The RESCORT and/or RESCAP then took necessary actions to suppress the hostile activity. When the low helicopter was able to safely hover over the survivor, the flight mechanic or designated hoist operator provided directional information to the pilot to position the aircraft for the recovery. In the event the survivor was seriously injured or disabled, a PJ was lowered to assist in the recovery.

After the survivor had been recovered, the helicopters were escorted to a safe area by the RESCORT aircr . The PJ or medical technician aboard the Jolly Green administered necessary aid to the survivor while the flight mechanic checked the helicopter for damage. Based on the condition of the survivor and the helicopter, the pilot informed the AMC in King as to his intentions and requirements. Normally, the helicopter returned to its point of departure; however, fuel status, weather, or the condition of the survivor could be cause for deviation.

RESCORT Aircraft. The functions of the RESCORT aircraft were threefold: first, locate and identify the survivor(s); second, detect and suppress enemy activities which might interfere with the recovery effort; and finally, provide protection for the helicopters enroute to, during, and from the pickup attempt. Normally, four A-1 Sandy aircraft (two flights of two) were used to support a pair of Jolly Greens. The two flights were referred to as Sandy Low and Sandy High and were scrambled individually as flights or simultaneously with the helicopters. One pilot of the Sandy Low element acted as the OSC and, unless specifically cleared to do so by the AMC, the Jolly Green would not attempt a pickup without a Sandy OSC in place.

The Sandy High element was responsible for escorting the recovery helicopters to and from the recovery site. Sandy High lead was responsible for navigating and controlling the formation up to the arrival at the Initial Point (IP) during ingress. Upon arrival at the holding point, the Sandy High pilot directed the Jollys into an orbit at a given altitude, providing a fix either in relation to navigational aids or by reference to a geographical area. The following functions were then accomplished by Sandy High as soon as practicable:

(1) Obtained altitude and temperature at the recovery site from the OSC for use by the Jolly Greens.

(2) Insured, through the AMC in King that, if needed, Combat Air Patrol aircraft were on the scene for protection against enemy aircraft.

(3) Briefed Jollys on the recovery area, including enemy positions, E&E areas, and applicable tactics.

When a pickup attempt was to be made, Sandy High moved the Sandy/Jolly formation as close to the recovery site as possible without compromising the safety of the Jollys. When directed by Sandy Low, Sandy High descended for an on-scene briefing while Sandy High wing and the Jollys held in orbit and monitored the briefing, visually relating it to the area. After the briefing, Sandy High returned to the orbit point and gave the Jollys a complete briefing on the survivor's location, the area defenses, and the procedures to be used during the pickup attempt. Upon the execution order, Sandy High flight went into a protective formation and Sandy High was responsible for placing the Jollys over the IP at the time, altitude, and airspeed requested by Sandy Low.

When scrambled, the Sandy Low element went directly to the SAR area. Enroute, Sandy Low queried King and other agencies for current and complete information on the survivor, weather and terrain at the scene, callsigns of other aircraft in the area, and what progress had already been made. After becoming OSC, Sandy Low's primary responsibility was to direct and coordinate the entire rescue operation.

The first major task for the OSC was to locate the survivor. When in the survivor's general area, Sandy Low conducted an electronic search. He attempted to contact the survivor on beeper or voice to further reduce the search area through Direction Finder (DF) steers or through directions received from the survivor. Once in the immediate vicinity, Sandy could further pin-point the location by:

1. visually locating the downed aircraft, or the survivor's parachute.
2. having the survivor advise him when he was overhead.
3. having the survivor use signaling devices.

Radio contact with the survivor also enabled Sandy Low to learn the survivor's condition and to gain information on enemy defenses in the area.

After locating the survivor, Sandy Low was faced with probably the most difficult decision in combat operations. He had to determine when and if it would be safe enough to commit the Jolly Green to the pickup attempt. He had help from the FAC and the AMC, but the decision was ultimately his. The degree of hostile opposition was the primary factor in determining the duration of the SAR attempt, and could extend it from a few hours to several days

Even if the enemy had not fired on Sandy Low during the location of the survivor, the Sandy pilot normally had to assume that there would be opposition to the rescue attempt. In determining the extent, the OSC first made high-speed passes over the area while his wingman and the FAC looked for groundfire. If heavy resistance was met, the OSC left the area while strikes were put in on the enemy positions. On the other hand if little resistance was encountered, Sandy Low was required to fly through the area low and slow, "trolling" for enemy fire. Based on what he determined the situation to be at that time, the OSC either decided to continue to strike the area or to attempt the pickup.

An experienced Sandy Low pilot, Captain Randy Jayne, in discussing the proper time for the OSC to order the beginning of the pickup attempt, said:[63]

> *When you're deciding it's time to pick the guy up, you have to be very careful--you have to be sure you have suppressed the fire as much as you can. If the enemy is not going to shoot at you and is going to wait for the helicopter, it complicates the problem. But, you put this problem together with the fact that sometime you are going to run out of your own assets--both A-1s and your fast-moving ordnance support. Then you are faced with a tough decision as to when to attempt a pickup. Sometimes waiting is going to hurt you. If you've killed a certain number of the enemy and silenced a certain number of guns, then wait without putting in a continuous stream of ordnance, the bad guys may bring in some more stuff. In four hours it may be worse than it is now. It's a hard decision to make and one that nobody can make but the guy that's down there as OSC.*

Once he had decided to begin a pickup attempt, the OSC would:

1. launch support aircraft in sufficient time to participate in the pickup attempt.

2. continue air strikes to keep pressure on the enemy.

3. bracket the survivor's position with visual marks for the Jolly. One mark was placed on a straight line from the IP through the survivor's location and a second mark was placed 200-300 meters past the survivor.

