AFEHRI File 19-10

Research Materials/Source Documents ENLISTED FIRSTS

FILE TITLE: Early Air Force Pioneer, Father of U.S. Precision Bombing - MSgt (later Major) Ulysses S. Nero

Reviewed by:

AFEHRI Representative DR. akin date 2708C 97 date 28 Ja-18 **EPC** Representative 13, Tor 38 **Scanner Operator** zer date **APPROVED BY:** GARY'R. A'KIN, CMSgt, USAF Director Air Force Enlisted Heritage Research Institute



General Billy Mitchell asked; "Do you think that you could take those two bombs that you have under your aircraft and go out there and hit that target?" "Positively, General. Given the opportunity and a pilot who would follow my instructions, I think I could do right well."

Ulysses S. Nero

On September 5,

1923, a Martin-Curtiss NBS-1 bomber flew towards the obsolete battleship U.S.S. New Jersey. The bombardier, Ulysses S. Nero, would make history by dropping a single 1,100 pound bomb down the smokestack of the battered vessel, which exploded and sank in three minutes and 17 seconds. This is the remarkable story of a true Air Force pioneer.

NERO

THE

PIONEER

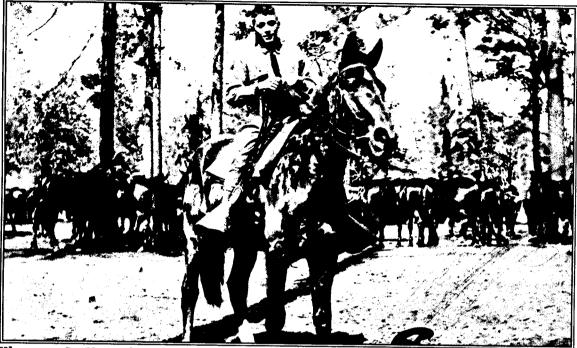
by

William I. Chivalette Director of Operations Airmen Memorial Museum Hysses S. Nero, a man described as

the father of American precision aerial bombardment, was born in the bustling town of Phoenixville, Pennsylvania, on November 13, 1898. As the third son of Antony and Margaret Nero, "Sam" completed 11 years of education and at age 14 began work in the shipyard as a rivet heater. He completed high school at the age of 15 by working in the shipyard by day and attending classes at night. News of World War I filled the Longing for excitement, newspapers. young Sam and some friends decided to enlist. The National Guard rejected Sam because at 100 pounds, he lacked the necessary weight. He and his firends visited the Army recruiting station and on June 13, 1917, at the age of 19, he enlisted in I Troop of the 13th Cavalry.

Nero's early military experiences took him to New Mexico, Kansas, France and Germany. The Army sent his cavalry unit from Fort Riley, Kansas, to New Mexico to chase Francisco (Pancho) Villa back into Mexico. This cavalry action was the last in American history because, effective November 1, 1917, Congress passed legislation that converted the Army's cavalry units to artillery. Young Nero received praise and respect for coolness under fire (see photo on page 2).

ŧ



Ulysses S. Nero in the 13th Calvary, I Troop, Fort Riley, Kansas, in 1917. U.S. Nero Collection, Airmen Memorial Museum.

Nero joined the Signal Corps because he found the living conditions were much better and he was less subject to kitchen patrol (KP). Soon after his transfer, he saw action on the battlefields of France during World War I. Although he performed well, on April 18, 1918, Ulysses again transferred, this time to the Aviation Section of the Signal Corps. The Pennsylvania youth experienced rapid advancement between the years 1917 and 1919, rising to become a staff sergeant and Non-Commissioned Officer in Charge of the wireless station.

After the war, Nero's unit occupied Germany. Occupation duty was generally good, according to Sam. Eventually, he returned to the United States, and although highly recruited, mustered out of the U.S. Army Air Service as a staff sergeant on June 27, 1919.

Life as a civilian lasted less than three years for Sam Nero. He worked as a ship fitter, railroad apprentice, heavy equipment operator and baker; delivered horses; and worked for the Bethlehem Steel Corporation, a coke outfit and a leather mill. He continued his education, receiving his second class engineer's license, and attended night school.

