COLLEGE EYE

IN THE SON TAY RAID



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Historians will remember the Son Tay raid as a well planned, carefully rehearsed and perfectly executed military operation that succeeded in all of its tactical aspects, but failed to attain its principal objective of rescuing American soldiers held in captivity by North Vietnam. Plans for the prisoner of war (POW) rescue began under tight security with a small number of carefully chosen Pentagon planners. Their initial plans continued evolving at Eglin AFB in Florida where a special Joint Contingency Task Group consisting of volunteers from the Air Force and Army Special Forces trained secretly and intensively for a raid that would take place in the war zone half way around the world. Once ready, the raiders sneaked cleverly into Southeast Asia under various pretexts and then succeeded in executing their plan with unsuspecting assistance of many in theater units whose members were not even aware of the POW rescue objective of the mission in which they would participate. Such strict secrecy and deception was necessary to insure that the attempt to free our imprisoned soldiers did not get compromised and that the well-prepared raiders were not sent out on a potentially suicidal mission.

The 552nd Airborne Early Warning and Control Wing (AEW&CW) from McClellan AFB became one of the Son Tay raid's supporting units. It operated EC-121 radar platforms called College Eye from its forward operating location at Korat Royal Thai Air Force Base (RTAFB). The Wing was tasked to deploy three of its EC-121 aircraft and 53 men to Korat to provide airborne radar coverage for high and low level raider aircraft in the Son Tay area that included MIG warnings and combat engagement vectoring for F-4s and F-105s that protected the forces tasked to rescue the POWs. To show how the deployment of this wing's resources fitted into the overall operation, it is necessary to sketch out the plan's most salient details.

The Plan

The raid would be executed under the direct control of the JCS by a Joint Contingency Task Group (JCTG) led by Air Force Brigadier General LeRoy J. Manor. He was the Commander of the USAF Special Operations Force at Eglin AFB, Florida. His deputy was Army Green Beret Colonel Arthur D. "Bull" Simons from the Headquarters of the XVIII Airborne Corps at Ft Bragg, North Carolina. Planning and training for the raid began at Eglin AFB in late August 1970.

Date and time for the raid was very carefully selected to provide the raiders with optimum advantages for surprise and nighttime illumination. It would be executed 15 to 20 minutes after the 2:00 AM prison guard shift change when the rising moon provided about 35 per cent illumination. This lunar event would occur between the 20th and the 25th of October and then again during the same time frame in November. The first window in October lapsed because presidential approval for the raid could not be secured in time for the Task Group to deploy and execute. Consequently, November became the target month and the raiders at Eglin AFB gained more time to train and polish up their tactics.

The raiding force would consist of 56 Special Forces and 62 airmen who trained at Eglin AFB and flew in two MC-130Es, five A-1E fighters, and six helicopters. One of the helicopters was Jolly Green Giant HH-3 and five were Super Jolly Green Giant HH-53s. One of the C-130s would escort the low flying helicopter formation with Green Berets from Udorn RTAFB to the Son Tay prison. The other would guide the A-1E fighters from Nakhon Phanom RTAFB into the objective area where they would provide close air support protection for the raiders while they engaged the enemy on the ground.

Air Force Raiders

Air Force raiders had to resolve several significant air tactics problems before they could produce realistic plans and conduct appropriate crew training. Rescue of POW demanded stealth and maximum surprise to ensure that the enemy guards would not have time to harm any of their captives. Rescuers had to be flown to a pinpoint spot on the first pass of their flight. That required precision navigation that the C-130 Combat Talons could provide by leading formations of helicopter and propeller driven fighter aircraft. Their navigation was enhanced by the installation of a developmental forward looking infrared system on board of both Combat Talons. This ensured that the C-130 which would lead the helicopters to the POW camp (call sign Cherry One) would fly directly over it and drop four illumination flares to destroy the night vision of the tower guards.

Nighttime formation flying over dark mountainous jungle terrain under blacked out conditions and without radio communications had not been done before. Yet, to arrive into the target area undetected by the enemy's radar required flying through the valleys and hiding behind mountain peaks. That type of flying was challenging enough for the Combat Talons. They had demonstrated it successfully over North Vietnam flying as single aircraft. But contemplated six and seven ship formations were something else. This new tactic required meticulous planning and an unprecedented aircrew discipline.

That wasn't all. Formation lead C-130s had to fly at minimum speeds to accommodate their slowest escorted aircraft. These air speeds were below the design limits of their terrain following radars. The first helicopter candidate that was small enough to make a landing inside of the prison courtyard was the U. S. Army's UH-1H Huey. It could cram in eleven combat ready Green Berets and fly on its own with a top speed of 87 knots. No C-130 can stay in the air flying that slow. So the Army and Air Force pilots experimented with a new drafting technique. They learned that if the UH-1H pilots could position their helicopter in a 5 degree nose down attitude and just above and

little behind the left wing of a C-130 that flew at 105 knots with 10 degrees nose up and 70 % flaps, they could stay in a drafting mode and maintain the lead aircraft's airspeed. That amounted to old fashioned air show exhibition flying performed for holiday crowds. They made it work at night, eventually blacked out and without radio communications. But the first full dress rehearsal that had eleven troops flying for two and a half hours under these conditions convinced the planners that the UH-1H was not the proper way to go. The troops were so cramped up after the ride that they couldn't performed their well rehearsed roles inside of the courtyard within the prescribed times that had to be carried out in mere seconds. So the Air Force HH-3, Jolly Green Giant, that is 14 feet longer and has also a 14 foot greater rotor blade span, had to be substituted for the smaller Army helicopter. This meant that the HH-3 would have to chop up some tree limbs during its landing in the small 60x80 foot courtyard. On the plus side, this helicopter did not need the drafting help of the C-130 and it could comfortably accommodate 14 troops that were actually needed inside of the yard. HH-3's call sign was Banana. The other five helicopters of the Assault Formation, all HH-53 Super Jolly Green Giants, were called Apples One through Five.



Assault Formation: MC-130E (Cherry One) with HH-3 (Banana) and HH-53(Apples).

Combat Talon that was to lead the A-1Es was called Cherry Two. The A-1E fighters were Peaches One through Five. This formation, known as the Strike Formation did not have a big air speed problem. It would fly at a fully fueled and combat loaded fighter speed of 145 knots. The only problem here was the 40 knot airspeed differential from the helicopter Assault Formation. Timing was critical. Both formations had to arrive

at Son Tay at the same time as the slower helicopters. So, during the low level penetration into North Vietnam the fighter formation had to make sharper dog leg tracks along its route than the one with helicopters. There was also another reason why both formations had to stay close together. Cherry Two, escorting the fighters, was a backup ship for the helicopter escorting Cherry One. Should anything go wrong with Cherry One, Cherry Two would have to assume the helicopter lead in a hurry. Because of the fruity call signs the Joint Contingency Task Group's air fleet earned the name "Fruit Salad".



Strike Formation: MC-130E (Cherry Two) with A-1E (Peaches).

The rest of the air operations planning was much simpler. Cherry One would leave its formation 3.5 miles out of the POW camp, accelerate, and climb to 1,500 for a four flare drop directly over the compound. Apple Three became the Assault Formation's gunship. Her gunners, firing 4,000 rounds per minute Gatling guns, would arrive over the illuminated camp first, assaulting the guard towers and the main guard barracks. Then the Banana would land inside of the courtyard with the Blueboy Group while Apples One and Two landed in a rice paddy south of the site with their Greenleaf and Redwine Groups.

Both Combat Talon Cherries were tasked to provide distractions to the enemy on the ground by dropping napalm bombs, battle simulators and railroad type flares. Specially rigged napalm bombs would be dropped in pairs by parachute. They would explode on contact with the ground and their fuel would pool, providing 40 foot high flames that would attract attention of the North Vietnamese troops and serve as readily visible markers for orbiting A-1E Peaches. The specially designed fire fight simulators were targeted for bridge and highway intersections. They would also attract attention of

enemy soldiers, causing them to believe that there were several areas under simultaneous attack. The long burning railroad flares would also produce unusual crimson fires that the enemy would have to check out. This would add to their confusion and cause delays in organizing their defensive response to the real target that was under attack by the raiders. The whole river basin, near and west of Son Tay, was the principal North Vietnam's military training area full of military installations of various sizes. During peak periods there could be as many as 80,000 troops within easy access to Son Tay. Raid's planners anticipated over 12,000 of them in the fall of 1970. Army planners estimated that they needed about 30 minutes to complete freeing the prisoners. Anything that could distract the enemy from realizing what was actually taking place at Son Tay and delay their coordinated counter attack would help to give them this precious time on the ground.

The return home would be without a formation escort. Cherry One was programmed to orbit on the Laotian border from where it could provide direction finding radio steers to guide the departing Apples and Peaches out of the country. Banana would never fly again. Special demolition charge would ensure that this damaged HH-3 could never be made air worthy by the enemy. Cherry Two would become a radio monitoring, recording, and if necessary, transmission relaying platform orbiting west of the Red River within the line of sight of Son Tay. It would be the last one to depart after all the Fruit Salad aircraft were safely over the mountains and heading out of North Vietnam. From this location Cherry Two would high speed to another orbit over central Laos and provide direction finding steers for the slower Fruit Salad aircraft heading for the recovery at Udorn.

Air Force raiders exercised their detailed plans and tactics in night flights over Florida, Georgia, and Alabama. They would be well prepared to execute the raid that was to take place with assistance of as yet unsuspecting friendly forces in the war zone that was half the world away. They needed area based helicopters and A-1E fighters without crews because they planned to bring only the two Combat Talons with them. Their helicopters would have to be borrowed from the 40th Aerospace Rescue and Recovery Squadron at Udorn and the A-1E fighters from the 56th Special Operations Wing at Nakhon Phanom. This, as well as the requirements for other supporting aircraft and crews, had to be engineered with very delicate care and secrecy after they deployed to their staging base at Takhli in Thailand.