4. brief Sandy High and the support flight leaders on their role in the pickup attempt.

5. brief the survivor on the pickup attempt and what would be expected of him.

6. plan to use at least the Sandy ordnance as preventive suppression from the IP through the pickup and egress even if opposition had not been present. On any opposed SAR or when opposition was expected, the use of a smoke screen and/or riot control agents was considered.

When possible during an opposed rescue attempt, the following tactics were used: the fast-movers were flown in a racetrack pattern on the most appropriate side of the run-in heading (terrain, weather, and enemy gun positions being taken into consideration); the support slow-movers flew an orbit on the other side of the run-in heading and the Sandy High flight plus Sandy Low wing formed a daisy chain around Jolly Low. When the command of execute was given by Sandy Low, the strike aircraft concentrated their fire on the known and active enemy positions while the support slow-movers dispensed

their special ordnance as directed and then entered a fire suppression pattern on their side. At the same time, the low Jolly was led over the IP by Sandy High where control was passed to Sandy Low.

As Jolly Low approached the survivor, ground fire was called out from his 12 O'clock position. At the proper time, Sandy Low directed the survivor to pop his smoke and vectored Jolly to a hover over the survivor. During this process, the survivor, the Jolly crew, or Sandy High could assist in directing the Jolly over the survivor. Sandy Low remained out of the Sandy daisy chain so that he could supervise the operation while the other three Sandys laid down suppressive ordnance during the ingress, pickup, and egress. Once the survivor was onboard, Jolly took the briefed egress heading and was escorted out of the area.

When the SAR forces were clear, remaining ordnance could be used on still active enemy positions. Finally, King would inventory the forces to determine that each participant was out of the area and could be expected to return safely to his base.

Forward Air Controllers. The FAC had always been a valuable member of the SAR team. Frequently he was already in position, or a short distance away, and knew the area better than the Sandy pilots. In cases where the FAC was on the scene prior to the Sandys, he began the SAR operation in generally the same manner as was described for Sandy Low. During the early stages of a SAR mission, the FAC:

1. assisted in pinpointing the survivor's location.

2. provided the OSC with first-hand knowledge of the SAR area.

3. assisted in locating enemy guns and troops.

4. controlled air strikes to suppress enemy opposition.

5. assisted in the selection of ingress/egress routes and the best local E&E areas.

6. acted as a communications link with the survivor.

When the OSC began locating the survivor or trolling for enemy guns, the FAC held high to observe enemy reaction. When guns were pinpointed, the FAC could be assigned specific targets or areas for air strikes. During the pickup attempt the FAC was placed overhead to spot groundfire and to act as a radio relay if needed.

Support A-1s. Some A-1s were used in the strike/smoke/riot control agent configuration in support of the SAR effort. The strike configured aircraft were used for the suppression of hostile guns or activity which presented a threat to the survivor or the Jolly Green. The smoke/riot control aircraft were normally held on the ground until a pickup attempt was forecast by Sandy Low. They were scrambled by Sandy Low in ample time to reach the scene for a briefing prior to the order to execute.

During strongly opposed rescue operations, the smoke A-1s were used to build a wall of smoke between the enemy and the survivor. Great care had to be exercised to place the smoke so that it would not drift over the survivor's location, thereby hampering the pickup attempt. The accuracy of

the A-1 enabled the riot control agents to be placed very near to, or even on the survivor if the situation warranted. All the support aircraft could be used in a fire suppression role during the actual pickup attempt if so briefed by Sandy Low.

Pedros. Although not a component of the normal SARTF, the HH-43 Pedros were available for aircrew recovery missions. When launched on a recovery mission, the Pedro proceeded to the scene via a nonhostile routing at a safe altitude and held in a safe location until the permissiveness of the rescue area could be assessed. Based on intelligence and FAC information, the aircraft commander of the Pedro determined whether the area was permissive enough to allow a rescue attempt. Certain limitations were imposed on the use of the Pedro helicopters for aircrew recovery operations:

1. Recovery from areas determined to be hostile would be attempted only after additional resources were available on the scene.

2. Rescue operations more than 10 miles off-shore were considered to be extended overwater missions and required another aircraft for navigation-communications assistance and rescue coordination in the event the Pedro was forced to ditch.

3. Night recovery missions in RVN beyond 10 miles from the launch base or into known high threat areas would not be attempted without JRCC approval.

COMMAND AND CONTROL

During actual or proposed SAR operations, control of participating forces was exercised by the Commander, 7AF through the 7AF JRCC in accordance with agreements made with commanders for forces providing SAR support. Whenever

possible, SAR operational control of forces in the search areas was vested in the JRCC/RCC, AMC, or OSC, as appropriate. Operational control of the forces enroute to and from the search areas was vested in the parent organizations.

In transferring control of any element of the SAR force, explicit terms were used so that there could be no doubt concerning control authority and mission supervisory responsibility. Transfer of control could be made based on any of a number of reasons, including geographical considerations, and predominance of forces belonging to a certain service. When an agency other than the JRCC/RCC was controlling a SAR mission, procedures insured that timely, accurate progress reports were forwarded to the JRCC. It was stressed that commanders who committed forces to the SAR operations would not withdraw those forces without notifying the controlling agency and receiving acknowledgement.

Airborne Mission Commander. The AMC was delegated the immediate operational control over the airborne SAR forces engaged in a rescue mission. Located aboard an HC-130P King aircraft which was extensively equipped with electronic search and communications gear, he was the airborne communications and control extension of the JRCC. The Kings were positioned at orbit points which could be moved as the mission dictated to maintain communications with the strike aircraft, the OSC, and the JRCC/RCC. The AMC monitored and controlled the SAR effort by:

1. establishing the location of the objective.