Realizing there might be more of a future for him back in aviation, Sam reenlisted in the U.S. Army Air Service on November 6, 1921. His first station was at the Aberdeen Proving Grounds in Maryland, where he spent eight eventful years. Thanks to his World War I service, the Air Service assigned him to communications, armament, engineering and ballistics with the 49th Squadron. Ballistics branched out into the study of bomb development for Nero over the next eight years. He became intimately connected with Air Service bombing experiments from both heavier- and lighterthan-air delivery vehicles.

Meanwhile, the First Sergeant sent him to the wireless section because of his previous rank and experience. Initially, Sam was the low man on the totem pole. The section had three corporals, one with 20 years of service.

1921 was a pivotal year for the Air Service. The Assistant Chief of the Air Service, Gen. William "Billy" Mitchell, was the leading crusader in a campaign to win independence from the Army, or at least a measure of autonomy. Through theoretical air raids on U.S. cities and the ship-bombing trials of 1921, he kept himself and the issue of air power before the American people (see photograph below).

By the summer of 1922, Sam, now a corporal, was in charge of the Radio and armament Section at Aberdeen, where he would remain until May 1931. Among the innovations he developed was a means of communicating between aircraft and ground personnel that combined Morse code and voice. The Air Service eventually adopted this system as SCR 134. Billy Mitchell visited Aberdeen to find out if the funding he allocated to Nero was wisely spent. General Mitchell was so impressed with Nero's progress that he sent him four complete receivers and transmitters, which literally brought the radio station at Aberdeen into the modern age. Nero and his people developed a lot of "gadgets" and test equipment that the Air Service improved upon and later adopted.

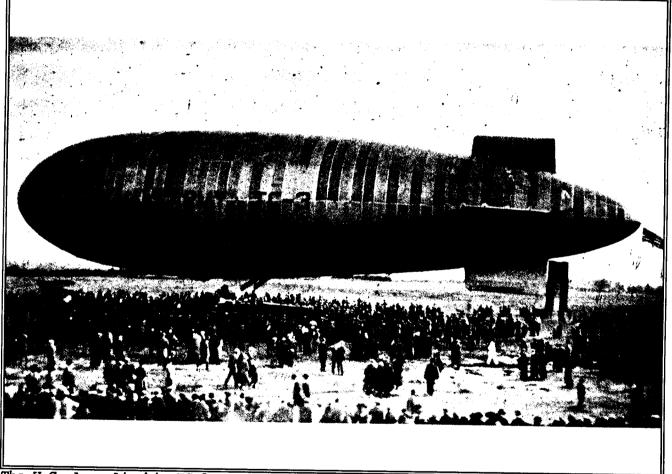
During that period at Aberdeen, the Army Ordinance Department built bombs that the Air Service tested. At first, they dropped the bombs in a large general area, between 50 and 150 acres. To provide more accuracy in bombing, Nero invented a nearbomb sight (the Nero Sight), after which they managed to tighten the range to 10 acres. Several bombardiers tried unsuccessfully to master the new bomb sight. The unit commander decided its inventor should be the one to demonstrate it. Additionally, the commander was so interested in the project that he piloted the airplane himself. Ulysses impressed him by dropping four



Brig. Gen. Billy Mitchell, in the Cockpit of a plane at Selfridge Field, Dayton Races, 1922, C/O Air Force Still Photo Collection.

bombs in a 10-acre square, just far enough apart so the craters did not overlap and were easily measured, a feat never before accomplished.

During the same period, Master Sergeant Stewart Smink, one of the first two enlisted pilots to graduate from the flying school at Brooks Field in 1923, and Nero frequently teamed up in flight testing of air ordinance. Sergeant Smink taught Nero to going 95 miles an hour. Nero had an opportunity to disprove that theory when the Air Service conducted a series of bombing accuracy tests at Aberdeen between the airplane and the balloon. Nero was the representative bombardier for the heavierthan-air (airplane) section. In April 1923, he dropped 19 bombs from an MB-2 at 2,500 feet, putting 18 of them on target. The next day he put 19 of 19 on target. In a four-



The U.S. Army Airship TC-3 at an airshow, Logan Field, May 1923, C/O Nero Collection, Airmen Memorial Museum.

fly, although Sam never attended a formal flight academy or school.

