

# 1<sup>st</sup> COMBAT EVALUATION GROUP



## **LINEAGE**

1st Radar Bomb Scoring Group constituted, 9 Jun 1954  
Activated, 10 Aug 1954  
Redesignated 1<sup>st</sup> Combat Evaluation Group, 1 Aug 1961

## **STATIONS**

Carswell AFB, TX  
Barksdale AFB, LA, 24 Jul 1961

## **ASSIGNMENTS**

## **COMMANDERS**

Col Otis Parks  
Col Melvin R. Schultz,  
Col Jacob A. Hutchison, 16 May 1966

## **HONORS**

**Service Streamers**

**Campaign Streamers**

**Armed Forces Expeditionary Streamers**

**Decorations**

**EMBLEM**

**MOTTO**

**NICKNAME**

## **OPERATIONS**

The group's mission was to provide the best possible training and comprehensive evaluation of SAC's aircrews.

On 10 August 1945, the 3903rd Radar Bomb Scoring Group, its three squadrons, and all detachments were discontinued. Simultaneously, the 1st Radar Bomb Scoring Group was activated. This new organization absorbed all personnel and equipment of the 3903rd. By March 1956 the Group consisted of 28 detachments. The numbers of missions scored increased as the size of the organization grew. For example, in 1956 the Group recorded 140,919 attacks against sites. Of these some 127,070 were successfully scored.

On 1 August 1961, a major organizational change came to fruition when the Department of the Air Force activated the 1st Combat Evaluation Group at Barksdale AFB, Louisiana. With this action the 1st Radar Bomb Scoring Group and the 3908th Strategic Evaluation Group were merged into one organization. This new organization then had the dual mission of providing radar bomb scoring services as well as standardization and evaluation services.

With the advent of B-52 bombing in Southeast Asia in 1965, it soon became apparent that a requisite number of suitable offset aiming points were not available. Secretary of Defense McNamara stated: We are faced with very, very heavy jungle in certain portions of South Vietnam, jungle so heavy that is impossible to find a good aiming point in it. We know some of these jungles are used by the Vietcong for base camps and for storage areas.... You can imagine that without an ability to find an aiming point, There is only one way of bombing it and that is with a random pattern...With the force we had (B-52s) trained as it was in pattern bombing...the military commanders felt-and I believe this was a proper use of the weapons-that these strikes would destroy certain of the Viet Cong base areas, and, as a matter of fact, they did...There is no other way of doing it.

In October 1965 the Air Force began further modification of its B-52 force to increase the internal loading from 27 to 84 of the 500 or 750-pound bombs. In March 1966 the modified bombs went into operation. Concurrent with the deployment of the modified B-52, the Air Force installed Combat Skyspot; a ground directed bombing system, in South Vietnam. The system employed existing (1 CEVG) mobile ground radar control units and permitted Military Assistance Commander Vietnam (MACV) considerably more latitude because the selection of targets would no longer depend on nearby, prominent geographical features; they had only to be within range of Combat Skyspot equipment. Our mission of ground directed bombing is an extension of area saturation bombing for munitions delivery in areas devoid of suitable aiming points. In conjunction with normal bombing procedures, a ground director can provide additional assurance that friendly forces are safeguarded. As originally planned, upon verification of Sky Spot's abilities, four units were to be deployed, three to Vietnam and one to Thailand. Each unit was to consist of five vans and 37 personnel. Vans included one for control and plotting, tow for power, and one each for administration and supply, and communications and maintenance. Personnel included 4 officers, 31 airman, and 2 civilians per site. Personnel requirements were subsequently reevaluated and established as 24, including 3 officers, 1 civilian, and 20 airmen.

Using radar, 1CEVG personnel would direct the bombers along a designated route to a bomb drop point, providing enroute corrected headings and speed as needed. Then, at the proper moment, the pilot received a signal to release his bombs. Combat Skyspot not only provided flexibility in targeting, but its accuracy soon surpassed that of the previously used radar synchronous bombing. In time, practically all combat areas of Southeast Asia were within range of one or more of the growing number of Combat Skyspot facilities.

