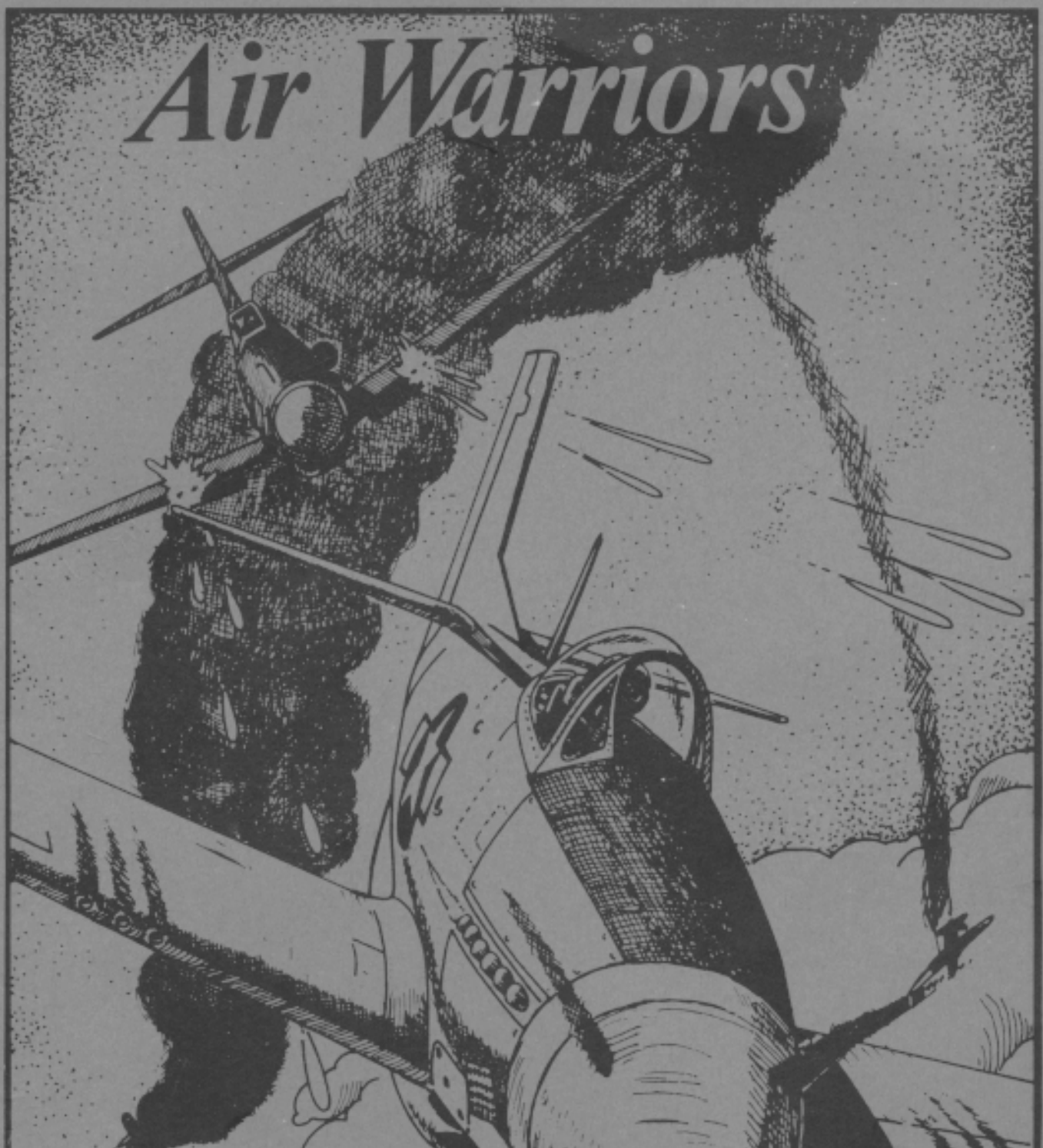
Air Warriors



ATC NEWS SERVICE

Air Training Command Office of Public Affairs, Randolph AFB, Texas 78150 Autovon 487-4400

SPECIAL EDITION

FOREWORD

"Air Warriors" is a collection of feature articles prepared in memory of the nation's military aviators and the hundreds of thousands who supported them through four wars. Together, they wrote history in the skies of the world in freedom's name, always with their sweat and often with their blood. Their courage, skills, sacrifices and vision built the U.S. Air Force and then strengthened it. Many of their faces are gone now but their deeds remain an inspiration for those who followed and for those yet to follow in the future. They forged a heritage rich in valor and achievement. All free peoples of the world are forever indebted to them.

Special thanks to Air Training Command's Directorate of Administration typesetting shop, to the 12th Flying Training Wing Photo Lab personnel, to the authors of the books and articles that gave us a good taste of our rich heritage and inspired us to write these articles, and to the contributors of articles and art for this special edition of ATC News Service.

ATC Office of Public Affairs
Randolph AFB, Texas 78150

The Men

The Missions

The Machines

Frank Luke-WWI fighter ace

Balloon busting specialist

Lt. Col. Ken White
Air Training Command Office of Public Affairs

Frank "Arizona Balloon Buster" Luke was perhaps the most tenacious fighter pilot who ever lived.

In just 17 days of combat in World War I, Luke scored 18 aerial victories -- second only to America's ace of aces Eddie Rickenbacker. He got his nickname because 14 of those victories were observation balloons. Remarkably, in one five-day period in September 1918, Luke downed 10 enemy observation balloons and three aircraft.

Contrary to popular belief, observation balloons were extremely hazardous targets for fighter pilots. Resembling huge sausages roughly 50 feet in diameter and 200 feet long, the balloons operate at about 2,000 feet above the ground. An observer hung suspended from the balloon in a wicker basket. With powerful binoculars and radio contact with the ground, he was a highly effective battlefield coordinator. For that reason, armies went to great pains to protect their balloon observers.

Cannon and machine gun batteries ringed the ground around the tethered balloons. Since gunners knew the exact altitude of the balloons they were defending, they also knew at precisely what altitude to set their shells to explode to down attacking fighters. Furthermore, a swarm of enemy fighters generally flew high cover for the balloons. Zooming down from a height advantage, these defensive fighters held a decisive edge over offensive fighters.

It was therefore categorized as near madness for a lone fighter to attack an enemy observation balloon. But Luke liked the challenge and chose to make balloon busting his specialty.

On one occasion he invited General Billy Mitchell to come watch him down two enemy balloons. He suggested the general be on time because his attacks would occur at precisely 6:58 p.m. and 6:59 p.m. General Mitchell arrived at 6:30 and got a ringside seat to watch the "Arizona Balloon Buster" attempt to make good his boast. Luke attacked through intense flak and at precisely 6:58 p.m. and 6:59 p.m. sent the two enemy hydrogen filled balloons down in flames.

On September 29, 1918 -- barely two months after his arrival for combat -- Luke attacked three enemy balloons. He'd already downed two of them when 10 enemy fighters roared down to attack him. Unintimidated by the odds, he exploded the third balloon. While pressing the final attack, however, his Spad suffered damage from intense groundfire and Luke was forced to land behind enemy lines.

German troops quickly surrounded the injured Luke and demanded his surrender. But surrendering was not his way. He pulled his automatic pistol and fired. He died in a hail of German rifle bullets.

Luke was posthumously awarded the Medal of Honor for bravery. The Air Force's commemorative link with the legendary balloon buster is through Luke AFB, Ariz.

Frank Luke was truly a fighter pilot's pilot.

His toughest battles were in Washington

Mitchell fought hard for an air force

By Lt. Col. Ken White
Air Training Command Office of Public Affairs

A rare few people live so in harmony with truth, and with the future, they seem totally out of tune with the overly conservative nature of the present.

Theirs is a life of intense energy and commitment, driven by a demonlike creature from within and held back by the stifling forces of apathy, self interest, parochialism and ignorance.

Brig. Gen. William "Billy" Mitchell was such a man.

The dramatic story of the architect of American airpower began in 1898 when young Billy Mitchell, then an 18-year-old junior at George Washington University, decided to quit school and volunteer for service in the Spanish-American War. Although his father, Senator John Mitchell, could have gotten his son a direct commission, young Mitchell instead joined the 1st Wisconsin Regiment as a private. After basic training near Milwaukee, he transferred to Florida to await shipment to Cuba and the war. While in Florida, he quickly earned a commission as a second lieutenant in the Army Signal Corps.