Prior to 1923, people generally believed that a bomb dropped from an airship (see photograph above) was more accurate than one dropped from an airplane month period, the lighter-than-air (balloon) section bombardiers completely missed the targets, despite near daily attempts. Their commander felt they had quality bombardiers and instructed Nero to attempt bombing targets from a balloon. Initially, Sam experienced many problems with the airship, winds and just getting the crews to follow his suggestions. When the balloon crews finally listened and picked up their speed, he hit the target every time.

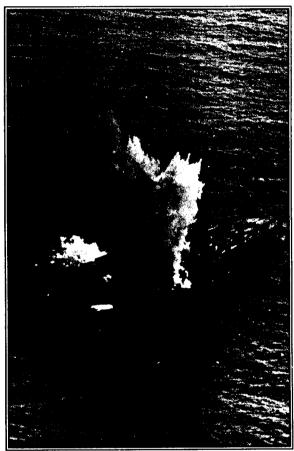
Based on the results of the test, General Mitchell removed the 19th Balloon Company from Aberdeen and combined it with the 18th Balloon Company at Langley Field.

During his tenure at the Aberdeen Proving Grounds, Sam estimated he dropped 10,000 bombs. Soon after the Air Service conducted all of the bombing tests. he became the designated bombardier for the unit and received a 50 percent increase in pay.

By the end of World War I, both the U.S. Navy and U.S. Army planned to experiment with bombing enemy ships from the air. However. neither service took the necessary second step required to obtain that knowledge. The resulting quest fostered a controversy so heated that even the exploded hull of the battleship

New Jersey did not assuage the situation.

Billy Mitchell contended the airplane was superior to the battleship and challenged the Navy to a test. On July 13, 1921, Mitchell directed an attack on the former German destroyer G-102 off of Cape Charles, Virginia, which the Air Service managed to sink after two direct hits. Five days later, his group bombed the German cruiser *Frankfurt* near the same site. Just when the Navy thought the attack had failed, Martin Bombers from Langley Field arrived, loaded with 600-pound bombs. They scored two direct hits on the cruiser's deck and a third exploded alongside. Ten minutes after the Martin bombers arrived, the *Frankfurt* sank.



The "Ostfriesland" "taking the final plunge," struck by Martin Bombers at 12:39 PM July 21, 1921. C/O Air Force Still Photo Collection.

1921, the air crews for a Handley Page and several Martin bombers each dropped a 2,000bomb close pound enough to the dreadnought Ostfriesland (see photograph left) to blow open its seams and sink it in 20 minutes plus. An observer, General Williams, Chief of the Ordnance Department, remarked. "Today а bomb has been fired which will be heard around the world."

On

July

21.

Despite the previous Air Service successes, the Navy remained unconvinced about their vulnerability from the air. They eventually turned over two obsolete battleships, the U.S.S. New Jersey and the U.S.S. Virginia, for further testing by the

Air Service.

After considerable competition within the Air Service, General Mitchell selected 12 air crews to sink the two target vessels. The terms of the competition allowed only one day to sink both ships. The bombing was to be accomplished above 10,000 feet. The Air Service owned only one bomber that could fly that high, a Martin-Curtiss NBS-1.

Among the two crews selected from Aberdeen was young bombardier, Sergeant Ulysses S. Nero. For practice, the air crews bombed the battleship *A labama* off of Tangier Island in the Chesapeake Bay. The flight of 12 aircraft left Langley Field for Cape Hatteras on the morning of September 5, 1923. Only 11 aircraft arrived to conduct the testing; one experienced trouble and turned back.

The scenario decreed that they fly to 11,000 feet and bomb the New Jersey (see photograph right), land at an improvised field at Cape Hatteras, re-arm and attack the Virginia. General Mitchell instructed them to fly over the ship, drop their first bomb, circle, then drop a second bomb. If the bombardier made an error, he would correct it, then drop their last two bombs.