2. appointing an OSC as soon as practical.

3. obtaining forces and equipment required for the rescue/recovery operation.

4. providing navigational and intelligence aid to the SARTF.

5. monitoring the weather.

6. providing a long-range communications capability.

7. controlling and maintaining mission and communications discipline.

8. obtaining and committing secondary SAR forces as required for mission prosecution.

Communications. More than for any other combat operation, effective use of available communications was required during a SAR mission to insure success. Each set of frequencies was used for a specific purpose and the OSC attempted to enforce strict radio discipline at all times. During a SAR, the various radios were used as follows:

1. UHF: Since most of the fast movers were equipped with UHF only, it was the primary radio for communication between the FAC, King, and the strike aircraft. The strike aircraft committed to a SAR made initial contact with King on a standard SAR UHF frequency. When it was decided to employ the strike aircraft, King sent them to a discreet FAC frequency for control.

2. GUARD: Except for emergencies, Guard channel was used exclusively by the survivor, Sandy Low, and the Jolly Greens. Other members of the SAR force did not use it without first clearing through Sandy Low. Prior to the pickup attempt, Sandy Low took all Sandys and Jollys over to Guard for its use as the primary channel. The entire force monitored Guard during the pickup attempt.

3. VHF: VHF was the primary inter-SAR force radio, especially for King. Although Sandy Low normally had his VHF turned down, he could be reached through his wingman. It was specifically used for the general SAR force briefing prior to the pickup.

4. FM: FM was primarily used for interflight coordination. The normal SAR FM frequency was used by King, the Jollys, and the Sandy High element. Sandy Low element and the support flights each had their own discreet FM frequency.

(Author's note: Except for the passage taken from an interview with Captain Jayne, the proceeding discussion on Tactics and Command and Control was extracted from 7AF Manual 64-1, dated 15 January 1971. Although considerably condensed, it was intended that the foregoing would acquaint the reader with the basic responsibilities of each element in the SARTF and the callsigns used during the reporting period. The purpose served should be that the following presentation on actual SAR missions and pending changes to basic concepts will be more easily understood.)

ACCOMPLISHMENTS

During 1971 and the first quarter of 1972, the 3ARRGp was credited with 184 combat saves, bringing its total for the war to 2,348. During the same 15 months, 127 non-combat saves were accomplished, which brought that total for the war to 1,133.[64/] (See Figure 3 for combat and non-combat saves.)

The accounts of the SAR operations in SEA all make exciting reading, but those discussed in this report were chosen because they were either

3ARRGp RESCUES*

	Jan-Mar 71	Apr-Jun 71	Jul-Sep 71	Oct-Dec 71	Jan-Mar 72
Combat Saves	60	26	19	47	32
Non-Combat Saves	15	26	45	23	18
Total	75	52	64	70	50

Total Saves (1 Jan 71-31 Mar 72) 311

Total Saves (Since 1 Dec 64) 3,480

*Numbers presented continued to be updated and offer only a close approximation.

Source: 3ARRGp Histories

Figure 7
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(THIS PAGE IS UNCLASSIFIED)

more difficult than the others, were unusual for some reason, or resulted in proposed changes in concepts and tactics.

Ashcan 01

On the morning of 10 December 1971, Ashcan 01, an F-105G out of Korat RTAFB, was downed by a SAM in the Mu Gia Pass. The pilot, Major Robert E. Belli, had received launch indications and had started evasive action when his aircraft was hit. The aircraft went immediately out of control and Major Belli called for the backseater to get out while he (Major Belli) went for his ejection handles. Major Belli recalled that the negative "G" forces made it almost impossible to reach the handles, but "I do remember finally grabbing them. And that's all I do remember until I woke up on the ground."[65/]

Major Belli's impact with the trees was so great that his parachute was torn in half and he was completely separated from the shroud lines. When he awoke, approximately 15 minutes after his ejection, he discovered that he had a badly broken arm and a dislocated knee. The injuries immobilized him and, in his own words, "I knew that I was going to stay right there until either they rescued me or something else happened."[66/]

Word was received at NKP on Ashcan 01's plight at 1027, and the Jolly Greens were scrambled with Jolly Green 52 to act as low aircraft. When the Jolly Greens arrived at the scene, it was learned that neither the OV-10 Nail FAC nor the Sandy had been able to locate the survivor due to poor weather. In the immediate area of the survivor, the weather was completely

overcast with bases of the clouds extending to the ground. Winds were from the northeast, gusting to over 30 knots.[67]

Jolly Green 52 located a hole in the clouds about three miles southwest of the survivor and descended below the overcast. Each attempt to head north toward the survivor was met with a wall of clouds and on many occasions, while looking for a clear route, the helicopter was forced to climb up through the clouds. Attempts from the north were barred by 6,000-foot mountains, while the ridge that the survivor was on precluded attempts from the west.[68]

At one time, a SAM passed within 200 feet of Jolly Green 52 and on four other occasions, the Jolly received hits from automatic groundfire after drifting over Mu Gia Pass. Another flight of Jolly Greens arrived in the area and became the target for several SAM firings. As the afternoon progressed, weather conditions worsened in the area and it was decided at 1730 to call off the SAR effort for the day. Sandy gave Ashcan 01 beddown instructions and insured him that the SARTF would be back first thing the next morning. With the weather and the approaching darkness, the survivor allowed that there was not much that could be done about it and he settled down for the night awaiting first light.[69]

The Sandys and the Jollys held a meeting at NKP that night to discuss the best method of operation for the next day's effort. It was determined at that time that there just was no better way to do it except wait for the weather to improve. Later that night, however, Major Kenneth Ernest, the

pilot of Jolly Green 52 scheduled for the Jolly Green Low position the following morning, called a meeting of his crew to brief a tactic that had never been tried before. Major Ernest told the author:[70]