By the time Mitchell got to Cuba on New Years Day 1899, the war was over. But he arrived in time to witness the surrender of Spanish forces. In that incident he saw a simple truth: the United States was now a world power and must act accordingly.

An exceptionally bright young officer with an unusual zeal to get things done quickly and correctly, Mitchell transferred from Cuba to the Philippines where, as a young lieutenant, he built a crucial telegraph network and developed a clever and successful plan to capture insurrectionist leader General Emilio Aguinaldo. While in the

Philippines, he served under General Arthur MacArthur, father of Douglas MacArthur and lifelong friend of the Mitchell family.

At 22 Mitchell was reassigned to Alaska where, using common sense, superior leadership and ingenuity, he planned and successfully constructed a vitally needed telegraph line back to the states. He succeeded where others, much older and more experienced, had failed. When he returned to the states after completing the grueling project, he was the youngest captain in the U.S. Army.

An officer of great compassion, Mitchell hurried to San Francisco following the disastrous earthquake of 1906 to aid in rescue efforts. This same compassion for human life sent him back to the Philippines in 1910 to restore communications and spearhead relief actions after the Taal Volcano on Luzon erupted, causing widespread devastation and suffering.

Billy Mitchell first became interested in aviation while studying for the Army Signal Corps test when assigned to Alaska. Typical of his brilliance, he immediately saw military uses for the fledgling airplane, then little more than a curiosity. In 1912-13 he watched the Balkan Wars with interest as primitive flying machines were first used in combat. And it didn't escape him that the French, German and British were seriously studying the airplane as an instrument of war. He was both puzzled and chagrined that there was no similar interest in the U.S.

Nevertheless, he would do what he could to advance military aviation. As Chief of the Signal Corps' Air Section, he worked relentlessly to develop new facilities for military flight instruction. Few shared his deepening concern that the U.S. was falling hopelessly behind in exploiting this new and potentially devastating weapon.

In 1915, while assigned to Washington as the youngest officer ever to serve on the Army General

MITCHELL'S MOUNT -- Billy Mitchell would eventually force the Department of War into the air age, but his start in the Army came in a different era -- cavalry duties with the 1st Wisconsin Regiment.

Staff, he took flying lessons at Newport News, Va. When World War I suddenly erupted in Europe in 1914, Mitchell was not surprised to see dramatically new and diverse uses of the airplane in battle. And the quiet voice that lived within him told him that this was just the beginning. He sternly warned his superiors of the profound implications of airpower to the U.S. when -- not if -- we entered the war. Few listened.

Mitchell's argument for a stronger air arm lost some of its credibility when the eight Curtiss JN-2 Jennies dispatched to assist General Pershing in his punitive raid against Pancho Villa in Mexico fared poorly. Two crashed, and by the end of the short campaign the other six couldn't be flown safely. But Mitchell knew why. The Jennies were simply not up to the task, not designed for the job they had been asked to do. The Mexican expedition, in his mind, was not a valid test of military airpower.

In 1917 before the U.S entered the war, Mitchell, then a major, got permission to go to France as an observer. Although a few American pilots were flying with the Lafayette Escadrille, they had joined the French Foreign Legion to do so. Mitchell, then, became the first U.S. Army officer to serve in World War I.

Once in Europe, he wasted no time getting into the action. He frequenty flew in the observer's seat in two-place aircraft, and then went to Paris where he learned to fly the newest French and British fighters.

From his viewpoint the war had stagnated to an appalling state, with hundreds of thousands of men living like moles, waiting to die, in the mud and stench of trenches that crisscrossed Europe. And Mitchell was quick to note that this tortured mass of humanity was supplied by unprotected logistics networks vulnerable to air attack.

While making his rounds of the French and British air units, Mitchell met and instantly liked British General Hugh Trenchard, himself a visionary and advocate of strategic aerial bombardment. The two discussed, among other things, the ultimate supremacy of aircraft over naval forces. It was this treatise that ultimately brought Billy Mitchell into bitter conflict with the Navy Department.

Then, as Mitchell had predicted

earlier, America entered the war. In June 1917 General Pershing arrived to assume command of American Expeditionary Forces yet to be assembled. Mitchell convinced himself of the growing importance of airpower and that U.S. pilots, flying aircraft purchased from Britain and France, could be the first Americans ready for combat. Pershing gave full support to Mitchell and his plans.

While Mitchell worked like a madman to build a small American air arm, he also developed revolutionary new tactics for its use. His philosophy was relatively simple: win air supremacy over the contested area and then concentrate airpower to bomb and strafe key enemy strongholds and supply lines.

He first tested these theories during the summer of 1918. By then the American First Army had grown to 400,000 troops massed in the St. Mihiel salient. General Pershing and his staff, Mitchell included, began planning a major offensive. For his part, Mitchell would coordinate the attack of 1,500 U. S. and 600 French aircraft, as well as 100 British bombers. All planning and preparation was attempted in strictest secrecy.

German intelligence, however, learned of Pershing's plans and rather than stand and fight, the Germans chose to secretly pull back and fortify. It was Mitchell himself, flying a reconnaissance mission, who discovered the German withdrawal. Pershing was informed and he immediately launched his offensive, considerably earlier than originally planned.

Mitchell put his air force to work. Wave after wave of aircraft hounded and hammered the retreating Germans, spreading terror and confusion. German aircraft, launched to neutralize the savage pounding from the air, were dispatched from the skies as soon as they appeared over St. Mihiel.

Pershing's forces won a great victory. And Mitchell's new concepts proved devastatingly correct, so effective in fact that Mitchell himself was surprised.

The Germans, quick to adopt any tactic that proved successful for anyone, attempted to use Mitchell's St. Mihiel aerial stategy in their Meuse-Argonne offensive. Their plan was to win air supremacy and then concentrate airpower on Pershing's supply lines in the same devastating way Mitchell had done at St. Mihiel. But once again the brilliance that was Billy Mitchell prevailed. Realizing the best defensive against an airplane was another airplane, Mitchell launched swarms of fighters to meet and defeat the German air armada intent on decimating Pershing's vulnerable supply lines. Mitchell knew that if he could deny the Germans air superiority he could prevent them from concentrating their air forces, and thus deny them victory. His strategy was flawless; 110 German aircraft went down in flames. Mitchell lost but 10. The German attack failed miserably.

By this time Mitchell's mind had become like a runaway computer, pouring out idea after idea. He would perfect dive bombing tactics, he promised, and during the planned summer 1919 offensive he would shock the Germans by air dropping infantry from bombers behind their lines.

Many of his ingenious plans were cut short, however, by the Nov. 11, 1918, armistice. Germany was on its knees; the war was over.

BIPLANE BILLY -- Mitchell not only developed air war doctrine and strategies, he carried them out. While on a reconnaissance flight in World War I, he noticed German infantry units pulling back and fortifying at St. Mihiel. Allied forces charged and won, thanks to Mitchell's observations. (U.S. Air Force Photo)

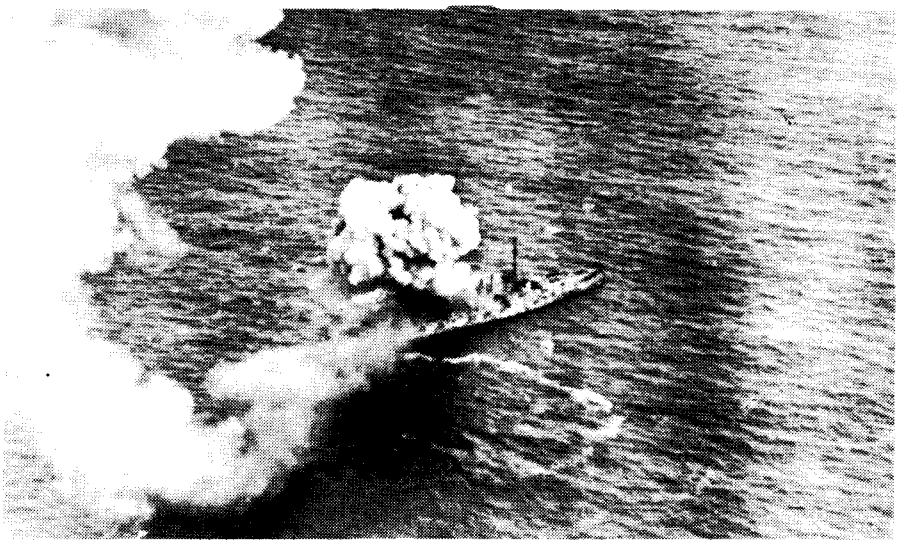
Mitchell's record during the seven months he commanded U. S. air forces was nothing short of remarkable: 848 enemy aircraft downed while losing but 289. And his planes and crews had given German ground forces a first-class education in military airpower.