When the first attack began, each aircraft carried four 600pound bombs. They climbed to 11,000 feet and attacked the *New Jersey*. Sam and his pilot, Lieutenant Devereaux, were at the end of the formation and drop-

ped their bombs last. When they were within two minutes of the target, Sam gave instructions to the pilot that deviated somewhat from General Mitchell's instructions. Sam and Devereaux scored two hits while their fellow bombardiers never came close to the target. Lieutenant

The

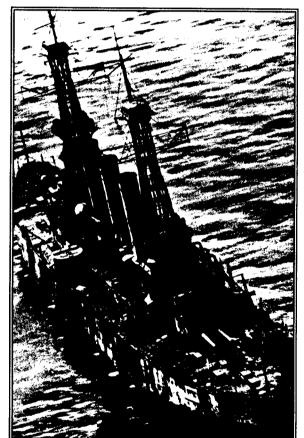
Deveraux, extremely happy, made a second approach and Sam put two 600-pound bombs just forward of the main mast on the *Virginia*. They landed on the improvised field, about 10 yards from the shoreline. After General Mitchell landed in his observation plane, he came over and disqualified Nero and his pilot for not following his instructions. While the other teams loaded their bombs and took off in an attempt to finish off the *Virginia*, Sam and

> Devereaux sat under the shade of the wing of their NBS-1 and ate sandwiches. Meanwhile, crews loaded several planes with 2,000-pound bombs. flew to the target and dropped their bombs with the intent of hitting the vessel. Not one of the bombs came within a quarter mile of the target. The Navy enjoyed the in-accuracy of the Air Service and displayed open pleasure at their discomfort. Finally the flight, minus Nero and pilot. dropped down to 1,500 feet and pounded the Virginia severely above the water line, leaving it in a sinking position. Meanwhile, the New Jersey was high and

dry. Another flight went out and repeated the mistakes of the previous one and, again, not one bomb came close to the ships.

C/O Air

At approximately three o'clock, General Mitchell approached Nero and asked him, "Do you think that you can take those two bombs that you have under your aircraft



"USS New Jersey" prior to the

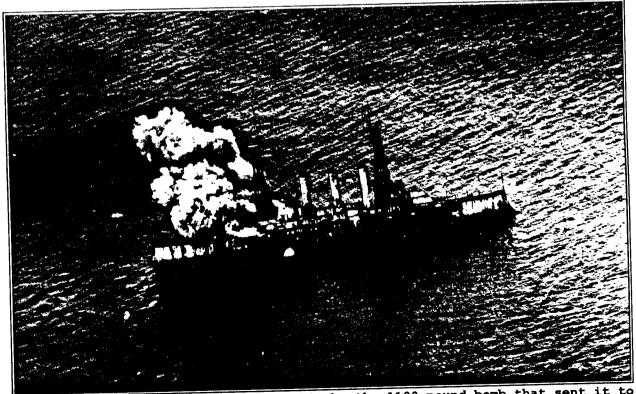
attack, September 5, 1923.

Force Still Photo Collection.

and go out there and hit that target?" Nero said, "Positively, General. Given the opportunity and a pilot who would follow my instructions, I think I could do right well. I could do as well as what has been done so far." General Mitchell responded, "Don't rub it in, we haven't done well at all."

Before they took off, the pilot, Captain Meyers, asked Sam how high they should fly. Sam, as cocky as ever, told the captain to take off and they would bomb from the altitude they reached when they were over the target. Meanwhile, another aircraft tried one more shot at the New Jersey and missed by 300 yards off the port beam. They were flying about 85 miles per hour at an altitude of 6,900 feet when they approached the target, about 15 degrees off the port beam. As they approached the target, a wave of self-confidence engulfed Sam. He would later say, "I never had any doubt I could do it." When the time came, he lined up his open wire sight and dropped