> *We just decided to go in in the weather--in a hover right on the trees. Everyone was briefed on just how I wanted our position passed. We knew at times that there would just be one person who would have sight of a tree, and everybody else would be IFR and I would just fly on that one person. If someone sighted something on one side of the airplane or in the rear he would say "clear" in that area. That would mean he had something in sight then he would start giving "move left five feet" and I'd have my eyes out front hoping I could catch something. And then we would leap to it and wait for something else to clear in front and then leap to that tree.*

The SARTF arrived back on the scene at 0545, 11 December, and awaited first light. Major Ernest's crew in Jolly Green 30 (Jolly Low) secured a doppler fix from over the survivor's position to aid in returning to him and, since the weather was about the same as the day before, Jolly Green 30 descended through a hole in the clouds and began searching. Beginning his run-in to Ashcan 01 from about two miles southwest, Major Ernest was IFR and required assistance in locating the survivor. The assistance was provided by a Sandy and a Pave Nail. The Sandy orbited behind the Jolly Green and provided headings for the Jolly through direction finder cuts with the survivor. The Pave Nail orbited 90 degrees off the Jolly's track and monitored the angle between DF cuts on the survivor and on the Jolly.[71]

In this manner, Jolly Green 30 slowly made its way from tree to tree toward Ashcan 01 Alpha. Along the way, the parachute of Ashcan 01 Bravo (the backseater) was discovered. A flight surgeon aboard Jolly Green 30 determined that the man (who had by then been hanging in his parachute harness for over 20 hours, suspended in a tree, with the wind causing him to swing against the tree trunk) was not alive. An unenviable decision had to be made at that time by Major Ernest. To retrieve the body would require lowering a PJ on Jolly Green 30's only penetrator. With the gusting winds making the helicopter difficult to control, this meant risking the life of the PJ and losing the penetrator. Without the penetrator the mission would have to be aborted, and with Ashcan 01 Alpha calling out that he was just a short distance away, Major Ernest elected to continue to the survivor. In discussing the decision he made, Major Ernest recalled thinking:[72/]

> *. . . what happens if I lower the PJ down there--we only have one penetrator. . . what happens if I get him or the penetrator stuck down there in the trees? We would have to abort the whole mission because we wouldn't have a penetrator to pick up Alpha. That's one thing--also risking the life of the PJ going after a dead man, that's the second thing. Also--here's a live man. Let's get him. Let's get him right now.*

The coordination between the Jolly, the Pave Nail, and the Sandy resumed as Jolly Green 30 continued to inch its way toward Alpha until a hover was established over Major Belli. Approximately one hour had been spent in mostly IFR weather for Jolly Green 30 to move the two miles or so to Ashcan 01 Alpha. Major Belli described the pickup from his vantage point on the ground:[73/]

The rain and winds were still gusty, and I could see the cloud cover right over the top of the trees. Anyway, they finally got over me, and they asked if I wanted a PJ to come down. I told them I guessed one had better since I wasn't in much of a condition to help myself. Actually, they sent two down, which was probably lucky because I think it took both of them to get me on the penetrator. It was kind of funny, because I could see the penetrator with the PJs coming down, and I could see the bottom of the helicopter, but the top of it was in the clouds. I thought that chopper pilot must be having one helluva tough time trying to hover there, with the gusty winds, and him just about IFR. Anyway, they got me on the penetrator and pulled me aboard.

Major Ernest, who won the Aviation/Space Writers' Association Helicopter Heroism Award for his part in the Ashcan 01 Alpha rescue, gave much of the credit to Major Belli. The importance of the actions taken by the survivor was emphasized when Major Ernest said, "I didn't make the pickup. The guy on the ground helped so damn much. His vectors--stuff like that, trying to get me to him--little helpful hints on what the area looked like, what to look for."[74/]

The rescue of Ashcan 01 Alpha marked the first time an IFR recovery had been made. Several observations and suggestions resulted from the operation.[75/] Some of these were:

1. An LNRS night pickup was considered but prevented by the weather in the area the night of the 10th.

2. The modified doppler on the LNRS aircraft proved to be very accurate and it was recommended that all MH-53 helicopters be so equipped.

3. The Pave Nail FACs used on the mission proved that the aircraft could be a very important part of the rescue force.

4. Using the same Jolly Green crews for the continuation of the mission the next day worked very well. It was recommended that this be made a standard procedure.

Falcon 74

Due to fuel starvation, the crew of Falcon 74--an F-4D from Udorn RTAFB--was forced to eject on 18 December 1971. Both Alpha and Bravo landed safely near the NVN-Laotian border, found cover, and awaited rescue. Soon after, an Air America pilot located their position and passed it on to the arriving SARTF. The Sandys reported both chutes in sight, but with approaching darkness and poor weather conditions, it was decided to await first light before attempting a rescue. The survivors were given instructions to maintain radio contact through the night and wait for the SARTF to return the following morning.[76/]

The Sandys were on the scene early on the morning of 19 December and informed the crew that the Jolly Green was coming in to make the pick-up. Since Alpha had reported people near him, Jolly Green 62 was positioned to pick him up first. While maneuvering to pick Alpha up, the helicopter received several rounds of automatic fire in its right engine which almost resulted in loss of the aircraft. Jolly Green 62 was able to leave the area and was escorted by two A-1s to an alternate airfield. The remaining Sandy began calling in airstrikes to neutralize the area while awaiting replacement

Jollys. Ordnance dropped included a riot control agent placed near the survivors' positions in an attempt to discourage the enemy.[77]