The original name for Combat Skyspot was simply Skyspot in 1965. In October of that year the name as changed to Combat Proof. In January 1967 the name was again changed to its final designation, Combat Skyspot. Air Force pilots can now bomb targets near our forces at night, or in rain, fog, or clouds, thanks to a radar system nicknamed Sky Spot. Operating a mobile radar set, a Sky Spot controller can direct strike aircraft with great accuracy through bad weather and darkness. The controller tracks an aircraft on radar, corrects its direction and speed to the target, and signals the pilot to drop when he is over the target.

In 1967, a U.S. Air Force clandestine operation code named "HEAVY GREEN" was undertaken to airlift 150 tons of equipment by helicopters to landing site 85 (abbreviated LS-85 and called LIMA SITE-85) atop Phou Pha Thi, a mountain in Viengxay District, Houaphanh Province, Laos. The equipment was to upgrade the original TACAN navigation equipment with an air-transportable version of the AN/MSQ-77, the AN/TSQ-81. This enabled American aircraft to bomb North Vietnam and Laos at night and in all types of weather, an operation code-named COMMANDO CLUB. PONY EXPRESS was the code name for weekly supply flights to the 700-foot strip (landing site L.S. 85) in the valley below, brought by Air Commandos from Udorn RTAFB in Thailand. The site was destroyed in March 1968 in the Battle of Lima Site 85. Four airmen were airlifted out by helicopter, but one, CMSgt "Dick" Etchberger died en route. (In 2010, Etchberger was posthumously awarded the Medal of Honor for his actions.) Eleven airmen left behind were initially listed as MIA/Laos, later changed to KIA.

On 5 June, six 1st CEG personnel encountered an ambush and were killed approximately five kilometers (3.7 miles) south southeast of Dong Ha Air Base, Vietnam. The deceased personnel included:

TSgt Antone P. Marks  
TSgt Bruce E. Mansfield  
SSgt Ephraim Vasquez  
SSgt John P. Guerin  
A1C Rufus L. James  
A1C Jerry D. Olds

Personnel involved departed Dong Ha by jeep at approximately 0930 hours local, on 5 June. They were searching for a survey point for Project Sky Spot. The survey party was required to establish radio contact every 15 minutes and the last contact was at 1045 hours. At approximately 1430 a Military Assistance Command Vietnam advisory team notified Dong Ha that the survey party apparently encountered an enemy ambush and was killed by small arms fire. Although armed, there was no evidence that the team returned fire during the ambush. Of the six personnel, four were from the headquarters, and remaining two were from Detachment 10, 10 RBS Squadron, at Hastings, Nebraska. Remains of the four headquarters personnel departed Vietnam for return to the Continental United States on 8 June. Remains of the two detachment personnel, burned in the

incident, did not leave Vietnam until 13 June. Interrogation of personnel having knowledge of the ambush revealed that the survey team traveled beyond safe perimeter limits. The party chief (TSgt Marks) was reportedly briefed by the Dong Ha Marine force Commander as to the possibility of Viet Cong in the area. The Marine Commander also recommended a Marine platoon accompany the survey team. The 1st CEG team chief declined the security force. The loss of the survey team proved a hardship on the 1st CEG. Our remaining teams, needed in the United States was scheduled to depart Travis AFB, California, on 11 June. We initiated action resulting in SAC requesting immediate personnel assistance to replace our losses and allow the organization to regain a site survey capability in the Continental United States.

On 15 August 1973, with the cessation of bombing in Southeast Asia, the last Combat Skyspot sortie was flown. In the seven years and six months of Combat Skyspot operations, 1 CEVG personnel manned ground radar sites on a 24-hour per day basis in such locations as Bien Hoa, Binh Thuy, Pleiku, Thuy, Pleiku, Dalat, Hue, Phu Bai, Son Tray, Da Nang, Quang Tri, and Dong Ha South Vietnam. In Thailand, the locations included, Nakhon Phanom, Udorn, and Ubon.