the bomb right down the smoke stack. Sam thought at first it was a dud, but he personally wired both of the safety wires to the aircraft so when the bombs left the plane they would arm. Just as he was giving up all hope of success, the explosion came out of the battleship with a big black cloud (see photograph below). The New Jersey turned over and sank in 3 minutes and 17 seconds. Captain Meyers temporarily lost control of the aircraft in the excitement that followed. By the time Sam got him under control, the battleship had capsized. Since they lost the chance to drop their second bomb on the New Jersey, they flew over and Sam dropped it on the deck of the Virginia. After landing his aircraft, General Mitchell told Sam he was going to be the next person promoted in the Air Service. True to his word, General Mitchell promoted him during the next cycle. After that great historical event, Sam and General Mitchell became close friends, a relationship that continued



The "USS New Jersey" after a direct hit by the 1100 pound bomb that sent it t the bottom, September 5, 1923. C/O Air Force Still Photo Collection.

until the general resigned in 1927.

For a while, Sam was somewhat of a hero in the squadron, but eventually, life at the Aberdeen Proving Grounds went back to normal.

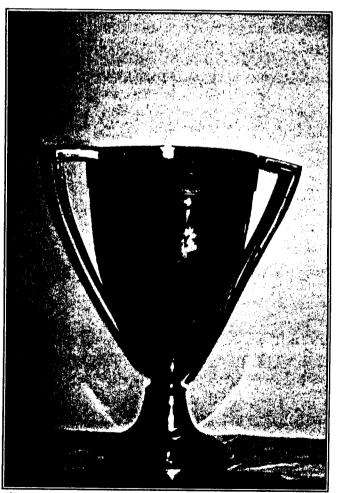
In 1923, Nero made quite a few parachute jumps. On October 20, 1923, the military held a parachute jumping competition at Logan Field in Baltimore, Maryland, between the services. Sam represented the Army in the competition, the object of which was to land closest to the center of a target.

Generally, parachutists crawled out onto the wing of an aircraft and simply slid off, or allowed their parachutes to pull them off. Sam mounted a step on the outside of his DH-4 that was 12

inches long and six inches wide. His idea was to step out of the airplane, stand on the step and guide the pilot, Sergeant Davis, toward the target. Nero considered sergeant pilot Sam Davis one of the best at his craft in those days. especially in the De Havilland DH-4.

Nero and Davis took off around two o'clock and headed toward Logan Field. Sam's equipment included both a chest and emergency pack. When they reached 2,500 feet, he found the equipment too bulky to allow him to get out of the aircraft. It took him

approximately five minutes to get out of his seat and onto the step. By then, Sam lost his nerve, mainly because he also lost the ring to his ripcord. He was also concerned about hitting the back of the aircraft; on past jumps, he simply floated off the wings. He finally decided that in order to miss the aircraft, he would have to hang off the step. By that time, the pilot was going in the right direction, but Sam lost his sense of distance and had all but decided he would feel safer back in the airplane. He tried unsuccessfully to re-enter the aircraft, and while hanging on the step, his fingers slipped off and down he went. He couldn't find his ripcord and fell approximately half the distance to the target, probably setting a new free fall record before

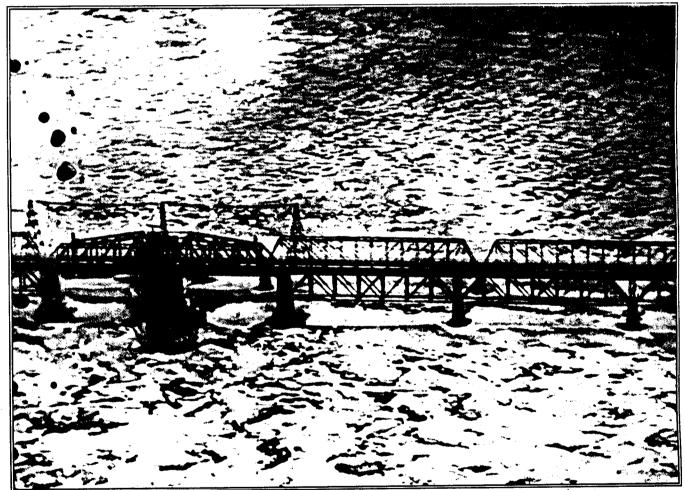


The Trophy Nero won for the 1923 parachute contest. On display at the Airmen Memorial Museum.