Another flight of Jollys was scrambled from NKP with Jolly Green 55 as Jolly Low. By the time the Jollys arrived in the SAR area, the situation had become critical. The enemy had radar coverage of the area and MIGs had already forced the withdrawal of the rescue force several times. The weather was deteriorating and the survivors were reporting people moving around them. Everything considered, it appeared that if a rescue was not effected immediately, the survivors would be killed or captured.[78]

A Pave Nail OV-10 found a small hole in the undercast and the OSC decided to make a pickup attempt. As Jolly Green 55 spiraled down through the hole, the AMC (in King 22) advised the crew to put on gas masks as protection against the riot control agent that had been dropped near the survisors. The gas masks hampered communication and presented a real hazard. As the Jolly Green pilot, Captain Harold O. Jones, headed for Falcon 74 Alpha, he had difficulty communicating with the survivors, other aircraft, and his own crew. As Captain Jones told it:[79]

> *Hovering was very difficult as corrections and observations given by my crew were distorted and unintelligible with the gas masks on. Once over 74 Alpha, it took five minutes to locate him through the thick jungle canopy. . . . At one point during the hover my tail rotor got dangerously close to a tree. I was unable to understand the PJ on the aft ramp telling me not to move back. He finally ripped the mask off and used his helmet microphone to warn me. He immediately*

suffering from the effects of the [gas] we were climbing in with our rotor wash.

Falcon 74 Alpha was picked up and Jolly Green 55 started for Bravo, who reported:[80]

> *On the first pass the Jolly had me sighted and I popped a flare, which he did not see, so I popped another one, which he saw. He flew in about 10 to 15 feet off to my right. . . . At first I started to move underneath the Jolly but the down-wash from the rotors was so strong that he blew down a couple of 100 foot trees, so I stayed out of the way in case any more trees fell.*

While Jolly Green 55 was lowering the penetrator for Falcon 74 Bravo, Captain Jones noted that they were well into their reserve fuel and he requested Sandy to have a tanker ready to air refuel as soon as Bravo's pickup was completed. Bravo was soon aboard the helicopter and as it departed, Captain Jones observed that the area where 74 Alpha had been was completely obscured by clouds. Also, the hole through which Jolly Green 55 had descended was closed so an IFR climb was made through the weather. The survivors were returned to Udorn in excellent condition.[81]

The following observations were made concerning the Falcon 74 operation:[82]

1. The usefulness of riot control agents during a contested SAR operation was again proven. Captain Lester O'Brien, Falcon 74 Bravo, reported that during a rescue attempt earlier in the day, the gas had been stirred up causing him to cough violently. However, between his own attacks of coughing he could hear others around him suffering the same effects.

2. As was already known, the gas masks used by the helicopter crews hampered communications.

3. The downwash caused by the HH-53 constitutes a real hazard to the survivor on the ground and precautions should be continually emphasized.

Nail 31

When the crew of Nail 31, an OV-10 from NKP, bailed out over the Ho Chi Minh Trail on 18 March 1972, they landed in one of the most hostile environments yet faced by rescue forces. The crew was both skillful and fortunate in avoiding capture or death during the period immediately following their bailout. The pilot, Lieutenant David G. Breskman, had traveled about 600 meters from his parachute and was sitting by a tree when he detected an enemy soldier with an automatic weapon coming toward him.[83/]

> *I took out my gun as he approached and sat very still hoping he would veer away from my position. . . . He kept coming toward me; I remained motionless. He looked in my direction a number of times but apparently didn't see me. He was within 10 feet of my position when I wheeled around and fired four times. . . . I cautiously moved over to him and took his MK-47. There was a lot of groundfire at this time and my shots apparently didn't attract attention.*

The SAR force had meanwhile arrived, and the groundfire that Lieutenant Breskman heard was most likely that which was directed at Sandy 01 who was trolling the area looking for enemy positions. On one of his passes Sandy 01 was hit and downed by AAA. The pilot bailed out and was immediately picked up by an Air America helicopter. Before he was shot down, Sandy 01 had pinpointed the location of Captain Steven L. Boretsky, the weapons

systems officer of Nail 31. However, a problem was to develop in that Captain Boretsky was having trouble with his radio and, since he was forced to keep moving away from gun positions, his exact location would not again be known until the next day. With SAR operations cancelled for the day due to heavy groundfire, the night was spent in trying to neutralize the enemy positions which, with his location unknown, placed Captain Boretsky in a hazardous situation.

For 24 hours, airstrikes were used to soften up the area sufficiently to enable a rescue attempt to take place the following day. Special ordnance contributed significantly toward protecting the survivors through the night. The support provided for the Nail 31 SAR operation was indicated by Captain Randy Jayne, OSC during the first afternoon:[84/]

> *While I was OSC, I got not only all the available ordnance in the area, I also got the special ordnance that had been requested earlier in the day. Had we not put that ordnance in--I'm talking here primarily of area denial type weapons--if we hadn't put that ordnance in, if it hadn't been available, those men would not have made it through the night. They were right in the middle of an enemy storage area, bivouac area, an extremely large concentration of enemy troops and AAA.*

As the time for another rescue attempt approached, a wall of smoke was laid by A-1 "Smoke" aircraft from NKP. Enemy resistance had been subdued by the strike aircraft, some of which carried laser-guided bombs and, when the order to execute was given, the Jolly met with little groundfire enroute to the survivors. There was some confusion as to where

Captain Boretsky was, but both crewmembers were found and safely evacuated. The accuracy and the amount of firepower delivered against the enemy during the Nail 31 operation caused Colonel Cecil N. Muirhead, Jr., Commander, 3ARRGp, to speculate that, "toward the end of this operation, the enemy probably wished we would just finish and leave him alone."[85/]

The SAR conference at which Colonel Muirhead made his remarks was held at NKP on 26 March 1972. Those in attendance included the crew of Nail 31 and most of the participants in the SAR operation. The purpose of the conference was to determine what lessons could be learned from the Nail 31 experience. The minutes of the conference included the following:[86/]

1. It was suggested that in extremely high-threat areas, the Nail FACs maintain longer OSC prior to allowing the Sandys in the area for in-close trolling. The Sandys should insure that they are briefed thoroughly by the on-scene FAC and by King.