Two HC-130P refueling tankers from the 39th Aerospace Rescue and Recovery Squadron at Cam Rahn Bay AB in the Republic of Vietnam had to deploy to Udorn to provide the helicopters with night time refueling over Laos on their inbound and outbound tracks.

Ten F-4s from the 432nd Tactical Reconnaissance Wing (TRW) at Udorn were needed to fly a two orbit MIGCAP (MIG Combat Air Patrol) high over Son Tay. Their high altitude presence was designed to accomplish two things. First, they were to be detected by the enemy early warning radar as they approached from over Laos. This early detection would focus attention on their intruding high altitude tracks while the low flying raiding formations would be sneaking into their country. Second, once in their

designated orbits, they would deter the North Vietnamese from launching their MIGs during the raid's progress. Task Force's helicopters and A-1Es would be highly vulnerable to them.

Five F-105 Wild Weasels from the 388th Tactical Fighter Wing at Korat RTAFB would establish a surface to air missile (SAM) suppression orbit west of Hanoi and provide protection for the MIGCAP F-4s. They were to fire Shrike missiles at any SAM and anti aircraft artillery (AAA) radar sites that engaged them.

Eight KC-135 tankers from the 307th Strategic Wing at U-Tapao RTAFB would be in refueling orbits over Laos to support the fifteen F-105 and F-4 fighters. Two more tankers would provide refueling for Air Force and Navy aircraft over the Gulf of Tonkin.

The Search and Rescue network with Jolly Green helicopters and HC 130P tankers at Udorn and with A-1E Sandys at Nakhon Phanom would be put on extra alert to anticipate earlier than normal first light rescue effort.

To ensure that the China and North Vietnamese Cross Border Air Defense System was placed in a state of confusion that would divert attention from the raiders, the planners incorporated Navy's Task Force 77 (TF-77) into the overall raid plan. It required the Navy to stage a fake attack against the city and the harbor of Haiphong by illuminating the sky with high altitude flares and simulating mining of the harbor with low flying aircraft. This diversion was scheduled to begin in the east before the Air Force fighters surfaced on the North Vietnamese radar screens entering from the west. The North Vietnamese would see evidence of two coordinated attacks that would cause them to defend with SAMs instead of their few night combat capable MIG-21s.

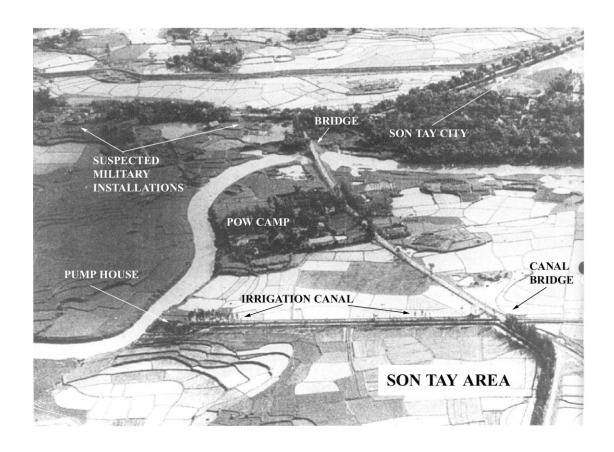
It must be pointed out that there was an ongoing bombing restriction on NVN territory that was declared by President Johnson on October 31, 1968. Hanoi and all of Vietnam north of the 19th parallel was off limits to our bombers. However, the Task Force's rules of engagement for the raid permitted the Air Force and the Navy to utilize air to ground missiles against enemy radar controlled SAM and AAA radar sites. Navy in the Gulf of Tonkin was specifically advised that there was no authorization for its aircraft to drop live bombs. Consequently, the fully armed Air Force F-4s and F-105s and their Navy counterparts were not to initiate any attacks unless they acquired positive indications that they were targeted by the enemy and that they had to defend themselves.

Army Raiders

Son Tay POW Camp's geographical location made it an ideal target for the raid. Even though it was just outside of a major city in a countryside that was replete with military installations, the camp was isolated enough to invite a daring rescue attempt. It was located between the Song Con River and a paved road that led into the town of Son Tay. It was just far enough west of the road to be easily disguised as a small farming settlement surrounded by rice paddies. A curve in the river blocked access to it from the west and north. A canal that went from the river and across the road provided isolation

from the south. Enemy reinforcements would have to use the road on the east to respond to the attack on the camp. (Photograph on page 7 shows the Son Tay Camp area from the air.) The site just begged to be invaded. If the raiders could get there without detection, they could clear the place in about twenty minutes and be out with rescued prisoners before any of the surrounding military installations could mount an organized opposition.

The Army Special Forces plan proposed to form three groups to execute the rescue. The first group, code named Blueboy, would land in a helicopter inside of the POW compound, eliminate the guards and free the captives from their cells. This approach seemed imperative because it was the only way to ensure that guards, alerted by an attack on their camp, would not have time to execute any of the prisoners. The second group, Redwine, would seize the road bridge over the canal and secure the area south of the camp from which the helicopters would exfiltrate the raiders and rescued prisoners. The third group, Greenleaf, would provide security for the other two groups. Its troops would clear the area east of the POW compound and blow up the Song Con River Bridge. This would deny the enemy reinforcements' access to the raiders from the north and east. (Figure on page 9 depicts the basic assault plan.)



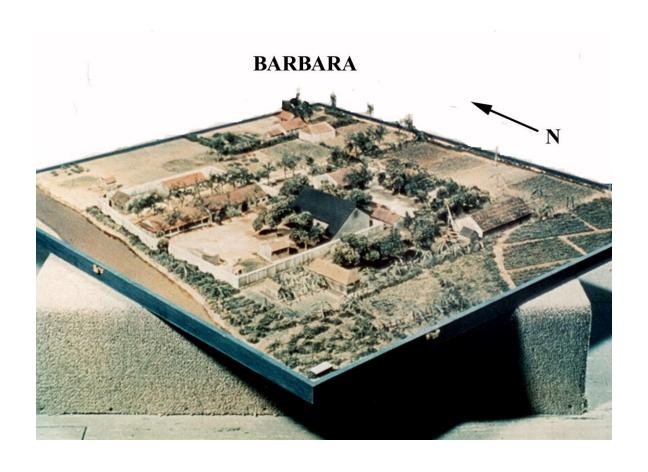
Aerial view of Son Tay POW Camp area.

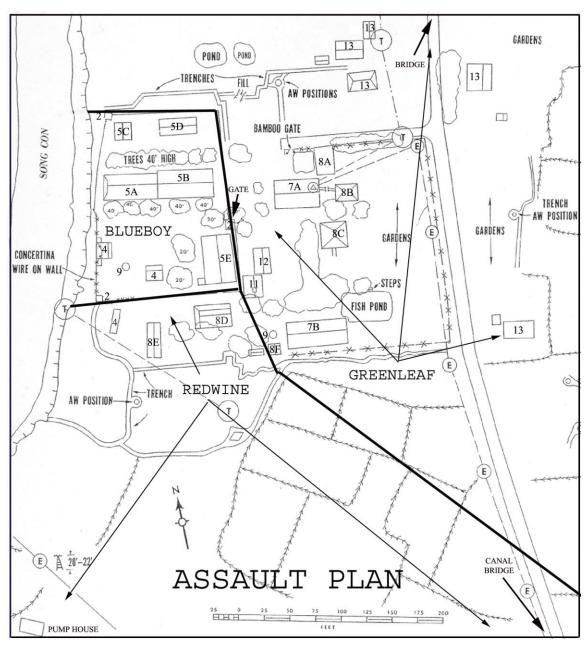
Meticulously detailed plans evolved from this simple three-group concept. Eventually, there would be a plan for each element of every group followed by specific

tasking for each individual raider. Each man would have to know the roles and routes of other members of his team and be aware of what other elements on the left and right were expected to do in the same time frame he was carrying out his assigned duties. In addition each man needed to know how to respond to any alternate plans that could be forced upon the raiders by unexpected developments.

Special Forces trainers constructed a full scale layout of the Son Tay camp that had the exact geometry and dimensions of the real site. Foundations of every building and of every wall were carefully staked out with 2x4 studs in the ground. Raiders draped yards and yards of cloth on these studs to simulate the walls. Numerous doors and windowsills were also constructed and mounted in proper places. Exact location of every tree and brush was identified and potted miniatures placed in corresponding spots. On the western periphery, raiders bulldozed a shallow trench with precise curve that simulated the Song Con River. The same was done to scrape out a road along the eastern side of the camp that ended at the bridge. A full scale mock-up of one section of the bridge was added there. They formed another trench that represented the irrigation canal on the south side. With all of this detail, each man could advance and count the number of steps he needed to take from one established position to the next. As elaborate as this site was, it was surprisingly small. The entire camp area from its southernmost buildings to the bridge would contain only three football fields laid on the side and stacked south to north.

Special Forces planners were blessed by a very unique tabletop model of the Son Tay prison that was produced by the best talents of the Central Intelligence Agency. This elaborate model of the prison was code named "Barbara". Study of this model required a special optical viewing device that could be placed anywhere inside of it. When one looked through its precisely scaled eyepiece the scene would be magnified to life size and the viewer would find himself standing at any selected spot inside of the prison compound.





POW Camp Facilities

2 Guard Towers	5E Cat House	8F Duck Pen
4 Latrines	7A Administration Bldg.	9 Water Well
5A Beer Hall	7B Guard Quarters	11 Kitchen
5B Opium Den	8A Support Bldg.	12 Guard Mess Hall
5C Outhouse	8B Communications Bldg.	13 Staff Quarters
5D Stag Bar	8E Animal Stable	

Nothing was left to chance. The ground assault planners conceived three alternate plans. Each one assumed that one of the helicopters did not make it to the objective area and that the rescue would have to be done by the two remaining groups.