The Combat Skyspot mission was not limited to all-weather weapons delivery. These sites also directed Commando Vault missions, the deployment of helicopter landing sites zones by releasing 10,000 and 15,000-pound bombs from C-130 aircraft in support of ground forces. Further, Combat Skyspot sites aided in search and rescue missions and provided navigation fixes for a variety of aircraft.

During the 90-month period of service in Southeast Asia, Combat Skyspot crews directed 75 percent of the B-52 strikes in that conflict. Under Combat Skyspot over 300,000 USAF, Navy and Marine sorties were controlled. Additionally, Combat Skyspot members were responsible for more than 150,000 tactical air strikes.

On 1 April the initial Sky Spot unit (OL-21/Bien Hoa Air Base, Vietnam) became operational. This unit, capable of tracking aircraft to a distance of 98.6 nautical miles radius of the site.

Sky Spot Two (OL-22) was established at Pleiku, Vietnam and became operational on 26 April. Personnel to man the site arrived on 12 April and found the location was complete and ready for equipment installation. The equipment arrived aboard three C-133 transports between 12 and 16 April. By the latter date, all equipment was in place. On 26 April, a tactical (strike) mission was flown and it was finally apparent that no further calibration was needed. Aircraft were guided and bombs dropped through the clouds from 9000 on a Viet Cong troop concentration. The forward air controller reported a perfect hit with a CEA of less than 150 feet and all bombs in the target area.

13 August At 0615 hours the 38th Aerospace Rescue and Recovery Squadron at Pleiku requested Sky Spot assistance in directing two rescue helicopters. By 0630 hours the controller had the helicopters over the requested coordinates. The weather included low ceilings and ground fog. The helicopter mission was to pick up seriously wounded personnel and deliver them to a field hospital. The helicopter pilots indicated they would have had extreme difficulty navigating without the aid of Sky Spot.

Sky Spot Three, the only unit to be located in Thailand. This unit was originally scheduled to Phu Mu Hill, which was approximately 12 miles south of Mukdahan, Thailand. SEVENTH Air Force eventually agreed to locate the system at Nakhon Phanom. This location offered several advantages, including an on base location, no logistics problems, and a fenced and guarded aircraft control and warning compound. By 19 April the survey had been completed. We experienced difficulties in getting the equipment delivered to Nakhon Phanom, as that airfield was not cleared for the C-133 transports employed to carry the equipment. In view of this, Military Airlift Command requested an alternate destination. SAC could not provide an alternate, so an operational waiver was requested to operate C-133's into Nakhon Phanom. This was approved, and the aircraft were scheduled at daily intervals. The first aircraft was due to arrive on 15 May, but was diverted to Bangkok due to engine failure. The aircraft then arrived at 1525 hours (local) on 16 May. Just over an hour after arrival the Bomb Directing Central Radar Van was dropped during unloading when a dolly broke. It took seven more hours to complete the unloading operation, and fortunately there were no damage. The second aircraft arrived on the 18th, and the final aircraft on 20 May. By 21 May, all personnel and equipment were in place.

The survey for location number four was scheduled to begin on 7 May. The unit was to be located at Dong Ha, Vietnam, as planned. This location required the airlift to terminate at Hue Phu Bai and a subsequent road convoy to Dong Ha. Equipment for Sky Spot Four was obtained from the Bayshore, Michigan, RBS Detachment. Three C-133's for the airlift were scheduled for 1 through 3 June from Barksdale AFB, Louisiana, which was the assembly point for all Sky Spot deployments. Aircraft were scheduled to arrive at Hue Phu Bai on 5, 6, and 7 June. A problem at Dong Ha was the collocation of a Marine TPQ-10 radar bombing unit. At a meeting on 27 May, between the Air Force, Navy, Army, and Marines, the decision was made to go ahead with locating the Air Force equipment and determine the extent of interference during initial operations. The Marines also indicated the TPQ-10 could be relocated if the Air Force AN/MSQ-77 could support their forces. By 6 June, the first two aircraft had arrived at Hue Phu Bai. The equipment arrived undamaged, but could not be moved to the site, as a Marine escort was not available for over the road movement. The Marines were engaged in priority operations in the area at the time. Additionally, the survey was incomplete, due to the survey team being casualties on 5 June, discussed in chapter two. As an interim measure, an attempt was to be made to establish the location by picking coordinates from a local map. By 25 June all equipment was in place and operating. The location was still inaccurate, but was the best available due to enemy action at survey stations. On 27 June, the target was calibrated and proved accurate to within 150 feet at a distance of 43 miles. The site became operational on 30 June. On 3 July, the first operational mission was flown and the excellent CEA and CEP average was 107 feet for the period 3 through 5 July. The greatest miss distance during this period was 200 feet. The site performed well. On 17 July, when the first B-52 heavy bombers were scheduled, three waves of two aircraft each of the Guam based giants flew under Dong Ha's direction. The site reported the second wave over flew the target due to intermittent communications, while the CEA for 99% of the ordinance was 1237 feet, and the greatest miss distance was 1975 feet.