2. It was emphasized that the cycling and scheduling of Pave Nail assets represented a critical problem due to aircraft availability and maintenance. It was suggested that Joker coordinate closely with the 56SOW to insure the best utilization of the assets.

3. It was noted that first light planning apparently created a considerable fast-mover overload on tanker resources. This resulted from holding certain night flights over until first light without expending them. Like other assets, tankers were limited, and strike flights should expend as soon as possible to avoid excessive refuelings and exhaustion of tanker resources.

Spectre 22

The end of the reporting period was marked by the spectacular rescue of all 15 crewmembers of a Spectre AC-130 gunship. At 2200, 30 March 1972, Spectre 22 was hit by AAA while attacking trucks in the Steel Tiger area of Laos. The right wing burst into flames and the pilot, Captain Waylon O. Fulk, gave the order to evacuate from the aircraft.[87]

While two crewmembers bailed out at that time, the others elected to remain with the aircraft temporarily. After a lapse of approximately 10-15 minutes, it became apparent that they could no longer stay with the burning aircraft. Captain Fulk, by this time clear of the Steel Tiger area, again gave the order to bail out. When the remaining 13 crewmembers left Spectre 22, they were some 50 miles away from the first two crewmembers who had bailed out earlier.[88]

The SAR forces were alerted for a first light effort and through the remainder of the night, other Spectre gunships and FACs located the survivors and related their positions in terms of LORAN fixes.[89]

The following morning the largest rescue operation of its type began. The two survivors that had bailed out first--in Steel Tiger--were picked up by Air America and flown to Pakse, Laos where they were later recovered by a Jolly Green. The SARTF arrived at dawn and within two hours the Jollys had picked up the remaining 13 crewmembers and the operation was complete.

Prior to the Spectre 22 operation, there had been concern that the existing procedures would not be adequate for effecting a rescue of a large number of survivors in a hostile area. To improve the situation, all SEA units were requested to submit comments or proposed changes for inclusion in a 56SOW draft of changes to SAR procedures for large-crew aircraft. The final draft was to be forwarded to the 3ARRGp, and the changed procedures were to be briefed to all multi-crew tactical units flying in SEA.[90/]

During the Spectre 22 SAR, the importance of a newly acquired asset--the Spectre gunship--was confirmed. The equipment aboard the three AC-130s that circled the survivors that night made it possible to pinpoint the positions of the crewmembers on the ground. These positions, in turn, were passed to the Jolly Greens, thus greatly reducing the time required to locate the men the following morning.

While the survivors' exact positions were being determined, surprisingly little difficulty was encountered in communication. This had been another matter of concern for prospective multi-crew rescue operations. The difficulties in locating 13 men in a relatively small area of jungle were compounded by the many aircraft at the scene, and presented a situation in which it could hardly be expected that effective radio communication could take place. It was a credit to the SAR force and to the crewmembers of Spectre 22 that radio discipline was maintained to a degree that allowed the pickups to be rapidly accomplished. Sharing the credit were the Spectres and other aircraft that spent the night overhead, both locating the survivors'

positions and keeping their spirits up until the rescues took place. It appeared certain that the experience gained during the Spectre 22 operation would prove valuable in modifying procedures in anticipation of subsequent multi-crew rescue operations.

LOSSES

During the reporting period the 3ARRGp lost three HH-53 Jolly Greens to enemy action. Eight personnel of the 3ARRGp were killed in action (KIA) and one was listed as missing in action (MIA).

3ARRGp COMBAT LOSSES

Date	Unit	Type/Tail Number	KIA/MIA
21 Jul 71	40ARRSq	HH-53/68-8285	0
25 Nov 71	37ARRSq	HH-53/68-10366	3 KIA/1 MIA
27 Mar 72	40ARRSq	HH-53/68-10365	5 KIA/0

Source: 3ARRGp Safety Office, 12 April 1972.

CHAPTER V

THE FUTURE

As this report went to press, the enemy invasion of SVN that had begun in late March had not lessened in intensity. The SAR forces were engaged in what were probably the most difficult operations of the war. It remains for a later report to detail the augmentation of the SAR forces and to document the 3ARRGp's performance during that period.

RESCORT

By early 1972, it was already apparent that the level of enemy activity, combined with the attrition of RESCORT aircraft and the redeployment of tactical fighters, called for basic revisions to the tactics employed in SAR operations.

It had already become policy to delay committing Sandys to areas of AAA until it could be assured that there was an objective. Even then, more time was being spent in trying to neutralize the area prior to using the A-1s to troll and pinpoint the survivor. In discussing the threat as it existed in March 1972, Captain Jayne presented his views on the new capabilities available to the SARTF:[91]

> *It is no longer an operation where two A-1s, or four A-1s and two Jolly Greens go out and make a pickup, in a lot of cases. The concept of the SAR force being limited to those two aircraft is long behind us. We were able to do some innovating here, partially because some people*

had some foresight and partially due to circumstance. We found that the new OV-10 capability--the Pave Nail--gave us some remarkable abilities that we did not have before. We found that with the combination of the Pave Nail and the laser-guided bomb capability, that we are much better able to deal with large enemy AAA than we were in the past. We found that with LOFAT delivery capability, combined with the laser again to pinpoint the survivor, we can protect him and drop ordnance around him even in IFR conditions. Unfortunately, in the last five years we've lost a lot of survivors--captured--because of weather not allowing the pickup. We've rescued three aircrews this year already out of weather, in each case, initially so bad that the A-1 could not get under the clouds--between the clouds and the trees. One of these people [Ashcan 01] was picked up out of that kind of weather by a helicopter, a very unusual situation and one that existed only because of the Pave Nail's equipment and the Jolly Green's equipment.