Plan Blue, assumed that something happened to the Blueboy on board of the HH-3 helicopter. The other two groups, Redwine and Greenleaf, would have to adjust to execute the rescue without them. Redwine Group would have to enter the prison compound over and through the walls and free the prisoners while the Greenleaf troops executed tasks assigned to them and their Redwine colleagues.

Plan Green covered a contingency in which the Greenleaf Group's helicopter did not make it all the way in. In this case, the Redwine Group would have to clear the surrounding buildings, provide its own perimeter defense, and blow up the Song Con River Bridge.

Plan Red assumed that the Redwine Group, with the raid's commander Bud Sydnor, failed to reach the objective area. Then the Greenleaf troops would have to split and clear the guardhouses and buildings outside of the walls in addition to providing their own outer perimeter defense.

Because Brigadier General Manor operated under the direct control of the Joint Chiefs of Staff in the Pentagon, he also needed a special direct link up with the National Military Command Center in Washington D.C. Special command and control arrangements had to be made to permit him to monitor the raid from the Tactical Air Control Center North Sector (TACC-NS) at Monkey Mountain outside of Da Nang.

Securing Support in the War Zone

When the time came to deploy the raiding force from Florida to the staging base at Takhli RTAFB, its top three leaders, Brigadier Generals Leroy J. Manor and Donald D. Blackburn * and Colonel Arthur D. Simons had to pave the way by briefing the prisoner of war rescue plan to the wartime commanders in Saigon. That was a touchy event because no one in Vietnam had been told anything about it. Admiral John S. McCain, the Commander in Chief Pacific, whose son was one of the known POWs, alerted General Creighton Abrams, the Commander of the US Military Assistance Command, Vietnam (MACV) about receiving and fully supporting the inbound trio, but he did not elaborate on any details for their visit. Only General Abrams and General Lucius D. Clay, the Commander of the 7th Air Force greeted the visitors and heard their mission plans. They did a bang up job with their briefing and astonished the two Vietnam War leaders who became enthusiastic about the proposed effort and pledged all out support for this noble effort. They were most eager to become a part of it. They were somewhat let down when they learned that they would not have a direct role to play in the raid and that Manor

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^{*} BG Blackburn was the Pentagon's Special Assistant for Counterinsurgency and Special Activities (SACSA) He convened the initial POW rescue plan feasibility group and continued implementing the plan under the JCS in the Pentagon.

would not be working for them, but directly for their own bosses in the Pentagon. ² Since practically all theater support had to come from the Air Force, General Clay assigned his own Brigadier General Cramer to assist Manor and his staff officers in their tasks.

After that briefing, Manor and Simons flew to see Vice Admiral Frederic A. Bardshar, Commander of the CTF-77 in the Gulf of Tonkin. The Admiral gave the rescue plan his most enthusiastic support. He tasked his planners to produce an impressive diversionary plan that simulated attacks on Haiphong harbor. His Task Force launched 59 aircraft from three aircraft carriers. That became the largest naval night attack of the Vietnam War.

Securing unconditional support from the theater Air Force units was not as easy as at the MACV Headquarters in Saigon. It fell upon three key staff officers to make face-to-face contacts with the commanders of all units whose participation was needed. This was done with the utmost secrecy and none of the commanders were told the reason for the unusual support that they were to provide. Supporting wing commanders were told to provide combat ready A-1E aircraft and helicopters, but no crews. Someone else would fly their assets once the time came. To insure compliance the staff officers had letters signed by the Air Force Chief of Staff, General John D. Ryan which stated bluntly that they were not to say no to the letter bearers and that if they had any problems with that, they should call him directly.

Lieutenant Colonel Benjamin N Kraljev, Jr. was one of these staff officers. He made contacts with unit commanders in Saigon's Tan Son Nhut AB, Cam Ranh Bay AB and Da Nang AB in Vietnam and at Nakhon Phanom RTAFB in Thailand. Ben was from the Special Operations Division of the Directorate of Operations at Hq. USAF in the Pentagon. At Eglin he functioned as the commander and the training officer of the assembled C-130, A-1E and helicopter aircrews.

Lieutenant Colonel Lawrence Ropka, Jr. was the second staff officer making diplomatic overtures to the commanders of units at Takhli RTAFB, U-Tapao RTAFB, Korat RTAFB and Udorn RTAFB. Larry was from the Special Plans Division of the Directorate of Plans at Hq USAF. He was one of the master planners from the initial conception of the raid. He had extensive experience in a variety of prior special operations in Southeast Asia. He was the chief coordinator of everything that was going on during the stateside planning, training and procurement of special equipment that was needed for the raiders.

Lieutenant Colonel Homer Willett was the third key staff officer. He made arrangements for Brigadier General Manor's command post at Monkey Mountain with all the necessary tie-ins that included the EC-121T airborne radar platforms. Homer was from the Hq. USAF Directorate of Operations where he was the Branch Chief for Air Surveillance in the Air Defense Division. Prior to his involvement with the POW rescue planning, he spent more than the equivalent of 2 out of the last 9 years in the Southeast Asia on almost monthly TDY visits to all U. S. radar sites. With that kind of exposure, Homer did not need the letter from General Ryan to obtain support. He knew all the

commanders that he needed to seek support from and did not have to use cover stories to explain his presence wherever he went. It can be said that his deployment to Southeast Asia was a part of his normal recurring duties. His main professional interest focused on real time presentation of remote aircraft operations to the ground-based command posts and in capturing and integrating enemy voice transmissions into the combat scenes displayed for the benefit of battle staffs. His expertise in this area lead to his designation as the project officer for the Integrated Tactical Air Control System in Southeast Asia (ITACS). On top of that, his Pentagon office managed the Southeast Asia Operational Requirement 62 (SEAOR-62) that was programmed to modify the existing EC-121D models into "T" models. This modification would discard the old grease pencil plotting of aircraft movements with its inherent time delay depiction of air operations for a direct encrypted data link download of airborne acquired data to be displayed right at the command posts monitoring screens in real time. So, during his pre raid trip to Southeast Asia, he would be in the theater to observe the testing of the newly modified EC-121s that had a new on board computer and digital downlink capability to Monkey Mountain. What a coincidence! This is what the planners wanted in being on the night of the raid. Because the SEAOR-62 modified aircraft were not yet available at Korat, the forward operating base for the College Eye aircraft, two crews with experienced technicians that had been testing the newly installed equipment in Texas had to be brought in for the event.

The air operations planners at Eglin AFB did not dwell too much on the command post that Brigadier General Manor would need at Monkey Mountain. They took the radar and electronic surveillance of North Vietnam by the College Eye and Combat Apple for granted. They knew that the EC-121s would provide radar coverage for the raid as part of their routine function and that their data, including MIG warnings and any intercept vectoring issued to MIGCAP aircraft would be available to Manor and his selected battle staff. Likewise, they knew that Strategic Air Command's (SAC) RC-135 Combat Apple from Okinawa would be orbiting over the gulf of Tonkin, performing its routine electronic surveillance function and passing radio relay communications between the air and ground raiding forces and the command post.

The Pentagon planners, however, took some extra steps to insure that there was a guaranteed presence of these normal assets over the Gulf. They requested a second Combat Apple for the night of the raid. The primary one would fly with USAF Colonel Norman H. Frisbie from the Air Force Plans and Policy Directorate. He had chaired the POW rescue planning staff at the Pentagon and was fully cognizant of all of the raid's plans. He would also assume the command of the raid from the Combat Apple aircraft if Manor lost his capability to be in charge at Monkey Mountain. Army Lieutenant Colonel Bill L. Robinson, who served as the Operation's Officer during the planning and Training in Florida and was completely versed in all planned ground operations, would accompany Frisbie on the flight. Major Thomas E. Macomber from the Air Force counterintelligence team at Eglin and Army Sergeant Major Donald M. Davis, who had been one of the initial raid planners in Washington, would fly on the alternate Combat Apple. To further ensure adequate radio relay coverage for the variety of radios used by the Special Forces, the planners included an extra RC-135 radio relay aircraft from U-Tapao. Lieutenant

Colonel Homer Willett took care of the aircraft from U-Tapao. Colonel Frisbie made arrangements with the Strategic Air Command at Kadena AB in Okinawa.

Lieutenant Colonel Homer Willet ended up with the sole responsibility to ensure that the best use would be made of the College Eye radar platform and that its data be properly integrated with the TACC-NS and the Navy's tactical air control system in the Gulf of Tonkin. Because this was precisely where Homer excelled, he was the right man for this job. He visited the Air Defense Command Headquarters in Colorado and arranged to have two newly modified EC-121T "Connies" deployed to Thailand in time to participate in the POW rescue mission under the pretext that they would go to Korat to perform new equipment testing in the area where the new electronic equipment would eventually be employed. This made good practical sense and all involved in the project accepted that cover story.