The fifth Sky Spot system was ordered on 15 April. SEVENTH Air Force indicated a requirement existed for a fifth system in the Dalat, Vietnam area. This system was required to provide complete coverage of the II and III Corps area, as well as furnishing a low altitude capability in support of

friendly forces in the south central section of the country. The additional system was requested for 15 June. On 27 April, SAC advised that a fifth system could be made available for Sky Spot. We completed the initial survey of the Dalat area on 30 April, and pinpointed a tentative location 15 miles east southeast of Dalat. This location was adjacent to a permanent communications site atop a hill, was fenced, and had a Vietnamese Army security force. On 4 May, Air Force advised that a fifth system had been approved for deployment to Dalat, and deployment date would be established by SAC, although a target date of 25 June was subsequently established. The necessary airlift was requested for 25, 26, and 27 June, and was approved. The initial site survey was completed on 2 June and the site selected was within a national police force training compound.

SEVENTH Air Force decided to operate Sky Spot Five and Sky Spot Three side by side, as Sky Spot Five was an extended range system (200 nautical miles). This was to allow correlation of units, provided minimum system down time, and assist in determining the requirement for modifying additional units. SEVENTH Air Force did not desire to replace the Sky Spot Three system with the Sky Spot Five system until the accuracy of the new system was verified, although they preferred the extended range system in Thailand rather than Vietnam. Air Force had previously suggested that the extended range for the Nakhon Phanom unit should be accomplished through a modification to the existing equipment. Air Force stated that the anticipated shipment date of the modification equipment was 1 July, assuming tests in the Continental United States proved successful. They estimated the modification installation time would be only three to four days. The destination of Sky Spot Five was changed from Dalat to Lien Khuong, presumably due to the airfield capabilities. The first aircraft was requested to be rescheduled from Barksdale AFB, Louisiana, on 30 June to Nakhon Phanom to offload the Sky Spot Five equipment to conduct the comparison with Sky Spot Three. The remaining two aircraft were to depart Barksdale on 7 and 8 July, respectively, enroute to Lien Khuong. The third C-133 was to continue empty to Nakhon Phanom from Lien Khuong to pick up one of the two radar vans employed in the test. By the end of the quarter, 30 June, this schedule had been approved.

Sky Spot Five (OL-25/Dalat, Vietnam) was more difficult to be established than any other site. In addition to the three aircraft already scheduled and reported, we requested a fourth C-133 transport from Barksdale to Lien Khuong, Vietnam, to arrive by 15 July. The purpose of this additional flight was to deliver three water purification units which were not available at the time the original schedule was finalized. This aircraft was scheduled to leave Barksdale AFB on 11 July. As scheduled, the second, third, and fourth C-133s departed Barksdale AFB on 7, 8, and 11 July, respectively, enroute to Lien Khuong, Vietnam. The third C-133 had the additional mission of flying from Lien Khuong to Nakhon Phanom, Thailand, to move the 100 nautical mile equipment previously installed at Nakhon Phanom to Lien Khuong.