What we try to do now, the SAR concept has changed to take advantage of this--when we are scrambled on a SAR mission, we hope to have an on-scene FAC who knows the area. We use him to give us a briefing on the area and to put strikes in while we're working. We also try to scramble or divert a Pave Nail to the area immediately. The first thing we want to do is get the man's position down to the last foot. We do a visual search and a communications search and hopefully, at some point, we are able to pinpoint the man's position exactly, so the [radar operator in the Pave Nail] can see the guy on his scope--mark his parachute, a tree, something to give us an exact location. Because if we can do this, problems of weather coming in, or nightfall, don't limit us. We can still protect the man with ordnance. We can work close to him--close, meaning around 1,000 meters--and drop ordnance without fear of injuring the survivor. Now, we've done this four or five times and in no case have we come close to endangering the survivor by dropping ordnance.

Before committing a Jolly Green to a pickup in a hostile environment, it was still required that a Sandy troll the area and, as OSC, determine whether it was permissive enough to allow a reasonable chance for success.

No aircraft was deemed a suitable substitute for the Sandy during this critical phase of a SAR operation. For that reason--and to protect the remaining A-1s--it was suggested at the 26 March 1972 SAR Conference at NKP that in extremely high-threat areas, the Nails and Pave Nails maintain longer OSC prior to allowing Sandys in the area for in-close trolling.[92]

It was planned by PACAF to reduce the number of A-1s to 10 UE* by FY 1973. Additionally, attrition threatened to lower the number of A-1s to a level insufficient to effectively support SAR operations. The 1SOS Operations Officer said in March, 1972:[93]

> *The big thing that I think is going to make the difference is if we can continue to turn over more of the search phase to the Nails and King bird and judiciously use the Sandy force; we may then be able to continue. I think it is a very unrealistic force posture that they have given us in that they expect us to maintain an adequate Sandy alert posture with insufficient aircraft. When we had 21 aircraft, it depleted our resources just trying to keep aircraft over the survivor for 12-14 hours. As we go lower and lower we are reaching the point where we will have to get another type aircraft or more A-1s.*
>
> *As far as I am concerned, the only airplane that can replace the A-1, for the role it has to do, is a new A-1. The jets don't have the loiter capability nor can they withstand the groundfire that we have to take when we are trolling the area prior to bringing in the Jollys. We have armor plating around the pilot and the engine which enables us to withstand most any small arms hits and still get the aircraft back to the field. The A-37, the F-4, the A-7--all of these aircraft are very vulnerable to even the smallest of small arms fire if they take a hit in the engine section. Also, the pilots of these aircraft have little protection. Only the A-7 can get slow enough to get down and do the job that we have to do to get the survivor out.*

*The number of authorized A-1s was 20 UE as FY 1973 began.

Unless the whole concept of rescue operations changed drastically, which was not foreseeable in the near future, the only prospect of an aircraft qualified to assume the Sandy role seemed to lie in the development of a new one.

Nighttime Rescue Capability

Although night alert had been pulled for some time with the LNRS-equipped HH-53s, a combat rescue at night had yet to be made as the reporting period ended. Although features of the system had assisted in the weather recovery of Ashcan 01, its limitations made it unlikely that a nighttime rescue under any but the most ideal conditions could be expected. Primary obstacles to be overcome before the potential of the system could be realized were in the following areas:[94/]

1. Terrain Radar Avoidance: The system could only be employed in flat to rolling terrain because it was not capable of warning the pilot when he was near cliffs.

2. Locating the Survivor: Further research was required to develop a satisfactory method of locating the survivor in weather and in heavy jungle. The equipment in use required that the survivor be in the clear before he could be located.

3. Gas Masks: A redesigned gas mask was needed for use in rescues where riot control agents had been used. The mask being used did not allow the use of special night goggles virtually essential during night rescue operations.

Gunships

An additional night SAR capability came to light as a result of the 56SOW SAR Conference on 16 December 1971. Already a proven asset in SAR

operations, the gunships, especially the AC-130 Spectres, were becoming increasingly important in protecting the survivor at night. The Spectre possessed a potent fire control system tied into a sophisticated navigation/detection capability which included LORAN, IR, and LLTV. It was pointed out at the conference that when the Spectre could maintain a pinpoint location on the survivor, it could deliver strafe ordnance very close to his position, discouraging enemy movement in the area.[95/]

The major limitation on the use of gunships in the future would be the degree of AAA threat. While night gunship coverage was considered extremely valuable, recent SARs had been in areas where the AAA/MIG/SAM threat prevented their operation. In the future, however, it was planned that the gunships would be utilized whenever the situation permitted.[96/]

Task Force Alpha

Task Force Alpha (TFA), located at NKP, was responsible for monitoring the sensors placed along the Ho Chi Minh Trail. Additionally, the TFA controllers were regularly provided with strike aircraft with which to attack selected segments of the trail, based on intelligence gathered through the sensors.[97/]

When SAR operations were conducted along the trail, TFA information was passed to the SAR force through intelligence liaison personnel who operated in the SAR Command Post during rescue efforts. Greater use of this capability was anticipated for the future through closer coordination between the SAR coordinator and the TFA controller. In this manner,

selective strikes on preplanned targets near the survivor could be made to protect him, especially at night.[98]

Command and Control

The intricate command and control system in use at the height of the war was perhaps not well suited for the level of activity in SEA during the latter part of 1971 and early 1972. Suggestions were offered at that time to reduce the complexities inherent in a system that requires the relaying of requests and information through so many individuals and agencies.