552nd AEW&C Wing's Challenges

Colonel Henry L. Timmermans, Commander of the 552nd AEW&C Wing received notice to assemble two EC-121T aircraft with crews for deployment to Korat on 29 October, 1970. He chose Lieutenant Colonel John B. Mulherron, better known at McClellan AFB as "Jake", to be the project officer for this unexpected Southeast Asia test cycle. In turn, Jake picked the most knowledgeable and available individuals in operations, maintenance, communications and radar to be his principal advisers in their respective specialty areas. All had participated in prior Category I and Category II testing of the on-going aircraft systems modification. They were: Captain Herbert M. Bomhoff, Weapons Controller from College Eye Task Force Staff, who was already with the Detachment 1 at Korat; Captain Bobby G. Edney, Weapons Controller and Operations Adviser; Chief Master Sergeant Forrest G. Wright, Radar Technician and Avionics Adviser; Senior Master Sergeant Darrel R. Crossman, Radio Operator and Communications Adviser; and Master Sergeant Jimmie A. Chevrier, Radar Crew Chief and Operations Adviser. These key individuals were given the formidable task of preparing two EC-121Ts with an additional spare and all the necessary support and test equipment for deployment to Korat on a very short notice.³ A day later, they learned that the short notice meant 4 days. One day after that, on October 31, with their preparations already well under way, Lieutenant Colonel Willett showed up to give them an encouraging pat on the back and tell them that they needed to depart on 3 November.⁴ Wing Commander, Colonel Timmermans, was not told about the real purpose for this hurried deployment of his talented personnel assets and aircraft that he needed for his daily operations. Only Jake Mulherron knew about the support for the POW rescue mission that awaited the crews at the end of their unexpected deployment to Thailand.

Shortly thereafter Jake Mulherron held a meeting with the key people that included the aircraft commanders and informed them that after the completion of testing in Thailand they would fly an operational mission before returning home. He insisted that all crewmembers be volunteers for this deployment and gave all of those he already picked for his staff an option to get out of that commitment. No one chose to do so. After that meeting Jake chose to brief two of his Senior Noncommissioned Officers (NCOs),

Chevrier and Crossman, about the planned POW rescue effort. He obviously felt that, because these individuals would be in charge of all of the pre and post deployment preparatory work, they needed to know why it was so important to have the two EC-121Ts in full operational readiness in the shortest possible time frame. They needed to know that this would not be a normal shakedown testing of their new equipment.

The deployment turned out to be a truly demanding odyssey for Jake Mulherron and his men. It came at a time when the wing was straining to meet its normal Air Defense Command commitments. One EC-121T had already been to Korat on an earlier 30-day test mission in August and other "T" models were undergoing Category II tests with 552nd AEW&C crews off the coast of California. Earlier during the summer selected crewmembers participated in twelve Category I test flights with the contractor, Ling Temco Vought Electro Systems, in Greenville, Texas. Now two EC-121Ts and a cargo C-121G with 52 crewmembers and the most experienced technicians would have to depart on another long TDY.

The TDY and the hurried preparation for it was not a joy ride. The SEAOR-62 equipment was so new that it was still in its testing stage and it had not yet been formally accepted by the Air Force. Consequently, the supply channels for the new mod equipment and spares had not yet been established. This meant that the test task force technicians had to take everything with them to conduct the test. At Korat they could count on only the type of maintenance support that already existed for the "D" models. This required the use of a cargo C-121 because it was impossible to bring everything on the two "T" models.

The New Digital Data Receiver Ground Terminal with its support spares and radio relay equipment, needed for the testing in Thailand, had to be deployed immediately by a separate military airlift without communicating with the Detachment at Korat about its arrival or its purpose. That would be Lieutenant Colonel Willett's task to perform. To complicate things even more, Category II tests identified the need for three major wiring modifications that had to be performed to accommodate the new on board equipment. This wiring modification had to be delayed until the aircraft arrived at Korat.⁵

Departure of the SEAOR-62 Test Unit from McClellan was on time even though one EC-121T had to be switched for a well prepared and checked out standby spare aircraft. Equally prudent turned out to be the decision to fly the three aircraft together because the crewmembers and spares from the cargo ship provided valuable assistance along the way and insured the group's on time arrival at Korat on 12 November.

Korat Royal Thai Air Force Base ⁶

Once at Korat the men of the 552nd settled down in their quarters and began a coordinated 24hour work schedule to prepare their aircraft for operational flights. They were ready for flights over Thailand and Laos in two days. Each crew consisted of 17 men. Six of these, two of each, were Pilots, Navigators and Flight Engineers. The other eleven were: one Weapons Controller, one Radio Operator, six Radar Operators, and

three Radar Technicians. Of the 22 crewmembers that had to operate the new "T" model systems, only ten had any prior experience with it. Many of the new avionics components had never been activated before because of emission restrictions over the US airspace. There were no manuals and no approved checklists, only notes and papers accumulated by those who participated in most of the Category I and II test flights.

Senior NCOs Chevrier, Crossman and Walker, men with the most experience with the new equipment became the workhorse trainers of the rest of the crew. They scheduled two equipment shakedown and training flights a day. They would fly with one crew from 0800 until 1200, land and take off again at 1300 in the second aircraft with another full crew for a repeat four-hour flight. This went on for three days with these NCOs putting in at least 16 hour work days, in spite of the fact that two of them suffered from nagging respiratory problems which should have qualified them for duty not involving flying (DNIF) status. Crew rest was a problem because the NCOs and Airmen had to sleep in open bay barracks with double bunk beds for fifty men who slept and worked at odd hours. NCO and airmen quarters normally used by TDY College Eye crews were filled with the regular D model people from Taiwan.

All others were also kept busy. This was not an R&R (rest and recuperation) trip for anyone. All knew that their job was important and they felt pride in being chosen for this task. Lieutenant Colonel Mulherron and Chief Master Sergeant Wright made an overnight trip to the TACC-NS in Vietnam to verify that the equipment the command post used to receive encrypted automated air traffic data from the Naval Tactical Air Control System (NTDS) was the same that the new EC-121T systems required.

There wasn't much interface with the other College Eye crews that flew the regularly fragged daytime missions over Laos and the Gulf of Tonkin. These crews would come here for a 15-day TDY from their main operating base at Tainan, Taiwan. They would fly daytime missions every other day and then return to the main operating base for 7 days before coming back to Korat again. They knew that a new major aircraft modification was forthcoming and the type of activity they witnessed from the McClellan guys was considered quite normal for that kind of developmental effort.

Mission Briefing at Takhli RTAFB

As the NCOs recall, both aircraft and their crews were ready to fly a mission as of 17 November. Two days before that the MC-130s that trained at Eglin AFB arrived at their forward operating base at Takhli. There they established a secure briefing and planning facility that was used by all in country participating units. Three regular Tactical Airlift Command's C-130s were available to provide shuttle flights to transport key unit planners. They came to receive mission briefings and to coordinate their timing and tactics with the raiding force's plans that had been finalized while still in Florida. Lieutenant Colonel Jake Mulherron, Captain Bomhoff and Captain Edney, both Weapons Controllers, were the only officers from the College Eye group that were flown in from Korat and given all the raid's details.

The reaction of the three College Eye newcomers was much the same as that of the fighter and tanker crews. At first, they were stunned by the plan's daring intrusion deep into North Vietnam, but as they heard the entire plan unfold, they realized that it was possible to carry out and became enthusiastic supporters of such a noble effort. The security aspects of this important mission were stressed with them again and again in spite of the fact that all newly initiated participants quickly realized that the surest way to fail in this elaborately planned rescue effort would be to spread the word out. Too many lives were at stake here and any detection of loose tongues could very well lead to scrubbing of the whole mission. For that reason, the planners would not reveal a thing about the coming operation after returning to their home units. There was also a possibility that the mission could be recalled after launch and then rescheduled for execution at a later date. Tropical storm Patsy was moving toward the objective area and it appeared that the planned launch window of the night of 21-22 November was in jeopardy. Consequently, the flight crews were not told about the rescue of POWs during their final mission briefing. They were told that they were to fly a normal route to their orbit and provide support for an operation that would evolve somewhere over North Vietnam. They were told the truth only after they were airborne and the raid was definitely on.

Approaching typhoon Patsy forced Brigadier General Manor's hand to advance the raid launch by one day. This presented no problems because everyone was eager and ready. Final briefing of the previously selected representatives of all participating units was conducted on the morning of the 20th after which they were returned to their bases for final mission preparation and crew rest. At 6:00 PM the Special Forces raiders, who suspected that they had been preparing for a rescue effort, were told that they would be freeing as many as 60 POWs from a place outside of Hanoi called Son Tay. This had to be the most emotional moment for all who witnessed this event. Almost 100 Green Berets were fully trained and ready to go. But only 56 were picked. All were given a chance right then and there to step out if they had any compelling reasons for not going. The feelings of all alternates were torn between the adrenalin rush that initially electrified them when they learned of the mission's target and the extreme disappointment over not getting an opportunity to take part in the action.

Just as Colonel Bull Simons did earlier that morning at Takhli, Lieutenant Colonel Mulherron gave the same opportunity to his men to decline going on the nighttime mission during the pre departure briefing. The only difference was that at that time he still had not told them about the POW rescue. All they were allowed to know was that the mission they were about to fly was a TOP SECRET one and that it carried with it higher than normal risks. Not one man opted out. Consequently, all the crewmembers became volunteers.

The Raid

On November 20 at 1500Z, or 10:00 PM local time Frog One, the primary EC-121T took of from Korat en route to its orbit outside of the Haiphong harbor in the Gulf of Tonkin. Its Aircraft Commander was Lieutenant Colonel Dewitt H. Barwick.

Lieutenant Colonel John B. Mulherron, the SEAOR-62 Task force Commander was also on board. Ten minutes later the second aircraft, commanded by Major Richard T. Weber, followed to establish its airborne spare orbit in the southern part of the Gulf. Their Call signs were Frog One and Frog Two, respectively. No one recalls why these call signs were picked. They didn't fit the "Fruit Salad" call signs of the overland raider aircraft. The two HC-130P tankers from Cam Rahn Bay in South Vietnam were called Lime One and Lime Two.