Still, he was distraught. In his mind the armistice was but a temporary respite from the carnage of war. The Germans, he felt, would someday rise from the ashes like a phoenix and return to fight again. A time bomb ticked within him. He took little comfort from the "illusion of peace" that settled uncomfortably over Europe.

And he was appalled at the lack of support American air forces had received from the highest levels of government. The U. S. had not designed and built a single warplane during the conflict. The French Nieuports the U. S. purchased, and Mitchell's pilots flew, were hopelessly outclassed by newer German, French and British aircraft. The British-designed -- and American-built -- DeHavilland DH-4 had justifiably earned the nickname of the "Flaming Coffin" because of its propensity to catch fire and burn quickly. The Liberty engine was the only significant technical contribution America had made to allied air efforts in World War I, and most of

those were manufactured for use in the highly flammable DH-4.

When Mitchell, then a brigadier general, returned to the U. S. his attention shifted to coastal defense. The Navy billed its big battleships as "America's first line of defense." Mitchell described them as "America's first line of targets," hopelessly vulnerable to attack by long range bombers sure to be developed in the future. And thus began the controversy that would ultimately destroy Billy Mitchell.



SINKING THE UNSINKABLE -- Navy ships used the captured German ship *Ostfriesland* for gunnery practice for years, barely denting the hull. Navy officials offered the ship to Mitchell to prove his theories on aerial bombardment. Mitchell proved his point. (U.S. Air Force Photo)

Alarmed by the dismantling of the nation's air forces following World War I, Billy Mitchell continued to express his views about the as yet untapped potential of the airplane as an element of national security.

He was frequently called to voice those views to congressional committees, and what he had to say about the vulnerability of battleships made a growing number of Navy and War Department officials very uncomfortable. They attempted to counter his arguments.

Through the sometimes heated debates that followed, Mitchell remained an officer and a gentleman -- polite and professional -- but uncompromising in his views.

The argument of supremacy of aircraft over battleships eventually became a battle between Mitchell and the Navy Department. The American press, anxious to dramatize the sharp difference of opinion on the issue, served to intensify the controversy.

In the hope of objectively settling the argument once and for all, Mitchell proposed a demonstration where aircraft would attack derelict naval vessels to test his premise that ships were helpless against airplanes. In 1921 the Navy Department reluctantly agreed and plans for the demonstration were finalized.

As Mitchell had predicted, his bombers effortlessly put ship after target ship to the bottom. Then came the final test, a demonstration pitting Mitchell's bombers against the captured German battleship *Ostfriesland*. This dreadnought of the sea, with its thick honeycombed hull and water-tight compartments, was thought to be unsinkable. For years the Navy had used it for target practice, hardly denting it.

For this last display of airpower, Mitchell chose to drop specially-built 2,000 pound bombs. He instructed his bomber crews to aim near the *Ostfriesland*, rather than at it, to take advantage of the "water hammer" hydraulic principle. Skeptics lined the rails of a nearby Navy observation ship as Mitchell's bombers lined up for their runs.

Concussion from the underwater explosions shook the observation ship. Six bombs and 22 minutes after Mitchell's bombers began their attack, the *Ostfriesland* rolled over like a mortally wounded whale -- great gashes in her sides -- and sank forever beneath the Atlantic. A stunned silence fell over those watching from the observation ship.

Surely, reasoned the American public as it read accounts of Mitchell's bombers and the *Ostfriesland*, the bitter argument was over. But that was not to be the case. General Mitchell was dispatched on an extended worldwide tour, primarily to get him and his uncomfortable truths out of Washington. The nation was on a path "Back to Normalcy" under President Harding, and Mitchell was making too many government arms industry officials nervous.

While in Hawaii, Mitchell wired back a scathing report about the deplorable state of defense and the island's vulnerability to air attack. While in Japan, he observed with alarm a growing anti-Americanism and the steady growth of Japanese military forces, particularly its air forces.

During his extended absence, America's military air arm continued to disintegrate despite the efforts of Arnold, Chennault, Spaatz, Doolittle, Eaker and others to slow the process.

When Mitchell finally returned to Washington, the old controversy between him and the Navy and War Departments erupted anew. Again, he was called to testify before congressional committees, and again he warned of the grave consequences if America failed to strengthen its air forces. He suggested that airpower was becoming important enough in warfare that the U. S. should have an air force separate and equal to the other services. To counter Mitchell's "ill conceived" propositions, the Navy and War Departments adopted what was described as "tactics of doubtful propriety."

Realizing the issues at stake,

Mitchell requested and got President Coolidge's permission to write a series of articles for newspapers. Their publication further polarized the forces arrayed against him. As a result, in 1925 he was reassigned to San Antonio as a field commander, hardly a fitting job for an officer of his demonstrated ability, experience, vision and dedication. His presence in Washington, however, had simply become an intolerable embarrassment to those who opposed him.

In August 1925 a Navy plane, on what was to have been a record setting flight from Hawaii to San Francisco, mysteriously disappeared. Shortly thereafter, the Navy dirigible *Shenandoah* crashed in Ohio with the loss of all 14 men on board.

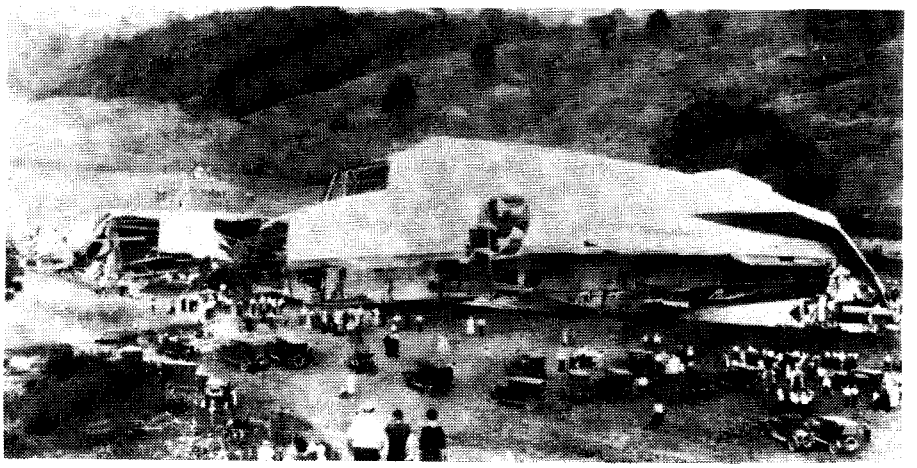
Mitchell promptly blamed the tragedies on what he termed Navy stunts and said: "These ingredients are the direct results of incompetence, criminal negligence and almost treasonable administration of the national defense by the War and Navy Departments."

Official censure was quick and sure. For his public statement Billy Mitchell was charged with violation of the 96th Article of War -- conduct unbecoming an officer. General Douglas MacArthur was the only member of the court-martial board who voted to acquit Mitchell. The punishment: Mitchell was to be suspended in rank, command and duty -- with forfeiture of all pay and allowances -- for a period of five years.

To avoid any further humiliation, Billy Mitchell resigned his commission and moved to a farm in Virginia. There he wrote a few articles, raised horses, sailed in the nearby Atlantic and watched the accelerating growth of American airpower with justifiable pride.

Then, tragically, he died of a heart attack in 1936.

Thus he was spared the national trauma of Pearl Harbor, a tragedy he had predicted years earlier. And he didn't witness the devastation wreaked by the German Luftwaffe -- using many of the tactics he had developed -- at the beginning of World War II.



(U.S. Air Force Photos)

DISASTROUS -- When the Navy dirigible *Shenandoah* crashed, killing the 14-man crew, Mitchell lashed out against "incompetence, criminal negligence and almost treasonable administration of the national defense." Mitchell was court-martialed for his statement.