finally finding and pulling the release. He turned his direction toward the crowd about a quarter of a mile away and, much to his surprise, landed 10 feet from the center of the target circle. The Navy secured second place by landing about 150 yards away. The Marine Corps representative experienced the indignity of not only landing the farthest distance from the target, but also squarely in a puddle of water. For Sam's victory, he received a drink of Scotch and a loving cup (see photo left) that read, "The Flying

Club of Baltimore Parachute Jumping Contest, Logan Field, Oct 20, 1923. Won by M/Sgt U.S. Nero, U.S. Army Air Service." After the contest Sam was much in demand by the service to make spectacular parachute jumps.

The winter of 1924 was quite severe for the residents close to the Susquehanna River in Maryland. A vast amount of ice Subsequently, on February 16th, the Ordnance Department at Phillips Field, Aberdeen Proving Grounds, dispatched pilot Lieutenant S.F. Bond and bombardier Staff Sergeant Sam Nero to meet with town officials at Havre De Grace and assess the situation. During the course of the meeting, the officials suggested the Air Service should blow up the ice pack just above the bridge



The ice-bound bridge over the Susquehanna River February 16, 1924. C/O The Nero Collection, Airmen Memorial Museum.

blocking the river began to melt and threatened the communities in the vicinity of Havre De Grace with flooding that might claim property and perhaps lives. The water north of Havre De Grace rose, threatening the communities of Rock Run and Port De Parsons. (see photograph above).

Lieutenant Bond and Sergeant Nero examined the situation and found the ice jammed near the bridge at that point, preventing the escape of water flowing from up the river. Due to the proximity of the ice to the bridge, great care needed to be exercised to prevent damage to the structure.

They decided to drop 300-pound bombs at strategic locations in an attempt to dislodge the ice and alleviate the pressure on the bridge.

While Nero and Bond conducted their study, the river continued to rise, causing



Ulysses S. Nero in NCO uniform, circa 1923. C/O The Nero Collection, Airmen Memorial Museum.

great concern to the local people. Finally, they loaded the bombs and dropped them at the apex of the ice flow, at the end of each pier. The ice broke up and the water slowly started flowing. Meanwhile, the temperature rose and accelerated the melting process to such a high degree that more water was flowing than they anticipated. The next morning, they dropped a bomb and debris flew up to 1,200 feet; fortunately, they were flying at 1,500 feet. They dropped another 300-pound bomb, re-loaded, then dropped two more, and watched as the ice broke. A five-foot wave rushed down over the flow, breaking the ice pack's back. By the next morning, the bombing released all of the pressure above the river. Consequently, Nero and his pilot received credit for breaking up the jam. Sam believed the ice would have soon broken on its own and, as usual, felt he received unwarranted credit.

Because of their success, the officials of Port Deposit, Pennsylvania, requested Nero's services to alleviate a similar problem in their town. However, because of the good publicity received on the previous venture, the Air Service sent more personnel and at least six aircraft to bomb the ice pack. Nero described the resulting situation as a fiasco: "They sent more people and a half dozen airplanes in the next bombing and they failed to break the ice flow, and managed to kill approximately 100 chickens, which greatly disturbed the local farmers."

After that, the Air Service dispatched Nero and his pilot in a Martin MB-2. Using 300-pound bombs, they managed to break the ice jam. Again, Nero felt the ice would have broken on its own (NCO photo left).

On March 4, 1926, pilot Master Sergeant Smink, bombardier Technical Sergeant Nero, and radio operator Sergeant Willard were returning to Phillips Field after dropping two 2,000-pound experimental demolition bombs on the test range at the Aberdeen Proving Grounds. A connecting rod on the bomber's right engine came loose, forcing Smink to shut it down and take a shortcut that unwittingly took them over an anti-aircraft range conducting live The officer-in-charge managed to firing. suspend firing in time to allow the wounded aircraft to pass safely through the range and avert a possible serious accident. Sergeant Smink made a safe landing with only the remaining engine working.