Neither Frog crew was ready for what was about to happen. They were to take part in the biggest night operation of the Vietnam War that would launch a total of 116 aircraft. Fifty-nine of these would belong to three Navy Carriers, USS Ranger, USS Oriskany and USS Hancock, in the Gulf. The other fifty-seven would be Air Force aircraft launched from seven air bases: five of these were Royal Thai Air Force Bases at Takhli, Udorn, Nakhon Phanom, Korat, and U-Tapao, one at Da Nang in Vietnam and one at Kadena, Okinawa. Forty of these would be flown in the airspace west of Hanoi and 17 would join the naval operation over the Gulf. Monitoring of this large number of aircraft would create a very busy pre dawn morning not only for our College Eye crews, but also for the North Vietnamese ground based radar operators.

The first challenging moment confronted the crew of Frog One shortly after they arrived at their 500 foot low-level racetrack orbit. Then just before they were ready to climb into their higher 8,000 foot working orbit, just outside of the SAM range east of the Haiphong, a busted oil line caused the Aircraft Commander to cage the number two engine and relinquish his aircraft's assigned operational role to the airborne standby Frog Two. The aircraft switched places and the sadly disappointed crew of Frog One made an emergency landing at Da Nang AB. As one would expect, the Aircraft Commander's, Lieutenant Colonel Barwick's, judgment to abort the mission was questioned by some of the crew. They learned about the POW rescue attempt that was about to take place from Jake Mulherron after getting airborne. They became so pumped up about the great event that was about to take place that they wanted to continue the mission on only 3 engines. But the plan called for a fully operational EC-121T to link up with the TACC-NS at Monkey Mountain. That is why there were two Frogs instead of only one.

Captain Edney was the Weapons Controller on Frog Two. His radar crew accepted the unexpected challenge with great enthusiasm because by that time everyone knew what their mission was all about. Captain Edney had been the only man on the aircraft who knew about the POW rescue prior to their take off from Korat. Once in the air, he avoided the use of the intercom and went from one work station to another explaining to individuals and small groups what was about to happen on the ground. They all experienced the same adrenalin reaction as others upon learning how important their mission had just become. They were ready to prove their new equipment's worth during its first time combat employment. All systems checked out perfectly on their way to the Gulf and were in a standby status. Now they would exploit their new electronic systems and give Brigadier General Manor and his battle staff real life depiction of aircraft positions over Son Tay and, if needed, provide the friendly aircraft with MIG warnings and MIG intercept vectoring in case of a night time aerial dog fight. They

would track all aircraft and provide navigational assistance to anyone in an emergency, coordinate rescue of any downed aircraft and provide radio relay as required. Opportunities like that just don't come too often in one's entire career.

Meanwhile, at the Monkey Mountain Command Post Brigadier General Manor and his small staff watched the Gulf of Tonkin displays that showed the Navy tankers taking off from Da Nang. Carrier fighters would soon begin their launches for diversionary attacks. They knew the overland flight paths of the raiders, but no one had seen the Navy's plans charted on a map. Aircraft began appearing all over the place. With so many screens full of air activity, the scene was hard to follow. Some flare dropping fighters headed north of Haiphong toward the clearly defined and forbidden buffer zone with China. Others were zigzagging east of Haiphong and then there was a distinct track of low flying aircraft that were simulating mining of the harbor. Before long, all of these aircraft established their distinct tracks and orbits, but anyone who did not pay continuous attention to this air activity would only see too many aircraft going in all directions.



While the number of aircraft over the Gulf dazzled the staff, Udorn's radar lost tracking of the raider formations. They were already in their low level penetration tracks through the mountains into North Vietnam. Most of Manor's staff members did not realize that the radar targets, which continued to creep through the mountains, were based on flight plans that Homer Willett had programmed into the Center's computer. Once the radars on Monkey Mountain and the Navy in the Gulf picked up the formations descending into the Red and Black River basin, the computer generation ceased and Homer informed his friend, the Center's Battle Commander, that this whole operation was designed to rescue our POWs from Son Tay.

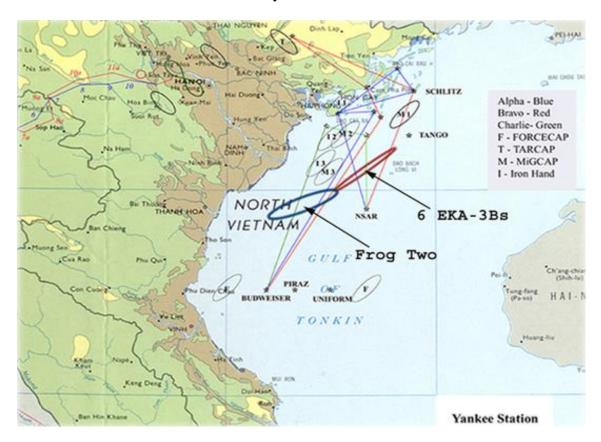
The Center was too busy for the word about the POW rescue to spread to those monitoring their assigned stations. No one had ever seen such heavy nighttime activity. There were problems with the new equipment and displays that they were using for the first time. They expected to receive direct download data from the Air Force EC-121 that were just like the Navy's tactical data system. But there was something wrong. They were sure that the problem was on board of the Connie. All systems at the Center seemed to be OK.

The crew of Frog Two was confronted with unexpected problems. Their eagerly anticipated first time employment of the new system was in jeopardy. The heavily counted upon IFF (identification friend of foe) processing equipment that checked out perfectly after they took off from Korat began malfunctioning. Master Sergeant Gary L. Walker and the other two Radar Technicians tried in vain to rectify the nagging situation. They checked and double checked the IFF threshold settings and ended up replacing the IFF interrogator with a spare. Nothing seemed to work properly. Captain Edney was not getting proper displays. All radars experienced unprecedented noise strobing and displayed range like concentric circles. Navy's jamming of the North Vietnamese radars with six EKA-3B aircraft was intensive and very detrimental to the efforts of Air Force radar technicians to rectify their problem. Their mission continued with questionable capability of their radars to provide vectoring information for the MIGCAP and Wild Weasel aircraft flying protective air cover for the raiders on the ground at Son Tay.

Everyone at the Center was amazed at the numbers of aircraft the Navy committed to the diversion and did not share the concern Lieutenant Colonel Homer Willett had about the plight of his College Eye EC-121T. This was to be the day when the Air Force reached the same degree of electronic sophistication that the Navy already possessed in the Gulf. Manor's battle staff had plenty to look at from a variety of sources and did not have much time to dwell on the problems Frog Two was experiencing. USS Wainwright had Positive Identification Radar Advisory Zone processing and was feeding the command post with the kind of real time radar data that the new EC-121T was supposed to provide. Radar technicians concluded that the Air Force problem was due to radar jamming by the Navy. College Eye problem forced Willett to rely on intelligence from the Center's translators of North Vietnamese voice communications to monitor the

MIG threat. With so many aircraft and radio frequencies used by the raiders the airwaves buzzed with all kinds of transmissions once the initial radio silence was broken.

Possible MIG launches against the Navy aircraft preoccupied Vice Admiral Bardshar in his Combat Information Center from where he monitored everything the Navy fed into the Air Force's TACC-NS at Monkey Mountain. He listened to the radios of his airborne aircraft and to the simultaneous translations of transmissions from the enemy's fighter control net. He was witnessing the enemy's utter confusion and hearing about the frustrated request for instructions from the MIG pilots who were ready to go, but who were never released to the air by their controllers. ¹⁰



Approximate orbits of Frog Two and six Navy EKA-3Bs. Frog One flew at 8 thousand feet and the EKA-3Bs between 21 and 24 thousand feet.

Meanwhile, the mood of Frog Two crewmembers was a gloomy one. All worked to their best ability to feed the TACC-NS with needed data, but felt frustrated by the problems they had to work with. Fortunately, the North Vietnamese reacted as the planners expected. They made a commitment to a SAM defense and never launched their MIGs that stood at the end of the runway at Phuc Yen, ready to take off of in pursuit of the invaders, if released and guided by their controllers. Those crewmembers in the cockpit and the ones who could peek out every now and then witnessed a spectacular display of Naval air power that harmlessly harassed North Vietnam with its fake attacks and blinding flare drops. They could see and perhaps even count the 20 SAMs that were

fired without effect on the aircraft over the Gulf. The Son Tay area was too far beyond the lit up Hanoi, but some arching SAMs fired against the USAF's F-4s and F-105 Wild Weasels could be seen in the night sky.

Target area navigation error caused the next raider problem. As planned, Cherry One left its helicopter formation at three and half miles out of Son Tay prison for a climb to 1500 feet, from which it would drop four illumination flares over the compound. At this point Cherry One's navigator broke radio silence and gave the helicopters magnetic heading to fly the rest of the way. Pilots of Banana and Apples One through Three were briefed to remain between the Song Con River and the paved tree lined road that paralleled it for some distance. Flying at 200 feet above the ground level they somehow ended up south of the road and headed for a building complex very much like Son Tay prison that was surrounded by similar rice paddies. When the flares lit up over the prison, Apple Three, the helicopter gunship, corrected its course to the left. But the pilots of Banana that carried the Blueboy Group for a landing inside of the POW camp did not see this course correction and focused their attention on the approaching complex on their right. Apple One, with the 22 man Greenleaf Group that was supposed blow up the Song Con River bridge and clear the buildings east of the camp, followed Banana. Once its pilots saw that the Blueboy gunners fired at the compound, they diverted their attention to locating their landing zone at the southeast corner of the complex. They did not see Banana abort its landing approach and turn north. They landed at a place some 400 yards away that looked exactly like their landing zone at Son Tay. Eager Apple One passengers exited immediately after their ship touched down.