He didn't get to see the nation and the U. S. Army build and employ -- at President Roosevelt's strong insistence -- the largest, most powerful air force in the world. And he didn't get to observe Japan and Germany wilt to their knees under relentless pounding from American aircraft and crews.

But these monumental events wouldn't have surprised him. Like all visionaries, he had seen the future. . .been to the mountain. . . and knew what was there. He loved America, and he loved the U. S. Army. And it was this great love, diabolically, that forced him to speak out, even at the risk of his military career. . .and his life.

When he died, it was not as a bitter man. He had known the stakes all along, and had resolved early to speak the truth as he saw it. Those who shared his vision used it to build the strongest air force in the world to protect the most precious commodity on earth: *freedom*. Those who had opposed his vision quickly, like the *Ostfriesland*, sank into oblivion under the tests of truth and time.

If Billy Mitchell could have seen his ideas at work protecting America during her darkest hours, he would have been pleased. And he would be pleased to see today's U. S. Air Force, the ultimate extension of his dreams.

He dared to look the future in the face. What he saw there benefitted every American for generations to come.

Billy Mitchell. . .undisputed architect of American airpower and father of the U. S. Air Force. May he rest in peace.

His 'gangsters' routed the Japanese

Ex-captain returned as top general

Lt. Col. Ken White
Air Training Command Office of Public Affairs

(U.S. Air Force Illustration by Marty Brazil)

OLD LEATHERFACE -- Chennault was nicknamed that by his staff, but it was a loving nickname. Chennault retired as a captain, came back as a two-star general, was constantly fighting with military establishment and was a brilliant warrior.

There's never been an airman quite like Claire Lee Chennault. And there'll probably never be another. He was truly one of a kind.

Chennault's story reads more like top selling fiction than fact meticulously assembled by a biographer, so incredible were his deeds.

The saga began in Commerce, Texas in 1890 when Chennault was born. But the Lone Star State, regrettably, can't take credit for molding a personality so independent... courageous...and brilliant that it literally stood Japan on its head during World War II. That distinction belongs to neighboring Louisiana where Chennault moved as a child.

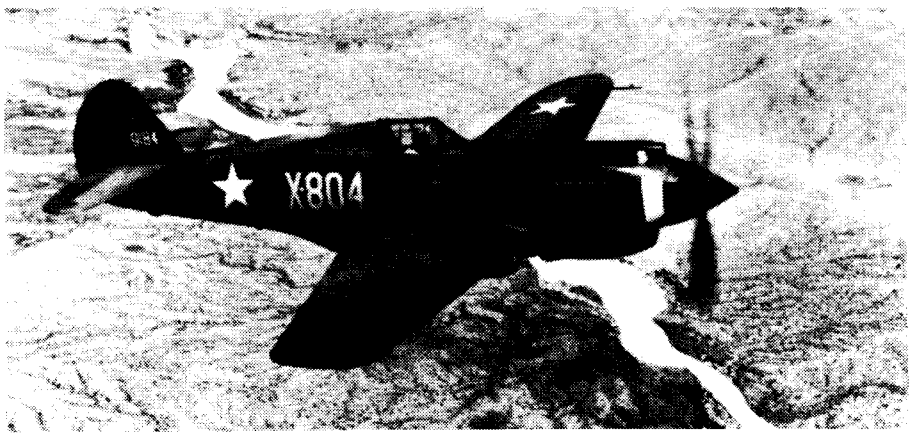
Powerful factors combined early to mold Chennault's strong character. The dangerous, snake infested swamps where he hunted and fished as a young boy, alone and unafraid. The untimely deaths of family members he idolized. A father who gave him room to grow and sound homespun advice. A rural setting with well defined values of right and wrong.

These influences gave Chennault intense independence, great compassion, a love of truth and its applications, a hatred for bullies in any form and a propensity to challenge bureaucrats and the status quo. These traits would bring Chennault into bitter conflict throughout his life with the forces of oppression, abuse, ignorance, arrogance and apathy.

Following graduation from Louisiana State University, Chennault taught in a rural school and tried his hand at various professions before joining the U. S. Army in August, 1917 with intentions of becoming an aviator. His request for flight training was promptly and decisively disapproved.

But the tenacity that would make Chennault a legend -- like a demon driving from within -- refused to let him accept the rejection as the last word. He would learn to fly an airplane...one way or another. In the hustle and bustle of Kelly Field, Texas -- then the biggest and busiest flying training facility in the world -- Chennault conned instructors and crew chiefs into teaching him the principles of flight and making aircraft available for his unauthorized attempts to fly.

Shortly, he was buzzing around the field among the swarms of Jennies and their legitimate student



FIGHTIN' FLYER -- Legend has it that Chennault had downed nearly 50 Japanese aircraft with his Curtiss Hawk Special. No records are available to prove or disprove it, but Chennault's talents as a superior fighter pilot are well-known. (U.S. Air Force Photo)

pilots. While he built up flight time and bad flying habits, he continued efforts to get accepted to the flying training program. Second, third and fourth requests were soundly disapproved. A fifth, supported by a close friend and by Chennault's characteristic doggedness, was finally approved...probably because officials knew he would never give up and he was becoming a first class nuisance in the process.

Once in the official flying training program, Chennault quickly shed his bad flying habits and, because of a native flying talent, was assigned to pursuit aircraft after receiving his wings. This same talent shortly thrust him into the instructor pilot business. Those student pilots who learned with Chennault, and passed his rigorous flight checks, had nothing to fear in the then extremely hazardous profession of flying. When they pinned on their new wings, they were already superb pilots.

A disciple of truth and common sense,Chennault became troubled by stories of World War I dogfights in which pilots entered the swirling aerial contests as individuals. Like German aces Oswald von Boelcke and Baron Manfred von Richthofen he believed success in aerial combat required teamwork just as any other endeavor. In his mind pilots working as teams rather than as individuals could execute one of the oldest and most successful principles of war: concentration of force.

To convince fellow fliers of the validity of this proposition, Chennault prepared pamphlets and made numerous presentations to superiors. His ideas over the next decade were politely received but fell on fallow ground where they failed to germinate and grow. To prove pursuit aircraft could fight in formation as a team, Chennault, while an Air University instructor at Maxwell AFB in the early 1930s, organized the Air Corps' first aerobatic team. Selection of his teammates was simple. Any pilot who could stick with Chennault's plane in the air for 30 minutes had a job. Many tried, but only three -- a lieutenant and two sergeants -- could do it. They became Chennault's wingmen on the team known as "Three Men On A Flying Trapeze."

The Trapeze clearly demonstrated that three pilots could excute even the most violent maneuvers in formation -- those expected in combat - - with precision. Still, Chennault's superiors failed to see how these aerobatic tactics had any real application in "modern" aerial warfare. Chennault's frustrations multiplied as he tried ever harder to sell his ideas and his superiors grew ever more annoyed with him.

Everyone knew heavy bombers were the real instruments of airpower. Billy Mitchell had proven that conclusively a decade earlier. But, strangely, Chennault had been cut from the same bolt of cloth as Mitchell. They were both visionaries, superior airmen and super patriots. It was diabolical that their similar personalities created ideas that clashed. But Mitchell himself was out of the equation. After being court-martialed for his outspoken battle for bombers years earlier, he retired in disgust. But Mitchell had planted the seed that would ultimately grow into a huge tree.

Finally realizing the wisdom of Mitchell's strategic bomber concepts, the U. S. Army placed more and more emphasis on the big planes...and less and less on pursuit aircraft. Chennault felt the pendulum swinging too far too fast, that putting all the eggs in the bomber basket was a tragic, and perhaps fatal mistake. In his mind both types of aircrafts were necessary, but to give his arguments the sharpest bite he picked up the gauntlet to begin his crusade for fighters.

Inevitably, this crusade brought him in conflict with bomber advocates who by then were firmly in the driver's seat. Chennault repeatedly and loudly warned that heavy bombers were not the indestructible aerial dreadnaughts their planners, designers, builders and users believed. Advances in aeronautical technology, Chennault insisted, would continue to give the fighter the same decisive edge in the air it had always enjoyed over the bomber. And if a bomber couldn't get to its target because of fighters it was essentially useless.

Chennault insisted escort fighters were necessary to help bombers reach their targets. His critics...by now running out of patience...responded with the argument that fast, high flying, heavily armed bombers had made the fighter in any form as anachronistic as the dirigible. The only way a fighter could attack a bomber, they argued, was for it to get past the devastating guns -- an unlikely possibility -- and swoop in to drop a chain on the bomber's props, a very impractical procedure.