Nero received valuable training during the eight years he spent at the Aberdeen Proving Grounds. He completed courses in ballistics, explosives, maintenance for both aircraft and radio, and engineering. He lent his expertise to the development of a gyroscope that when added to a bomb made it fly in a straight direction. He was active in the improvement of winged bombs and was involved in experiments that, after many hours of development and trial and error, were incorporated in the famous Norden Bomb Sight

Ulysses S. Nero's remarkable career was still in the infantile stage at that point. He went on to many more remarkable achievements that spanned 34 years and eight months of dedicated service, both as an enlisted man and an officer.

Sam flew in almost every type of aircraft in the Air Force inventory up to his retirement on August 31, 1952. He was an inventor of superchargers, bomb and gun sights, bomb fuses and other accessories to military aircraft and equipment. Additionally he held a minimum of 12 patents on military-related equipment, most of them of a classified nature.

When the United States entered World War II, Master Sergeant Nero was stationed at Mitchell Field, New York.

Having earned his commission through field promotions after over 15 years as a master sergeant, Sam applied for a commission. According to his promotion orders, the Army Air Force commissioned Nero a lieutenant on March 18, 1942. He then experienced an amazingly fast series of promotions that took him from master sergeant to major in 53 days. Additionally, Ulysses went from major to lieutenant colonel in one year and six days.

On December 8, 1941, President Franklin D. Roosevelt stirred American resolve when he expressed his anger and humiliation at the Japanese bombing of Pearl Harbor.

"Yesterday, December 7, 1941, a date which will live in infamy, the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan."

The American public demanded action from its armed forces despite the devastating blow



Ulysses S. Nero as an officer, circa 1942-1951. C/O The Nero Collection, Airmen Memorial Museum.

dealt by the Japanese.

Early in 1942, several plans took shape for an aerial retaliation to serve, at the very least, as a morale-builder for the nation. One of those plans developed into the famous "Doolittle Raid," where 16 aircraft led by Lt. Col. James "Jimmy" Doolittle bombed Japan with B-25s launched from an aircraft carrier. The other plan became the "Halverson Project." The project, under the command of Colonel Harry A. Halverson, was a carefully chosen task force of 23 B-24Ds and hand-picked crews originally intended for service at Chinese bases in bombing operations against Japan.

On January 23, 1942, Colonel Halverson called then MSgt Nero into his office and told him he was being considered for one of two very dangerous missions. The colonel sent Sam to Dayton, Ohio, the next day, where technicians were lengthening the wings of B-25s to be used in the Doolittle Raid. There, he prepared 15 flyaway (spare parts) kits for the B-25s in only two days. Impressed with his work, the Chief of Staff, General George C. Marshall, assigned him to the Halverson Task Force, where he built similar kits for their B-24s.

After completing a physical at Wright-Patterson Field, Nero received his commission as a first lieutenant and subsequently through captain. Learning of the success of the "Doolittle Raid" and that the Japanese controlled the Burma Road, the Halverson Project personnel packed up and proceeded to the Middle East on May 17, 1942. Just prior to departure, a clerk handed Sam an envelope, which he stuffed in his pocket and forgot. When he entered the aircraft, Colonel Halverson asked Sam if he had read the letter he received. Sam said no, he didn't have time. Halverson suggested he open it. On May 20, 1942, the Army Air Force promoted Sam to major and made him the Halverson project's maintenance and supply officer. Subsequently, he became the maintenance officer for the first Air Force Task Group overseas during World War II.

Sam became known as one of the best maintenance men in the Air Force during World War II, especially when it came to overhauling damaged B-24 Liberators. At times, it became necessary for him to travel to the Middle East in search of battle-damaged B-24s to salvage for spare parts. Sam was very proud of his maintenance record and was involved in some of the hottest action of World War II. His contributions began with the first raid on Polesti on June 12, all the way through the hottest targets in Europe. Those included the low-level Polesti Raid on August 1, 1943, Weiner Neustadt, Rome and Naples. Sam considered the Ploesti Raids the highlight of his career.