Meanwhile, Apple Three, the gunship helicopter, strafed the guard towers and guard quarters with its miniguns and the Banana made a hard landing through larger than anticipated trees in the courtyard. Apple Two with the Redwine Group and the ground force commander Lieutenant Colonel Elliott "Bud" P. Sydnor, Jr. landed in the missing Apple One's landing spot in a rice paddy outside of the prison walls. When Sydnor realized that Apple One and its Greenleaf did not arrive, he ordered Redwine to execute Plan Green. This was an often-practiced contingency plan to carry out the raid without Greenleaf. It called for the Redwine members to spread out and execute both outside of the wall functions: clear the surrounding buildings of the enemy soldiers and provide for its own perimeter defense that included blowing up the bridge over the Song Con River.

This unexpected event created considerable confusion among all that monitored radio transmissions coming from the ground forces. The crew of Cherry Two heard one voice say: "We lost Axle!" Axle was the code name for "Bull" Simons who went on the raid as a backup for Sydnor. To us on board of Cherry Two "lost" meant dead.* We envisioned one helicopter downed with 27 people on board. Then we heard Sydnor's call for "Plan Green" and only later another voice: "You let them out at the wrong place!" That lit a light bulb. We knew immediately that Apple One must have landed at a similar compound that we referred to as the "Secondary School". We gave a sigh of relief.

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^{*} Author flew as the radar navigator on Cherry Two.

Manor's staff members, who were at the Center and understood the ground order of battle, must have reacted with a similar relief.

Meanwhile the Greenleaf troops were engaged in an unexpected heavy firefight with well armed occupants of the so-called Secondary School. The enemy soldiers appeared to be non-Vietnamese and sustained heavy casualties. Miraculously, none of the Greenleaf members were hit and in a well-disciplined retreat, they reboarded Apple One. The arrived at their proper Son Tay landing spot almost 9 minutes late. Equally miraculous was the meshing of the late arriving Greanleaf with those Redwine members that were already executing Greanleaf's perimeter defense tasks. Potential for friendly fire was great with Redwine members in places where Greanleaf would normally expect to see the enemy. Restoration of normal operations after initiation of "Plan Green" and other alternate plans was neither envisioned nor practiced. Once one of the three helicopter groups failed to arrive, the operation continued without that group rejoining the fight. The 56 men that "Bull" Simons picked to be on the ground that night were indeed the best. Their intensive training and professionalism avoided friendly fire injuries.

The worst of it for everyone came when Sydnor had to report that there were no "items"- code word for POWs – in the compound. No one who heard it wanted to believe it. Was it just a garbled message? It had to be repeated. Was all that effort for nothing? Sydnor ordered the rollback of the raiders and called for the helicopters to exfiltrate them.

As this scene unfolded, Manor learned that his F-4s and F-105s over Son Tay that had been receiving anti aircraft artillery fire came under SAM attack. That was good news for the departing raiders. It meant that the North Vietnamese would not be scrambling their MIGs. However, it was bad news for the Air Force jets that became SAMs primary targets. Sixteen SAMs were fired against them and two of them detonated close enough to damage two Wild Weasels. The first one, Firebird Three, was able to recover at Udorn with a rough running engine. The second one, Firebird Five, an airborne spare that replaced battle damaged Firebird Three, was not that lucky. SAM explosion ruptured its fuel tank and the bird flamed out on the way to join up with a rushing in KC-135 tanker. Both crewmembers bailed out over the Plain of Jars and were picked up without incident by returning Apples Four and Five at the first daylight.

With the departure of aircraft from Son Tay, the mission of Frog Two was over. They returned to Korat dejected without knowing the results of the raid. When they found out later that morning that the Green Berets raided an empty POW camp, they did not want to believe it. They theorized that the raid results were being held back for some reason. After all, this was a TOP SECRET operation and they were still under obligation to keep it that way. On the other hand the men of Frog One learned about the raid's result from Brigadier General Manor himself. His aircraft was parked right next to their disabled Connie so they had a chance to speak with him before his departure for Udorn.

The Aftermath

Because neither one of the EC-121T recovered at Udorn with the rest of the raiding and support aircraft, their crews were not debriefed and did not get to hear some of the first person accounts the raiders shared with each other. They had just participated in a highly classified mission and were not at liberty to talk about it to anyone. They had to rely on radio reports and the Stars and Stripes stories that followed. Their return home was a longer one than the one for the raiders from Florida. The Joint Contingency Task Group gathered at Eglin AFB for an extensive post mission debriefing that was summarized in the *Commander*, *JCS*, *Joint Contingency Task Group Report on the Son Tay Prisoner of War Rescue Operation*. It was published in three parts and declassified over the following years. The men of College Eye were not represented at this Eglin AFB debriefing.

Lieutenant Colonel Mulherron, the EC-121T task Force Commander, departed Korat immediately and flew to the Pentagon for a separate debriefing. One EC-121T proceeded directly home to McClellan. The return of the other two Connies and their crews turned into a long aircraft engine problem island hopping adventure. The cargo "G" model and the other new "T" model flew to Itazuke AB in Japan, which was the operating base for the EC-121D task force for Korea. They hoped to fly a Korean mission from there, but their Wing Commander, Colonel Timmermans, intervened and ordered them to rush on home. This they tried, but on the way to Midway, the "T Model" lost one engine and experienced problems with another. They diverted to the nearest island, which was Iwo Jima. Fortunately, the cargo Connie heard their distress and followed them and the rescue C-130 from Guam that intercepted them. Because it was night and the airfield at the Japanese Iwo Jima did not have runway lights, the C-130 had to drop flares to make their emergency landing possible. The cargo Connie followed the rescue C-130 to Guam. The safe and sound crewmembers of the crippled "T" model were forced to spend the Thanksgiving on this World War II famous island in the company of US Coast Guard personnel that operated the LORAN station there. The cargo Connie returned from Guam with spare parts and helped the crew to fix both engines. Then on their way to Wake Island the "T" model lost the same engine once more. This caused another delay at that isolated outpost. The Cargo Connie did not stop behind them this time and continued on its way to McClellan. Once airborne again, they made it to Hawaii where some Pacific Command's Air Force staff members requested a briefing on the raid. Here they were at a disadvantage, because they have not received much news during their continued TDY island-hopping odyssey. Master Sergeant Chevrier was the one who ended up representing the group at a high-ranking officer gathering. He disappointed all in attendance by declaring that he couldn't tell them a thing because he had not yet been debriefed and as far as he knew everything about the mission was highly classified.

By the time they finally returned home, the Task Group in Florida had disbanded and the 552nd AEW&C Wing raid participants got left out of a very interesting debriefing process. Because of that their story did not get fully recorded and because many mission details, including the capabilities of the EC-121T, remained classified for many years thereafter, the men themselves kept quiet about their participation.

All 552nd AEW&C Wing's participants, including the cargo aircraft crew and technicians should be proud of the work that they did during their deployment. They worked "their tails off" to get the EC-121T systems ready for the mission whose purpose they were not privileged to learn until after the wheels were up. Then they did their very best to make all the systems work in the air. That was their task and as all other raiders, they performed it with great dedication in a most professional manner.

Even though the extensive naval jamming of the North Vietnam's ground control radars interfered with the EC-121T's capability to monitor the IFF/SIF returns of the raiding aircraft in the Son Tay area, the College Eye performed USAF's first time ever combat mission with an automated air defense system. It was also the first time that the US Navy, US Marine and USAF automated tactical air defense systems exchanged mutual air surveillance data in real time under wartime conditions. ¹¹ The US Navy's diversion turned out to be its biggest nighttime operation of the Vietnam War.

Because there were so many supporting units involved in the POW rescue operation, and the names of in flight participants were known only to their commanders, the Joint Contingency Task Group command processed award nominations only to those Green Berets and airmen who were assigned to it on TDY orders. It was left up to each unit to recommend their participants for an appropriate award. By Special Order G-140 dated 23 June 1971, each of the men of Frog One and Frog Two was "awarded the Air Medal for meritorious achievement while participating in aerial flight on 21 November 1970".

The raid shocked the enemy and caused tremendous repercussions throughout the North Vietnamese military. One of the fallouts of the ensuing shake up was the immediate consolidation of all of their captives in Hanoi. There the previous solitary confinement of the POWs turned into a crowded but much more tolerable internment. The lives of many POWs were saved because in this new environment the men were able to nurse back to health their sick and weak comrades and help them survive the rest of their remaining captivity.

The raid also served notice to all our potential enemies in any future conflicts. American fighting men don't become pushovers when captured by the enemy. They can be counted upon to honor their code of conduct and will continue to resist the enemy during their captivity. The Son Tay message to the would be captors of American soldiers is that they can never relax their guard because there will always be soldiers like the Son Tay raiders who will volunteer to take ultimate risks to free their interned comrades.

552nd AEW&C Wing Participants

Crewmembers of Frog One:

Lt. Col. John B. Mulherron – Task Force Commander Lt. Col. Dewitt H. Barwick – Aircraft Commander Captain Bruce W. Rogers 1Lt. Samuel E. O'Briant

1Lt. Ronald D. Turner, Jr.