Faced with this mindset, Chennault became ever more tenacious. He warned that when war came,

which it surely would, thousands of bomber crewmembers would perish needlessly if sent to battle without escort fighters. But the die was cast. The U. S. Army would build more and more B-17s...and fewer and fewer fighters. And those few fighters still being built were hopelessly outclassed by those coming off German production lines.

Chennault saw the angry storm clouds forming, and clearly heard the distant rumble of thunder. But his warnings died in the wind. Then in 1936, against Chennault's vehement objections, the course in fighter tactics was dropped from the Air University curriculum. To Chennault, the Army Air Corps had just buried one of the nation's best weapons on the dawn of what he foresaw as mankind's darkest hour, World War II.

Saddened, weary and thoroughly frustrated by the trends in the U. S. military aviation as well as suffering from respiratory problems and loss of hearing that had grounded him from flying, in April, 1937, Chennault retired as a captain after 20 years of service. Little did he know it at the time, but rather than the end of his association with military aviation, his retirement from the U. S. Army was but the beginning of a much deeper, intensely personal love affair.

The day after retirement from the U. S. Army, Claire Lee Chennault was on his way to China at the invitation of Madame Chiang Kai-shek to help build an effective air force in the face of emminent Japanese invasion. Thus began a relationship between Chennault and China that would become legend.

In May, 1937, Chennault knew China had little time. Its tiny air force was badly managed, poorly manned and hopelessly underequipped for the inevitable conflict ahead.

Working 20 hours a day, Chennault quickly made his mark. He taught Chinese fighter pilots formation techniques he'd perfected at Maxwell AFB with the Flying Trapeze. He established a crude but highly effective early warning net using ground observers and any means of communications available. With the full support of Madame and Generalissimo Chiang Kai-shek, he improved organizational structures and maintenance. And he prayed a lot.

GENERAL COMPANY -- Chennault, second from left, tours senior military officials at a 14th Air Force base somewhere in China. From left, Lt. Gen. Henry H. "Hap" Arnold, Chennault, Lt. General Joseph Stillwell. Sir John Dill and Brig. Gen. Clayton Bissell.

In August, 1937, the hammer fell. Japan invaded China. Swarms of Japanese bombers appeared over major Chinese cities to pound the undefended populations below.

Chennault knew China's small air force wasn't ready. But the unescorted and overly confident Japanese bomber crews couldn't be permitted to continue their devastating attacks unchallenged. He launched fighters against them in the first test of theories he'd long propounded.

Even with their outdated and poorly maintained fighters, Chinese pilots gave Japanese bomber crews a lesson they wouldn't soon forget. Scores of them fell from the sky trailing flame and angry black smoke within sight of the targets they'd failed to reach. Scores more faltered and crashed on their way back to home base. The ragged wreckage they left behind proved Chennault's theories unerringly valid in the test of fire.

Reeling from the unexpected losses of their bombers, Japanese officials were quick to pinpoint the reason. One Claire Lee Chennault.

Chennault was quickly labelled an international gangster and Japan demanded the U. S. force his return to the States. But State Department attempts to comply with Japanese demands were met with characteristic Chennault independence. Yes, he was an American citizen. But he was also a free man. If necessary, he would become a Chinese citizen if that's what it took to repay the Japanese in spades for what they were doing to a defenseless, gentle people. Chennault would not be bullied. The issue was closed.

Themselves disciples of common sense, Imperial Japanese Air Force officials quickly modified their tactics, hoping to neutralize Chennault's devastating fighter attacks on their bombers. They introduced deception and started sending escort fighters with the bombers.

But Chennault was always one step ahead of them. His early warning net provided accurate advance information on Japanese bomber attacks. This information was translated into hitting the aerial armadas where least expected. Adopting the old confederate cavalry technique of rapid movement and surprise, Chennault shuttled his small forces from base to base like pieces on a chess board, frequently taking the offense against Japanese air bases in east China.

To Japanese officials, wildman Chennault was becoming a first class nuisance...and an embarrassment...in what had been planned as an easy task to gain aerial suprema-

(U.S. Air Force Photo)

INTERNATIONAL GANGSTERS -- was what the Japanese called them, but Chennault's Flying Tigers were America's first fighter unit in the Pacific War. Originally hired by the Chinese as their Air Force, the unit was disbanded in July, 1942 and reactivated as what would become the 14th Air Force.

cy over China. He had to go. Since diplomatic attempts had failed, they would use bombs and bullets to put Chennault out of business...for good.

The tiny Chinese Air Force...and Chennault himself...became priority targets for Japanese attack. But once again, the Japanese found that putting Chennault out of business was much easier said than done. He simply would not play by their rules and always seemed to have at least two aces up his sleeve.

Chennault forced the Japanese to direct more and more of their air forces against his by then rag-tag units, thus reducing their ability to hammer the civilian populations of China's cities. Overnight, Chennault became a national hero, his name and deeds known to virtually every Chinese citizen.

But the relentless Japanese attacks, and the inevitable loss of Chinese aircraft and pilots on the ground and in combat, forced the slow but sure disintegration of Chennault's forces. But like a cornered rattlesnake, he continued to lash out to inject deadly venom into frustrated Japanese airmen.

Legend has it that by this time Chennault, flying a Curtiss Hawk Special purchased for him personally by Madame Chiang, had downed nearly 50 Japanese aircraft himself, despite her strong objections that he not fly combat. Records are not available to prove or disprove this legend but it is known that Chennault flew combat, that he was a superior fighter pilot and that the swarms of Japanese bombers would have been easy prey for him.

But magician that he was, Chennault knew he couldn't stop the Japanese advance...swarming like locusts across China...with a handful of aircraft and pilots. By the fall of 1940 his situation was desperate.

Well equipped, highly disciplined Japanese armies controlled all of east China and its vital seaports. Generalissimo Chiang Kai-shek and his government had been forced to retreat to Chunkiang in the western mountains. And the only supply route still open to China was through the back door up the treacherous Burma Road from Rangoon. And even that lifeline was being threatened by Japanese forces moving into French Indo-China. If Japan could halt supplies moving up the Burma Road, Chinese opposition to the invasion would collapse quickly.

In his most desperate hour Chennault went to Washington and the White House for help. Since the U. S. and Japan were openly on

friendly terms at this point, negotiations were delicate. But realist that he was, President Roosevelt secretly agreed to help, and an unusually warm personal relationship developed between Chennault and the president.

One hundred early model P-40s destined for England were diverted to Rangoon. And Chennault was given permission to recruit mercenary pilots, mechanics and staff members from the U. S. Navy, Army and Marine Corps. His recruiting efforts, often hindered by U. S. military officials, ultimately netted 100 pilots and 165 support personnel.

Back in Burma, the P-40s were assembled and Chennault began training at an unused British air base in September 1941. On the morning of December 7 the world went topsy-turvy when Japanese aircraft devastated the U. S. Pacific fleet in their surprise attack at Pearl Harbor. Once again, Chennault's dire predictions of nearly a decade earler were proven horribly accurate. But he had no time for reflections or lament. The world was quickly coming apart at the seams and one of the worst rips was in his backyard.

He declared the American Volunteer Group, or Flying Tigers, combat ready and took to the air with a precision and vengeance unmatched in military aviation history. During the next seven months, the Flying Tigers downed nearly 300 Japanese aircraft and damaged thousands more while losing but a handful themselves. Their phenomenal combat record was the first real ray of hope Americans received after the trauma of Pearl Harbor.

With mobilization in full swing as America desperately sought to take the offensive, the Flying Tigers, having flown the lives out of their aircraft, were deactivated in July 1942. Pilots were offered commissions in the Army Air Corps. Many elected to remain with Chennault who was promoted to brigadier general and given a small paper unit that would eventually grow into the 23rd Fighter Group and 14th Air Force.

With characteristic intensity, Chennault began building his new unit, wrestling with monumental supply and bureaucratic problems in the process. The only known U. S. air unit activated in the field under combat conditions, the 23rd Fighter Group was soon taking the same devastating toll of Japanese aircraft the Generalissimo's Flying Tigers had exacted earlier. During a three-year period, Chennault's units destroyed nearly 1000 Japanese aircraft and fought their way to an enviable five-to-one victory ratio.