By 14 July, Two aircraft had arrived and the remaining operational equipment was due in from the Sky Spot Three location on 15 July. Site preparation began on 20 July, and leveling was approximately half complete by 29 July. By 4 August, leveling of the site and grading of the road to the site was approximately 75% complete, but efforts had been drastically slowed by three days of rain. Rock was being crushed manually and spread at the location. By 6 August, gravel and rock laying were approximately half complete and the road was in a satisfactory condition to move the equipment to the site if the rain stopped, or continued light. Revetment materials were scheduled to be moved on 9 August. Near completion of the revetment was necessary prior to moving the

equipment to the operating location. Safety of the equipment was not otherwise possible, due to known enemy activity in the Police Academy grounds where the site was located.

By 14 August, rock and gravel spreading at the site, a tedious process to accomplish by hand, was approximately 75% complete and was scheduled to be rolled the following day. On 16 August, the site reported the teletype facilities had been out of commission for a week due to generator outage, but that replacement generators had been supplied by Clark Air Base in the Philippines. Revetment materials and sand were on the site and personnel were filling sand bags. Sections of the revetment were being assembled by a civil engineering team and awaiting a forklift and welding equipment, on 18 August. The forklift arrived on the 20th, and the revetment was being erected, although foundation materials had not arrived by the 21st of August.

On August 20th we were advised that the Seventh Air Force Commander was concerned about the amount of time required to place the Dalat location on the air. Also, equipment was being cannibalized to keep the other four sites on the air. This, of course, could have led to an embarrassing situation if the equipment was non-operational after our other problems had been eliminated. We ordered that the unit not be further cannibalized without the theater Commander's approval.

By 23 August, the revetment was over half complete, but then work was slowed by rain. Road conditions were so poor that four-wheel drive vehicles were required, by the 1st of September. By this time, one wall of the revetment was complete and two other walls were half finished.

Vans were finally moved to the site on 9 September, and the following day the revetment was closed to a 10 foot entry way, antenna installation was completed, and power was applied. Communications equipment problems were immediately apparent, but were cleared up by 11 September. There was still no material for a security fence or lighting, although enemy activity was noted in the area and, as personnel at the site stated: "We are unable to become complacent." Calibration flights were attempted on 15 and 16 September and completed on 19 September. On 21 September all equipment became operational, and the site was declared operational on 26 September. On 27 Sep, the first attack was directed by the site and involved two F-100s striking a Viet Cong area.

Into the 1980's the personnel of the 1st Combat Evaluation Group continued to provide the best radar bomb scoring services in existence. This, combined with the development and acquisition of new and sophisticated equipment, plays a major role in the readiness of the Strategic Air Command and the security of the United States.

#### Subordinate units

Det 1 La Junta, Colorado

Det 2 Holbrook AFS, Arizona

Det 3 Statesboro, Georgia

Det 4 Harrison, Arkansas

Det 5 Wilder, Idaho

Det 6 Bay Shore, Michigan,

Det 7 Ashland Strategic Training Range, Ashland, Maine  
Det 8 Blue Grass Army Depot, Richmond, Kentucky  
Det 9 St. George, Utah  
Det 10 Naval Ammunition Depot Hastings, Nebraska  
Det 11 Fort Drum Watertown, New York  
Det 12 Hawthorne, Nevada  
Det 13 Ellisville, Mississippi  
Det 14 Bismarck, North Dakota  
Det 15 Tan Son Nhut Air Base South Vietnam  
Det 16 Powell, Wyoming  
Det 17 Havre, Montana  
Det 18 Forsyth, Montana  
Det 19 Dickinson, North Dakota  
Det 20 Conrad, Montana  
Det 21 Belle Fourche, South Dakota  
Det 22 Pleiku Air Base, Southern Vietnam  
Det 23 (Later:)OL-23 Udorn Royal Thai Air Force Base, Thailand  
Det 24 Andersen AFB (Northwest Field), Guam  
Det 26 (Later:)OL-26, Binh Thuy Air Base, RVN  
Det 28 Osan Air Base, South Korea  
Det 50 Bergstrom AFB, TX

OLA7 Matagorda Island Air Force Base  
OL-24 Dong Ha Marine Combat station  
OL 25 Ubon Royal Thai Air Force Base, Thailand  
OL-CD Castle AFB, CA



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