MSgt. Edgar C. Howard – Flight Engineer

MSgt. Gary T. Igo – Flight Engineer

Captain Herbert T. Bomhoff – Weapons Controller from the Det. At Korat RTAFB

SMSgt. Darrel R. Crossman – Radio Operator

CMSgt. Forrest G. Wright – Radar Technician

TSgt. James H. Bleecker – Radar Technician

SSgt. Roy A York – Radar Technician

MSgt. Jimmie A. Chevrier – Radar Operator Crew Chief

TSgt. James M. Russell – Radar Operator Assistant Crew Chief

SSgt. Charles A. Downs – Radar Operator

SSgt. Michael J. McConnell – Radar Operator

Sgt. Bruce A. Griffin – Radar Operator

Sgt. Alfred G. Scipio – Radar Operator

Crewmembers of Frog Two:

Major Richard T. Weber – Aircraft Commander

Major Irvin M. Gipson - Navigator

1Lt. Lawrence R. Conover

1Lt. Robert S. Craig

MSgt. Clarence R. Helm – Flight Engineer

MSgt. Robert H. Mansfield – Flight Engineer

Captain Bobby G. Edney – Weapons Controller

Captain Lawrence R. Lausten – Operations Analyst from the Det. at Korat RTAFB

MSgt. Donald P. Roy – Radio Operator

MSgt. Gary L. Walker – Radar Technician

TSgt. Henry A. Moore – Radar Technician

TSgt. Joel. S. Rosenow – Radar Technician

TSgt. James H. Lippert – Radar Operator Crew Chief

TSgt. Nicholas J. Zeri – Radar Operator Assistant Crew Chief

SSgt. Ronald G. Clark – Radar Operator

Sgt. Charles E. Russ – Radar Operator

A1C Davis O. Jimenez - Radar Operator

A1C Charles E. Martin –Radar Operator

Ground Support Team:

MSgt. Kiliarie M. Paquette- Propulsion Specialist

TSgt. Jerry B. Martin – Propulsion Specialist

TSgt. Larry D. Levell – Communications Technician, Crypto

TSgt Earl K. McNabb – Communications Technician, Crypto

TSgt. Donald I. Baker – Crypto Specialist

TSgt. Billy W. Gibson – Crypto Specialist

SSgt Reynaldo M. Herrera – Communications Technician Sgt. Harold A. Doral – Radar Technician Sgt. Frank V. Sylvester – Radar Technician A1C Michael S. Bates – Radar Technician SSgt. Paul W. Johnson, Jr. – Aircraft Mechanic, Crew Chief Sgt. Bobby D. Parsons – Aircraft Mechanic, Crew Chief

Cargo Support Aircraft:

Major William T. Mauser – Aircraft Commander Crew of four

Endnotes:

¹ Official Report, *The Son Tay Prisoner of War Rescue Operation*, Part 1, 18 December 1970, USAF HRA, Maxwell AFB, AL, 79.

² Oral History Interview of Lt. Gen. Leroy J. Manor by Mr. Hugh N. Ahman *et al.*, 26-27 Jan and 9 May 88, typed transcript, p 130, K239.0512-1799, in USAF Collection AFHRA, Maxwell AFB, AL.

³ 552nd AEW&C Wing History, 1 Oct –31 Dec 70, p 9, K-WG-552-HI, AFHRA, Maxwell AFB, AL.

⁴ Ibid., p 11.

⁵ Ibid., p 11.

⁶ Details of pre-mission testing and training at Korat are based on e-mail exchanges between the author and CMSgts Chevrier, Crossman, and Wright and SMSgt Walker.

⁷ Oral History Interview of Brigadier General Leroy J. Manor by Dr Charles Hildreth and William J. McQuillen, 31 Dec 1970, typed transcript, p 12, K239.0512-700, in USAF Collection AFHRA, Maxwell AFB, AL.

⁸ From e-mail exchange between the author and Lt. Col. Edney.

⁹ From e-mail exchange between the author and SMSgt Gary Walker.

¹⁰ Benjamin F. Schemmer, *The Raid* (New York: Harper & Row, 1976), p 199

¹¹ From e-mail exchange between the author and Colonel Homer Willett.

Table 1
Air Force Aircraft

Number	Type	Take off Base	Mission
1	HH-3	Udorn, Thailand	Land with Blueboy inside of the POW Camp
2	MC-130E	Takhli, Thailand	Lead ships for Helicopters and A-1E fighters
5	HH-53	Udorn, Thailand	Transported Greenleaf and Redwine Groups
5	A-1E	Nakhon Phanom, Thailand	Provided air to ground support for the raid
2	HC-130P	Udorn, Thailand	Provided refueling for helicopters
2	EC-121T	Korat, Thailand	Provided AF radar monitoring for the raid
5	F-105	Korat, Thailand	Provided SAM suppression for the mission
10	F-4	Udorn, Thailand	Provided MIG combat air patrol
2	RC-135M	Kadena AB, Okinawa	Routine airborne operation monitoring
1	RC-135	U-Tapao, Thailand	Radio relay aircraft
12	KC-135	U-Tapao, Thailand	Provided refueling for F-105s and F-4s
2	HH-53	Udorn, Thailand	Provided SAR response for downed crew
4	A-1E	Nakhon Phanom, Thailand	Provided SAR response for downed crew
3	C-130	U-Tapao, Thailand	Shuttled raider crews between the bases
1	T-39	Tan Son Nhut AB, RVN	Command support shuttle

57 Total

Notes:

- 1. HH-3 came from the $37^{\rm th}$ Aerospace Rescue and Recovery Squadron at Da Nang AB, Republic of Vietnam.
- 2. One Combat Talon C-130 came from Detachment 2 of the 1st Special Operations Wing at Pope AFB in North Carolina. The other one was from the 15th Air Commando Squadron at Nha Trang AB, Republic of Vietnam. It was used by the raiders in training flight at Eglin AFB.
- 3. Two HC-130P tankers came from the 39th Aerospace Rescue and Recovery Squadron at Cam Rahn Bay AB, Republic of Vietnam.
- 4. Two EC-121 T radar platforms came from the 552 Airborne Early Warning and Control Wing at McClellan AFB in California.

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Table 2 **Navy Carriers and Aircraft**

USS Ranger (CVA - 61)

Number	Type	Mission
1	E-1B	Airborne radar platforms for monitoring air traffic and assist
		fighters in MIG detection and intercepts. "Uniform" orbit.
1	KA-3B	Tanker aircraft launched from Da Nang Air Base.
2	EKA-3B	Electronic countermeasures, jamming of enemy radars and
		tankers. Launched from Da Nang AB.
2	A-6	Tankers.
2	F-4	Target combat air patrol (TARCAP) for track Bravo and
		MIGCAP at Station 3.
4	F-4	MIGCAP interceptors for Stations 1 and 2.
4	A-7	Rescue combat air patrol (RESCAP).
5	A-7	Iron Hand – Suppression of SAM and AAA radars.
8	A-6	Track Charlie – Simulation of mining of Haiphong Harbor.
29		

USS Oriskany (CVA – 34)

Number	Type	Mission
1	E-1B	Airborne radar platforms for monitoring air traffic and assist
		fighters in MIG detection and intercepts. "Tango" orbit.
2	EKA-3B	Electronic countermeasures, jamming of enemy radars and
		tankers. Launched from Da Nang AB.
2	F-8	Barrier combat air patrol (BARCAP) for Air Force C-135 high-
		flying aircraft – Combat Apple and radio relay.
4	F-8	Force Combat air patrol (FORCECAP) – protection of Yankee
		Station.
4	A-7	Tankers.
6	A-7	Track Bravo – Flare drops north of Haiphong.
8	A-7	Track Alpha – Flare drop east of Haiphong.
27		

USS Hancock (CVA – 19)

Number	Type	Mission
2	EKA-3B	Electronic countermeasures, jamming of enemy radars and
		tankers. Launched from Da Nang AB.
2		

59 Total

One EP-3, Big Look long range electronic surveillance aircraft from Guam operated over the Gulf.

Table 3 SON TAY RAID EVENTS

Local Time November 20-21, 1970

Time	Event
6:45 P. M	T-39 with Brigadier Genera Manor departs for Da Nang AB.
8:00 P. M	RC-135M, Combat Apple is on station over the Gulf of Tonkin.
8:00 P. M	Two airlift C-130s transport Green Berets with helicopter and HC-130 tan
to	crews to Udorn RTAFB.
9:00 P. M	One airlift C-130 transports A-1E pilots to Nakhon Phanom RTAFB.
8:45 P. M	Manor arrives at the Monkey Mountain Command Post.
10:00 P. M	EC-121T, Frog One takes off from Korat RTAFB.
10:10 P. M	EC-121T, Frog Two takes off from Korat RTAFB.
10:25 P. M	C-130E(I), Cherry Two takes off from Takhli RTAFB.
10:55 P. M	C-130E(I), Cherry One cannot start #3 engine at Takhli RTAFB.
11:05 P. M	U. S. Navy EP-3 Big Look from Guam takes up its position over the Gulf
to	Tonkin to provide electronic monitoring for operations over North Vietna
3:30 A. M	
11:07 P. M	HC-130Ps, Lime One and Lime Two take off from Udorn RTAFB.
11:17 P. M	Five HH-53 Apples and HH-3E Banana take off from Udorn.
11:18 P. M	C-130E(I), Cherry One takes off from Takhli 23 minutes late.
11:44 P. M	Five A-1E Peaches take off from Nakhon Phanom RTAFB.
12:00 P. M	RC-135 Radio relay from U-Tapao is on Station in the Gulf of Tonkin.
12:35 A. M	Frog One air aborts due to broken fuel line and recovers at Da Nang AB
12:36 A. N	Frog Two replaces Frog One as the new airborne radar platform.
12:40 A. N	Assault Formation refueling begins over Laos.
12:45 A. N	Five F-105 Wild Weasels take off from Korat RTAFB.
1:00 A. M	USS Ranger's KA-3B tanker takes off from Da Nang AB.
to	Six Navy EKA-3B ECM/Tankers take off from Da Nang. Two are from t
1:30 A. M	USS Hancock, two from the USS Ranger, and two from the USS Oriskan
1:00 A. M	Task Force 77 begins launching aircraft from the Gulf of Tonkin.