Frequently criticized by Army superiors for his lack of spit and polish on the ground, Chennault was pure business in the air...and demanded the same of his pilots. His subordinates quickly grew to love the man they called "Old Leatherface" because of Chennault's stern visage. On the outside he appeared hard as nails; inside he was an individual of infinite compassion and love for those who worked and flew with him. On one occasion his units ...unknown to him...submitted paperwork recommending Chennault for the Congressional Medal of Honor. The recommendation was signed by every officer and airman in Chennault's command. The package was promptly disapproved by the theater commander without explanation.

After the fall of Rangoon and the loss of the Burma Road in 1942, the bulk of supplies for air and ground operations in China had to be airlifted over the Himalayas from India. While Chennault pleaded, intimidated, prayed and used every technique he could concoct to get more supplies from the Hump airlift, his crews -- dangerously short of gasoline, ammunition and spare parts -- continued to improvise and take the air war to Japan with savage ferocity. Mysteriously, they were everywhere...blasting enemy planes in the air and on the ground...riddling troop concentrations and supply lines...and ranging out over the ocean to devastate Japanese shipping.

And then, the ponderous Japanese war machine began to stagger, mortally wounded by an accumulation of spears driven into it by Allied forces throughout the Pacific. Visionary that he was, Chennault saw the early signs of ultimate Japanese collapse and eagerly awaited the day they fell to their knees in submission. Having spent the last eight years of his life fighting them, Chennault's fondest dream was to be present at surrender ceremonies.

But that dream, too, was to be denied him.

His years of fighting the bureaucracy for materials and men for his growing units had produced enemies in high places. Despite Generalissimo Chiang Kai-shek's objections, Chennault was relieved of his command on the eve of the Japanese surrender. He submitted retirement papers for a second time, and before leaving China toured the cities he knew so well. His departure from China was a touching sight as millions of Chinese peasants gathered throughout the country to pay tribute to the man they'd come to love so much.

Chennault was airborne over the Nile River Delta on his way back to the U. S. when Japan surrendered on the decks of the battleship Missouri in Tokyo Bay. No single American had done more to hasten that event.

Back in his beloved Louisiana, Chennault tried to begin his life anew as a civilian. But new and ominous events in China prevented it. Even before the guns had cooled from World War II, another bully was on the move. His dear friends Madame and Generalissimo Chiang Kai-shek were again in trouble.

Mao Tse-Tung, who led communist forces attempting to take over China before the Japanese invasion and who had reached accommodation with the Generalissimo during the war, seized the opportunity to resume his assault against an economically devastated China.

Once again Chennault was China bound, this time to build an air transport system for use in restoring that nation's economy. The Generalissimo's chances of defeating communist forces, Chennault knew,

would be improved in direct relation to the state of the Chinese economy.

Chennault again worked 20-hour days to assemble equipment and personnel. Soon, transport aircraft were moving critical materials throughout the country, frequently coming under fire while delivering supplies to the Generalissimo's units in areas controlled by communist forces. Chennault soon realized, however, that less than 100 transports and their crews could not save China from communism. Outside help was needed...and fast.

Once again, he returned to Washington. But this time his pleas fell on deaf ears. Tired of war and lacking the perspective of Chennault, U. S. officials failed to see the urgency of the deteriorating situation in China.

And then it was over. The blood red flag of communism was hoisted over China. The free world was chilled. Mao Tse-Tung had -- with a band of guerillas in a short time -- done what the full might of Imperial Japan had failed to do in nearly a decade -- bring the world's most populous nation under heel.

But for Chennault there was again no time for reflection or lament as he hurriedly snatched aircraft and equipment from communist forces rapidly spreading through China to establish ironclad control in all areas. He moved most of the transport system to Hong Kong and Formosa.

Then followed one of the most bizarre court cases in history. Maintaining that all things Chinese belonged to China, Mao filed suit in international court claiming ownership of the airline Chennault, Chiang Kai-shek and others had built. Fortunately for the Generalissimo, Mao eventually lost the case and Chennault's personnel, aircraft and equipment formed the seed that in a circuitous way grew to become Taiwan's national airline and a vital part of that small nation's economy.

Bone weary from nearly four decades of battling skeptics, bullies and bureaucrats, Chennault once again returned to Louisiana seeking long overdue rest. But the accumulation of stress over the arduous years had taken a fatal toll.

A medical examination of the respiratory problems that had hounded Chennault for decades revealed lung cancer in advanced stages. Within a few months the growing lump in the old warrior's chest did more to rob him of his vigor and tenacity than the combined mights of Japan and the Chinese communists had been able to do in a decade.

As a final tribute to his courage and contributions to freedom, on July 25, 1958, Chennault was promoted to lieutenant general on his death bed. On July 27, 1958, his indomitable spirit slipped quietly away. A few days later his body was buried with full military honors at Arlington National Cemetery within sight of the capitol of the nation he'd loved so much and served so well.

A single aircraft roared over the assembled group of 5,000 statesmen, military officials, relatives, flying comrades and friends at the grave site and pulled up sharply into a bright blue sky. The spirit of one of America's greatest warriors and patriots went with it up toward the sun...and beyond.

Claire Lee Chennault had found peace at long last.

(U.S. Air Force Photo)

TIGER SHOW -- Chennault, here with Army Air Corps Commander "Hap" Arnold, was at his finest with the Flying Tigers. After the war, Chennault asked Washington for help in supporting Chiang Kai-shek against Communist Chinese forces. Help was refused, the Nationalists fled to Formosa and Chennault went home to Louisiana.

Terror of the Chinese skies

Hill proved his fighting talents

By Lt. Col. Ken White
Air Training Command
Office of Public Affairs

David Lee "Tex" Hill. Even the name has an impressive ring to it.

The man. Even more impressive.

Born in Korea the son of missionary parents, "Tex" Hill began his flying career as a U.S. Navy torpedo and dive bomber pilot. But when Gen. Claire Chennault put out the call for volunteers to form his Flying Tigers in Burma in 1941, Hill was one of the first in line.

From then until he left China three years later, Japanese pilots saw a lot more of the business end of "Tex" Hill than they'd bargained for.

Operating their tigernosed P-40 Tomahawks from grass and dirt strips, the Flying Tigers, facing unbelievable hardships and swarms of Japanese aircraft, wrote a chapter in military aviation history without parallel.

Chased from one location to another by Japanese air and ground forces...getting their fuel, ammunition and supplies in a haphazard manner...performing aircraft maintenance under trees...living in small enclaves under constant enemy attack, the Flying Tigers took to the air again and again to devastate the Japanese air arma

During an eight-month period, a handful of swift, heavily armed P-40s, piloted by courageous and skilled aviators, destroyed 297 Japanese aircraft. Twelve of those fell from the sky under the guns of "Tex" Hill's Tomahawk.

Later, after America's entry into the war and the deactivation of the Flying Tigers in the summer of 1942, Hill accepted a spot promotion to major in the Army Air Corps from General Chennault and remained in China to activate the 75th Fighter Squadron and later to command the 23rd Fighter Group. The 23rd was probably the only air unit in American history to be activated in the field, under fire.

Before returning to the states in late 1944, "Tex" Hill and his P-51 Mustang scratched another six aircraft from the Japanese inventory. It is believed that he was the first to down a zero with a P-51. Altogether, Hill destroyed 18 and one-quarter enemy aircraft to place him among today's top living American fighter aces.

During the closing months of World War II, Hill commanded the 412th Fighter Group, the first jet unit in the Army Air Forces. The group flew the Bell XP-59 and later the Lockheed P-80.

In July 1946, "Tex" Hill resigned his commission and left active duty. Shortly thereafter, he joined the Air National Guard and became the youngest brigadier general in the history of that service. He retired from the military in 1968.

Today, he resides in San Antonio, in the heart of the state that gave him his nickname when he flew with the Flying Tigers.

David Lee "Tex" Hill. A gentle man with the eyes of an eagle, the courage of a lion, and an unqualified love of God and country.

Gabreski was an ace in two wars

Murphy's Law can strike at the best

By Lt. Col. Ken White
Air Training Command Office of Public Affairs

Murphy's Law: What can go wrong, will.

Murphy's First Corollary: When it goes wrong, it will do so in the worst possible way at the worst possible time.

