action Directive
PCS	Permanent Change of Station
PEDRO	Call sign HH-43 LBR Helicopters
PJ	Para Jumper (now Pararescue Recovery Specialist)
PJSS	PACAF Jungle Survival School
PLD	Personnel Lowering Device
QOR	Qualitative Operational Requirement
QUEEN	Call sign OL-A Rescue Coordination Center
RCC	Rescue Coordination Center/Rescue Crew Commander
RECONDO	Reconnaissance Commando
RESCAP	Rescue Combat Air Patrol
RESCORT	Rescue Escort
ROC	Required Operational Capability
RT	Receiver-Transmitter/Recondo Training
RTAF	Royal Thai Air Force
RTAFB	Royal Thai Air Force Base
RTNA	Royal Thai Navy Airfield
RVN	Republic of (South) Vietnam

SA	Small Arms
SAM	Surface-to-air missile
SANDY	Call sign A-1 Search and Rescue Task Force aircraft
SAR	Search and Rescue
SARTF	Search and Rescue Task Force
SEA	Southeast Asia
SEAOR	Southeast Asia Operational Requirements
SERE	Survival, Evasion, Resistance and Escape
SER NR	Serial Number
SHP	Shaft Horse Power
SO	Special Order
SOP	Standard Operating Procedure
SOWg	Special Operations Wing
SPAD	Call sign A-1 Search and Rescue Task Force South Vietnam based aircraft (now SANDY)
SVN	South Vietnam
TA	Terrain Avoidance
TAC	Tactical Air Command
TACC	Tactical Air Control Center
TASS	Tactical Air Support Squadron
TAWC	Tactical Air Warfare Center
TDY	Temporary Duty
TED	Transfer Effective Date
TF	Terrain Following

TFWg	Tactical Fighter Wing
TMS	Type, Model, and Series
TOE	Table of Equipment
UHF	Ultra High Frequency
US	United States
USAF	United States Air Force
USARV	United States Army, Vietnam
USNS	United States Naval Ship
UTM	Universal Transverse Mercator
VC	Viet Cong
VHF	Very High Frequency
VNAF	Vietnanese Air Force
WP	White Phosphorus