1:00 A. M	Twenty-five aircraft from the USS <i>Oriskany</i> :
to	One E-1B "Tango", AEW radar platform.
2:30 A. M	Two F-8 BARCAPs.
	Four F-8 FORCECAPs.
	Four A-7 Tankers.
	Six A-7 attack aircraft with flares on Track Bravo.
	Eight A-7 attack aircraft with flares on Track Alpha.
1:00 A. M.	Twenty-six aircraft from the USS <i>Ranger</i> :
to	One E-1B "Uniform", AEW radar platform.
2:30 A. M.	Two A-6 Tankers.
	Four A-7 RESCAPs.
	Five A-7 Iron Hands.
	Six F-4 MIGCAPs.
	Eight A-6 attack aircraft with flares and chaff on Track Charlie.
1:18 A. M.	First wave of five F-4 MIGCAP aircraft take off from Udorn RTAFB.
1:30 A. M.	First wave of six A-7s from the USS <i>Oriskany</i> depart on Track Bravo.
1:32 A. M.	Second wave of eight A-7s from the USS Oriskany depart on Track
	Alpha.
1:33 A. M.	Frog Two establishes radar-monitoring orbit over the Gulf of Tonkin.
1:45 A. M.	North Vietnam launches first SAMs against the Navy aircraft.
1:48 A. M.	Second wave of five F-4 MIGCAP aircraft take off from Udorn RTAFB.
1:52 A. M.	First flares are dropped by A-7s on Track Bravo.
1:56 A. M.	First flares are dropped by A-7s on Track Alpha.
2:03 A. M.	Eight ship wave of A-6s from the USS <i>Ranger</i> depart on Track Charlie.
2:08 A. M.	Wild Weasel F-105 arrive in orbit over Son Tay.
2:10 A. M.	First wave of MIGCAP F-4s arrives in orbit over Son Tay.
2:13 A. M.	Assault Formation arrives over the IP.
2:16 A. M.	Strike Formation breaks up abeam of the IP.
2:18 A. M.	Cherry One drops flares over the POW camp at Son Tay. "H" hour begins.
2:19 A. M.	Cherry Two reverses course and begins air drops.
	Banana with Blueboy lands inside of the POW courtyard.
	Apple One with Greenleaf lands at the suspected "Secondary School".
2:20 A. M.	Blueboy Elements assault their targets inside the courtyard.
	Apple Two lands at Son Tay and Sydnor calls for Plan Green.
	Greenleaf Hq. Element assaults the guard building.
2:23 A. M.	Blueboy Elements search the POW cells.
	Greenleaf Element #2 holds position at the road intersection.
	Greenleaf Element #1 provides fire support for the Hq. Element.
	Redwine #1 clears building 8D.
	Redwine #2 clears Building 7B.
	Redwine #4 clears the pump station.

-	
2:24 A. M.	Blueboy Elements find empty POW cells.
	Redwine #1 clears buildings 4A and 8E.
	Redwine #3 sets up a roadblock position at the canal bridge.
	Call for Apple One to extract Greenleaf Group.
2:25 A. M.	AAA radars become active over in the Son Tay area.
	Cherry Two enters primary radio monitoring orbit.
2:26 A. M.	Peaches One and Two attack the footbridge to the Citadel.
	Greenleaf Group engaged with enemy prepares for extraction.
2:27 A. M.	Blueboy #1 and #3 report from the courtyard. There are no POWs.
	Apple One returns to extract Greenleaf.
2:28 A. M.	SAM radars become active around Son Tay.
	Blueboy #2 reports no POWs in his area.
	Sydnor calls to revert to the Basic Plan.
	Redwine #4 blows up electrical power tower.
	Apple One brings Greenleaf Group to its landing zone at Son Tay.
2:29 A. M.	A1-E Peaches attack the Song Con River bridge.
	Greenleaf #1 clears Building 7B and 8F and links up with Redwine #2.
2 20 4 3 5	Blueboy Group reports that there are no prisoners at Son Tay.
2:30 A. M.	Redwine #3 engages a road convoy with LAW.
2.22 4.34	Sydnor issues a command to withdraw to the landing zone.
2:32 A. M.	Apple One is called to extract the first departing raiders.
2:33 A. M.	Redwine Element # 2 checks out the pump house.
224 4 34	Cherry Two leaves the primary orbit because of Firecan radar tracking.
2:34 A. M.	Redwine Element #2 fires LAW at a road convoy.
2:35 A.M.	North Vietnamese launch first SAMs in the Son Tay area.
2:37 A. M.	Apple One begins to load the first departing group of raiders.
2:39 A. M.	Cherry Two arrives in the alternate radio monitoring orbit.
2:40 A. M.	Firebird Three is hit by SAM. Replaced in orbit by Firebird Five.
2.41 A M	Apple One departs with the first group of raiders.
2:41 A. M.	Apple Two lands to extract the remaining raiders.
2:45 A. M.	Apple Two departs from son Tay with the remaining raiders.
2:46 A. M.	Firebird Five is hit by SAM.
2:48 A. M	Apple Three departs from holding area.
2:52 A. M.	HH-3 Banana is destroyed inside of the courtyard.
2:55 A. M.	Cherry Two leaves radio monitoring orbit.
3:17 A.M.	Firebird Five's crew ejects at 090/8 miles from Skyline TACAN.
3:18 A. M.	Udorn's Rescue Center receives report of downed Firebird crew.
3:20 A. M.	Lime One becomes ARRS King 21. Mission and call sign change.
3:25 A. M.	40 th ARRS Super Jolly Green Giants at Udorn are alerted.
2,26 A NA	56 th SOS Sandys at Nakhon Phanom are alerted.
3:26 A. M	Apples Four and Five locate the downed crew, hook up for refueling with
to 2.50 A M	Lime Two and prepare for a rescue pick up.
3:50 A. M.	C-123 Candlestick makes contact with the survivors and remains in
	control until the arrival of King 21.

3:50 A. M. Jolly Greens and Sandys depart home bases. 4:22 A. M. Cherry Two in orbit north of Skyline TACAN. 6:20 A. M. Apple Four picks up Firebird Five pilot Major Kilgus. 6:28 A. M. Apple Five picks up Firebird Five EWO Captain Lowry. Recoveries All Navy aircraft returned either to their carriers or to Da Nang. Fruit Salad aircraft, MIGCAP F-4s, and Wild Weasel F-105s recovered at Udorn for debriefing. EC-121 T, Frog Two returned to Korat. All other Air Force and Navy support aircraft returned safely to their home bases. Rescued Firebird Five crew returned safely to Udorn. Raiders and Fruit Salad crews returned to Takhli after debriefing at		
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o dolli.		Udorn.
C-141 medical evacuation aircraft that came to Udorn to pick up rescued		C-141 medical evacuation aircraft that came to Udorn to pick up rescued
POWs were used to return the raiders from Takhli to Eglin AFB.		POWs were used to return the raiders from Takhli to Eglin AFB.

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AIR FORCE AIRCRAFT in the SON TAY RAID



Two Combat Talons flew as lead aircraft for the raiding helicopter and fighter formations.



Five Super Jolly Green Giants (Apples One through Five) flew in the Assault formation led by Combat Talon Cherry One.



One Jolly Green Giant (called "Banana") flew in the Assault Formation.



Five Skyraiders (Peaches one through Five) flew in the Strike Formation led by Combat Talon Cherry Two.



HC-130P tankers (Lime One and Two) provided refueling for the raid's helicopters.



Two College Eye aircraft (Frogs One and Two) flew as Air Force radar platforms over the Gulf of Tonkin during the raid.



Ten F-4s, called Falcons, flew MIG Combat Air Patrol over Son Tay.

Twelve KC-135 tankers provided refueling for jet aircraft.

Ten tankers flew over Laos and two flew over the Gulf of Tonkin.



Five F-105 Wild Weasels, called Firebirds, provided suppression of enemy surface to air missile (SAM) and antiaircraft artillery (AAA) radars during the raid.



Two Okinawa based Combat Apples flew over the Gulf of Tonkin, monitoring aerial activity over North Vietnam during the raid.

One similar C-135 aircraft from U-Tapao, Thailand provided radio relay transmissions between the raiders on the ground and the Command Post near Da Nang in South Vietnam.

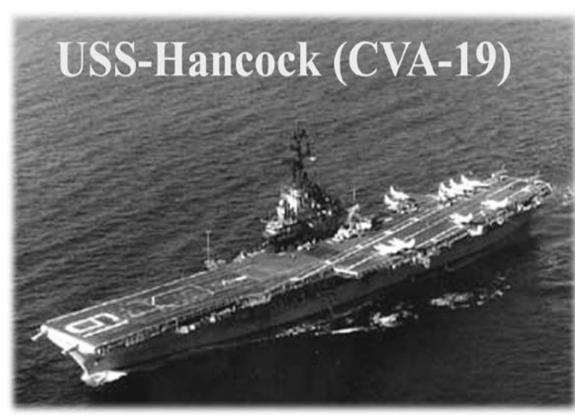
NAVY CARRIERS and AIRCRAFT



USS Oriskany launched 27 aircraft to create a diversion for the Son Tay raid.



USS Ranger launched 29 aircraft in support of the raid.



USS Hancock launched two EKA-3B Tanker/ECM aircraft from Da Nang AB.



Two E-1B aircraft flew as radar platforms for the TF-77 diversionary attack on Haiphong during the Son Tay raid.



Twenty seven A-7s flew diversionary attack tracks near Haiphong in support of the Son Tay raid.



Ten A-6 Intruders supported the raid on Son Tay by flying diversionary tracks in the Gulf of Tonkin



Six F-4s flew MIGCAP on the coast of North Vietnam during the Son Tay raid.



Six F-8 Crusaders flew BARCAP over the Gulf of Tonkin in support of the Son Tay raid



One KA-3B tanker aircraft flew in support of the diversionary attack in the Gulf of Tonkin



Six EKA-3Bs flew as tankers and ECM jammers over the Gulf of Tonkin supporting the Air Force and Army raid on Son Tay POW camp west of Hanoi.



One P-3 Orion from Guam, flying over the Gulf of Tonkin, supported the Son Tay raid by monitoring North Vietnamese electronic and voice transmissions.