In June 1944, Col. Francis "Gabby" Gabreski was America's leading fighter ace in Europe, certainly not the victim of Murphy's Law. The 31 German aircraft he and his P-47 Thunderbolt had scratched from the *Luftwaffe* inventory during his 21-month combat tour had been subjected, however, to Murphy's First Corollary.

Now it was time for a well deserved rest for Gabreski. He had faced everything that Hermann Goering could point at him and had emerged the clear victor. In a few months he would return to a hero's welcome in the U. S. and marry the lovely lady he met and had to leave in Hawaii days after the infamous Japanese attack on Pearl Harbor.

On July 20, 1944, returning from a bomber escort mission, Gabreski spotted a covey of Luftwaffe fighters parked neatly on a German airfield far below. The target was simply too tempting to ignore. Experience had taught Gabreski that ME-190s and FW-190s were much easier to deal with on the ground than in the air. So he nudged his Thunderbolt over and began preparations for the attack.

The P-47 built up a good head of steam as it plummeted downward. Gabreski would closely observe the first rule of attacking a German airfield: come in low and fast to avoid intense and highly accurate anti-aircraft fire.

Like an avenging angel, Gabreski roared in low over the airfield, all guns blazing. German fighters began to disintegrate before him.

TEAM EFFORT -- Gabreski and his ground crew, left to right, Staff Sgt. R.H. Stafford, crew chief; Sgt. Joe DiFranza, armorer; Col. Francis Gabreski. Gabreski had racked up 28 victories when his photo was taken.

(U.S. Air Force Photo)

Noting that he was overshooting a particularly appealing target, he dropped the nose of the Thunderbolt slightly to bring the German airplane into his gunsights.

Enter Murphy's Law and First Corollary.

The intensity and target concentration that had served Gabreski so well in the past backfired in a diabolical way. The props of his Thunderbolt struck the ground. Instantly, the P-47 went wild. The engine and airframe shook violently and oil sprayed back over the canopy to block Gabreski's vision.

He knew his number was up. Fighting to keep the bucking Thunderbolt airborne -- just above the ground and below the effective envelope of German anti-aircraft guns -- Gabreski sought to trade airspeed for distance. When flight became impossible, he let the P-47 settle heavily to the ground and hung on as the fighter plowed through the underbrush.

When the Thunderbolt finally stopped sliding, Gabreski leaped from the cockpit to a heated rifle and machine gun reception from German ground troops. He ran for cover and took evasive steps. But his efforts were in vain. Four days later he was captured and spent the remainder of the war in a German prison camp.

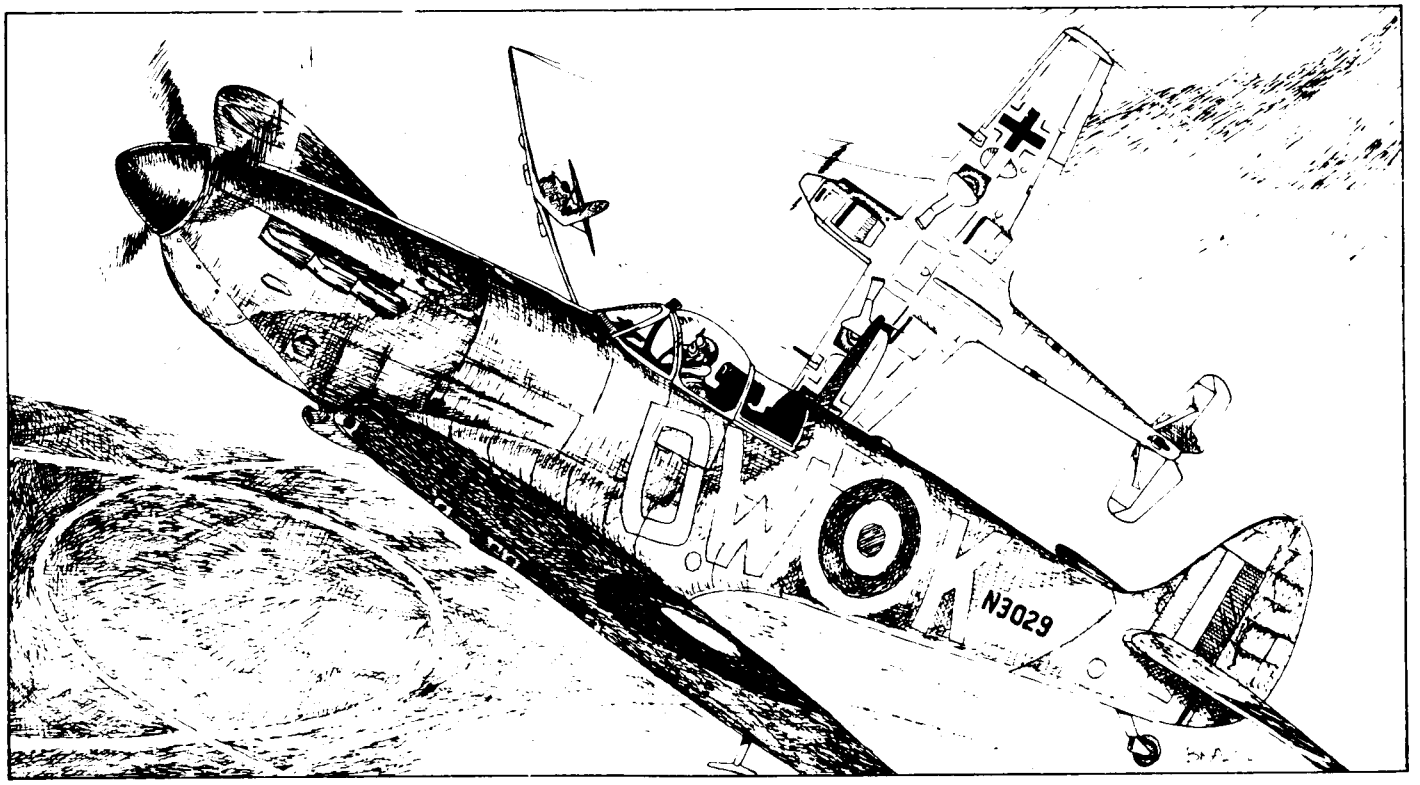
After World War II ended, Gabreski returned to the U. S., married his Hawaiian sweetheart, and assumed command of Selfridge AFB, Mich. When war broke out in Korea in 1950, he returned to aerial combat to down six North Korean MiG-15s with his F-86 Sabre.

Gabreski, America's top living fighter ace, is now retired from the Air Force and lives and works on Long Island, N. Y.

He is a firm believer in Murphy's Law.

Michael Gladych

Flew for four air forces in WWII



(U.S. Air Force Illustration by Marty Brazil)

WILDMAN GLADYCH -- On a mission over France in a Royal Air Force Spitfire, Flight Lieutenant Michael Gladych lost his squadron and single-handedly attacked three German fighters. He shot down two before running out of ammunition. Determined to down the third plane, he rammed it. Pieces of the wreckage burst Gladych's canopy, slashing his head and eyes. He set course for England and passed out. Two days later he woke up in a British hospital. In what had to be a fantastic flight, his aircraft droned in a gentle glide to England, where it touched down with Gladych still unconscious. The plane tore itself to pieces and came to a stop two hundred yards from a hospital.

By Lt. Col. Tom Buckner
Air Training Command Office of Public Affairs

Polish heritage stands tall in the history of World War II air combat.

America's own Francis Gabreski, with 31 victories, was our leading ace in the European theater. The Polish-American added six MiG-15s in Korea and is today the nation's top living ace.

And Witold Urbanowicz -- a Polish flight instructor who fought the Germans over his homeland and became an ace with the Royal Air Force in the Battle of Britain -- has to be one of the all-time great air fighters.

But this story is about the many adventures of Michael Gladych, who fought briefly with the famed 56th Fighter Group in Europe. The 56th "Wolfpack" pilots thought the Pole was "a wild man" because of his unquenchable desire to tangle with the enemy no matter what the circumstance.

Gladych had good reason to dislike the Nazis. When they invaded Poland, he shot down at least five Luftwaffe aircraft with his outclassed high-wing, fixed-strut FZL-11. He fled to Romania where he was captured and jailed. He later escaped to France where the Gestapo again found him. In a hand-to-hand fight he killed the Gestapo agent sent to assassinate him but landed in a hospital blinded by the fight.