When a Sandy OSC made a request to King, it was relayed to the appropriate RCC. The RCC forwarded the request to the JRCC which in turn passed it on to the 7AFCCC. The 7AFCCC then set about satisfying the OSC's request by contacting the appropriate wing to get (for example) ordnance loaded and to the SAR scene.

According to an experienced OSC, there were often major delays at the RCC, at the JRCC, and at the 7AFCCC level, where it was decided whether the OSC's request was valid and what the priority should be. One suggestion to reduce the time spent was to use the Airborne Battlefield Command and Control Center (ABCCC), bypassing King and the RCC when requests were to be made for special ordnance or forces. In support of his suggestion, the OSC said:[99]

> *Basically, we've found that the people in the ABCCC know the frags, know the airplanes, and know the ordnance. They control the war every day and are better able to get the stuff on the scene, if they are allowed to do so.*

The issue became moot when the enemy invaded SVN, resulting in an increase in U.S. airpower in SEA and the resumption of air attacks against the North.

When air activity in SEA is again reduced to the level prior to the invasion, the question will most likely be raised once more. A greater enemy threat with reduced SAR and SAR support forces would demand greater flexibility in getting special ordnance to the SAR scene as rapidly as possible. In the future, assets may not be available for prolonged SARs.

SUMMARY

Soon after this reporting period ended, the U.S. was flying combat operations almost exclusively from Thailand. Additionally, during 1971 and early 1972, almost all strike activity was conducted in Cambodia and Laos. However, with the NVN offensive in the spring of 1972, the war increased in intensity with the Air Force striking in the North again. The future of the USAF in SEA was uncertain, but as long as Americans continued to fly combat, they could count on the people in rescue to support them. As Dr. Harold Brown, former Secretary of the Air Force said:[100/]

> *When the history of this war is finally written, I feel that the story of Air Rescue may well become one of the outstanding human dramas in the entire history of the Air Force. Air Rescue did not begin, of course, with the war in Vietnam. But the extent of the operation, the dangers involved, and the dedication shown on an everyday basis--month after month--makes these rescue operations something unique in our military history. . . . These men are all*

heroes, but they're also normal Americans from all walks of life. They come from the cities and the farms. They share the same hopes and fears that concern us all. . . .

Certainly, the Aerospace rescue and recovery people deserve their immortality. For they have lived up to their motto as if it were a solemn pledge: "That others may live."

FOOTNOTES

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GLOSSARY

7AF	Seventh Air Force
7AFCCC	Seventh Air Force Command and Control Center
AAA	Antiaircraft Artillery
AB	Air Base
ABCCC	Airborne Battlefield Command and Control
AFCS	Automatic Flight Control System
AMC	Airborne Mission Commander
ARRGp	Aerospace Rescue and Recovery Group
ARRS	Aerospace Rescue and Recovery Service
ARRSq	Aerospace Rescue and Recovery Squadron
ARRWg	Aerospace Rescue and Recovery Wing
Blue Chip	Callsign--7AF Command and Control Center
CROC	Combat Required Operational Capability
Det	Detachment
DMZ	Demilitarized Zone
DF	Direction Finder
ECM	Electronic Countermeasure
E&E	Escape and Evasion
ELF	Electronic Location Finder
FAC	Forward Air Controller
FM	Frequency Modulated (Radio)
FY	Fiscal Year
GOT	Gulf of Tonkin
HF	High Frequency (Radio)
IFR	Instrument Flight Rules
IR	Infrared
IP	Initial Point
Jack	Callsign for Operating Location Bravo
Joker	Callsign for the Joint Rescue Coordination Center
JRCC	Joint Rescue Coordination Center
JSS	Jungle Survival School

KIA	Killed in Action
King	HC-130P Callsign
LBR	Local Base Rescue
LLLTV	Low Level Light Television
LNRS	Limited Night Recovery System
MAC	Military Airlift Command
MIA	Missing in Action
NKP	Nakhon Phanom (Royal Thai Air Force Base)
NVN	North Vietnam
OL	Operating Location
OL-A	Operating Location Alpha
OL-B	Operating Location Bravo
OSC	On Scene Commander
OT&E	Operational Test and Evaluation
PACAF	Pacific Air Forces
Pedro	HH-43 Callsign
PJ	Para Jumper (now Pararescue Recovery Specialist)
Queen	Callsign for Operating Location Alpha
RCC	Rescue Coordination Center
RCS	Radar Cross Section
RESCAP	Rescue Combat Air Patrol
RESCORT	Rescue Escort
RHAW	Radar Homing and Warning
ROC	Required Operational Capability
RTAFB	Royal Thai Air Force Base
RTNB	Royal Thai Naval Base
RVN	Republic of Vietnam
SAM	Surface-to-Air Missile
Sandy	A-1 Callsign for SAR Operations
SAR	Search and Rescue
SARCO	Search and Rescue Coordinator
SARTF	Search and Rescue Task Force
SDO	Senior Duty Officer
SEA	Southeast Asia
SEAOR	Southeast Asia Operational Requirement
SOS	Special Operations Squadron
SOW	Special Operations Wing

TAC	Tactical Air Command
TFA	Task Force Alpha
UE	Unit Equipped
UHF	Ultra High Frequency (Radio)
VFR	Visual Flight Rules
VHF	Very High Frequency (Radio)
VNAF	(South) Vietnamese Air Force