By the time Nero returned to the United States in October 1943, he received credit for eight combat missions in B-24s and B-25s against Benghazi, Tobruk, Tripoli and Italy, for a total of 44 combat hours.

Sam went on to many other accomplishments and contributions to his country, too many to list. Among them was his involvement in the postwar testing and development of the atomic bomb. His involvement included both the Bikini Atoll tests in 1946 and the Eniwetok tests of 1948. He served at the Pentagon and as the Commanding Officer of the 4th Fighter Interceptor Maintenance and Supply Group. Somehow, it seemed appropriate that Nero would set up the first postwar, specialized maintenance organization on jet fighters at Langley Field, Virginia. Among his other firsts, he set up the first jet engine overhaul. He served in Japan in support of the Korean War and volunteered for duty with the 5th Air Force in Korea. His promotion to full colonel on August 12, 1951, was welldeserved. Sam's final assignment was as Commanding Officer of the 3535th Maintenance and Supply Group until his retirement, effective August 31, 1952.

Sam was a family man who lost his first wife, Edna May Purner, in 1962 to a heart attack. They had a daughte, Patricia A. Nero. He remarried in 1963 to Agnes Gadow Fisher. They enjoyed 17 wonderful years together before Sam succumbed after a long illness on October 27, 1980. He would have been 82 years old on November 13, 1980.

Ulysses S. Nero was buried in Arlington National Cemetery with full military honors. His daughter described the funeral; It was a beautiful, sunny, fall day. As befitted him, a military band was present, with its tuba gleaming in the sun. Beyond the band was an honor guard, 42 strong, with muskets shouldered. There were six grey cobs (horses), the black draped caisson, and the eight-wheeled hearse. Between those two groups were the Captain of the Guard, the Adjutant, two chaplains, "... so ramrod straight, so perfectly groomed, so very respectful ..." His daughter reminisced as the utmost respect and honor was paid to Sam by those young men. She felt they acted as if they knew how much Sam cared for the young. The care lavished on his coffin during the transfer to the caisson was incredible-so precise, so ordered, so traditional. Never was Taps played so well. As the procession moved off at half-time or less into the autumn sun, she could not help thinking how Sam would have said, "Stop! I have to set my camera!"

Thus ended the life of a remarkable man. Some say Sam was the father of U.S. Air Force precision bombing. Perhaps he should be remembered for the pioneer spirit that drove him as an inventor, bombardier, parachutist, ballistics expert, engineer, and aircraft maintenance and supply man extraordinare. He was quick witted and popular, yet extremely tolerant of those around him. Sam stood up for what he thought was right and good. Most of all, he was a modest man who made light of his many accomplishments. May we of the enlisted corps, active or inactive, never forget the trail he blazed for us.@

RECOMMENDED READINGS

Isaac Don Levine, Mitchell Pioneer of Air Power, The World Publishing Company, 1944.

Burke Davis, The Billy Mitchell Affair, Random House, 1967.

Lee Arbon, They Also Flew, Smithsonian, 1992.

Mauer Mauer, Aviation in the U.S. Army 1919-1939, Office of Air Force History, 1987.

W.F. Craven/J.L. Cate, <u>The Army Air Forces in World War II, Vol I</u>, Office of Air Force History, 1983.

Robert I. Curtis/John Mitchell/Martin Copp, Langley Field, The Early Years, 1916-1946, Office of History, 4500th Air Base Wing, Langley AFB, Virginia, 1977.

George/Lena Baroni, Sam's Story, George/Lena Baroni, October 1989.

Lee Arbon, <u>Ulysses S. Nero</u>, Crosshairs, June 17, 1989.

Mauer Mauer, Air Force Combat Units of World War II, Office of Air Force History, 1983.

John F. Shiner, Foulois and the U.S. Army Air Corps, 1931-1935, Office of Air Force History, 1983.

Wayne Thompson, Air Leadership, Office of Air Force History, 1986.

John L. Frisbee, Makers of the United States Air Force, Office of Air Force History, 1987.