After regaining his eyesight, he flew obsolete French fighters in a losing cause against the Germans. He then made his way to England to join the RAF where he continued to

down enemy planes; in one instance he rammed a German fighter after he ran out of ammunition.

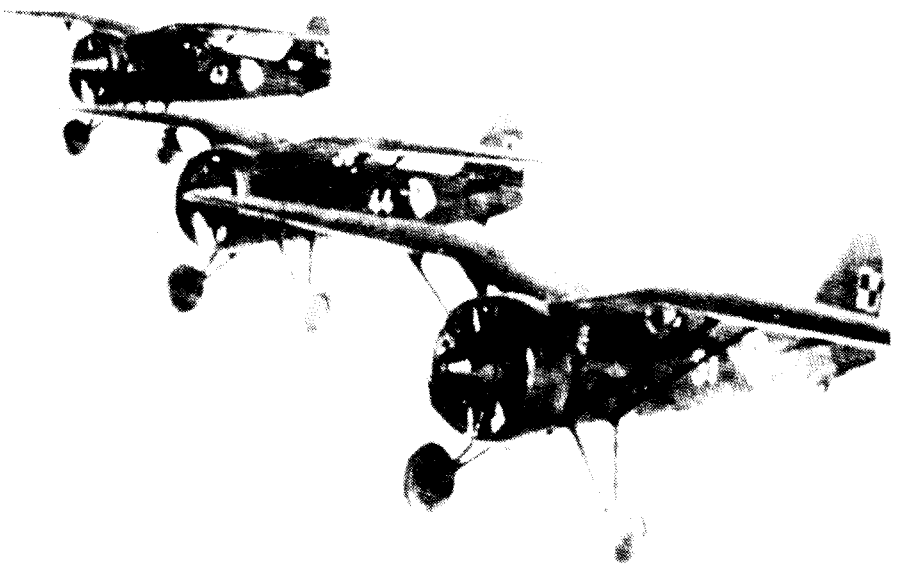
Finally, in the P-47 Thunderbolts of the 56th Fighter Group, he found an aircraft that matched his aggressiveness. The Pole had already impressed the 56th in several battles when on March 8, 1944, he helped the Wolfpack set a new single mission record of 20 victories.

Group pilots were on their way back to England following a bomber escort mission when they realized Gladych was missing. Group leader Gabreski made three radio calls for Gladych with no results.

Then the radio crackled with the Pole's monitone: "Hello Gabby, hello Gabby, this is Mike. I'm okay. I am being escorted out by three Focke-Wulfs over Dummer Lake."

Gabreski racked his Thunderbolt around to try and help, but he could have saved his fuel.

Gladych turned into the three pursuing FW-190s and exploded the leader. At that moment his fuel reached the critical stage -- if he fought a moment longer he could not reach England. So he chose what the P-47 did best, turned nose down in a power dive to treetop level with the 190s still hot on his tail.



POLISH FIGHTER FORCE -- Gladych fought off the *Luftwaffe* for four air forces, first flying planes like these PZL-11s. Although these planes were outclassed by the Nazi fighters, Gladych shot down at least five German fighters with his "obsolete" airplane.

As he shot over a clump of trees, he suddenly saw a German airstrip dead ahead. Not wasting an opportunity, he strafed the field as he streaked over. This alerted German anti-aircraft gunners, who promptly blasted the next two planes over the field.

"You know, it's funny ting. They no bother me after I cross the field," Gladych reported in debriefing later that evening.

FLIGHTLINE PREPARATION

P-47 Thunderbolts with invasion markings get refueled before pilots fly them into another mission.

Fought to get to Korea, fought when he got there

McConnell dominated MiG Alley

Lt. Col. Ken White
Air Training Command Office of Public Affairs

Those who fight to get into combat generally do a pretty bang-up job when they get there.

Joseph McConnell, Jr. was one of those. He became America's leading jet fighter ace in the process.

While his fellow Air Force pilots were making history in "MiG Alley" during the Korean War, Captain McConnell sat in Alaska working angles to join them. A veteran of World War II who had served as a B-24 navigator and earned his pilot's wings in 1948, McConnell was determined to get to Korea. Finally, in the fall of 1952 he got his wish and his first taste of a vastly different kind of aerial combat than he'd experienced nearly a decade earlier.

But he believed in himself, his aircraft, his wingmen, and his reason for being there. It didn't take long to prove these elements formed a winning combination.

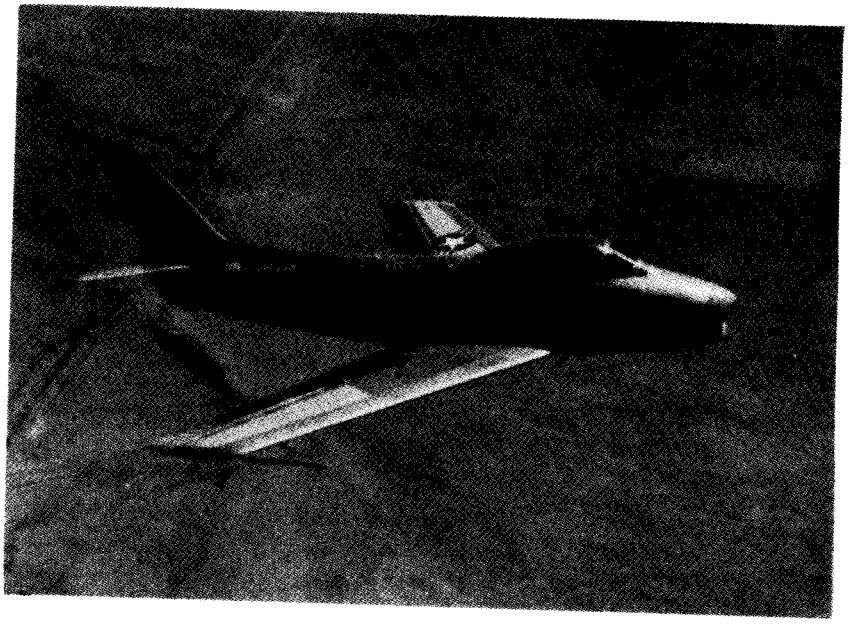
Assigned to the 51st Fighter Interceptor Wing flying the F-86 Sabre, McConnell downed his first Soviet MiG fighter on Jan. 15, 1953. He became an ace a few weeks later when he downed his fifth.

On April 12, 1953 -- after his eighth aerial victory -- his F-86 was hit by devastating ground fire and he was forced to bail out over enemy waters. While his wingmen kept the enemy pinned down, an air-sea rescue helicopter plucked McConnell from the icy waters less than two minutes after he splashed down. He was back in combat the next day to down his ninth MiG.

By the end of April, McConnell had passed the double ace standard of 10 and on the morning of May 18, 1953 -- in a particularly violent battle in "MiG Alley" -- he destroyed two more MiGs to become a triple ace. He downed his 16th and final Soviet jet fighter that afternoon.

Tragically, McConnell was killed on August 25, 1954, in the crash of a new model F-86 Sabre he was testing.

McConnell fought to get to Korea to do what he was trained to do. And he did it better than anyone else. He died doing what he did best: serving his country.



CAPTAIN JOSEPH McCONNELL, above, became America's leading jet ace with 16 victories in Korea. The F-86 Sabre, below, flown by McConnell, proved more than a match for the MiG-15 in Korea.
(U.S. Air Force Photo)

Struck like lightning on the bayou

DeBellevue met destiny and won

By Lt. Col. Ken White
Air Training Command
Office of Public Affairs

Louisiana is famous for many things: Basin Street and the blues, spicy food and hot sauce, chicory coffee, zesty Cajun music and sultry summer days.

It's a foreboding land of swamps, cypress trees, moss, alligators, poisonous snakes and mosquitos. Its earthy people, many of French ancestry, are proud, hard working, hard living and intensely patriotic. They're a people hard over on right and wrong, good and bad.

Not surprisingly, Louisiana has produced more than its share of outstanding warriors.

Lt. Gen. Claire Lee Chennault, leader of the legendary World War II Flying Tigers and 14th Air Force, was one of them.

Lt. Col. Charles B. DeBellevue is another.

The two never met. But they shared common interests and personality traits forged during their childhood years in the Creole State. And their trails crossed in an interesting way.

Having become a legend by helping defeat the Japanese in World War II, Chennault was on his way back from China to the United States when DeBellevue was born in New Orleans on Aug. 15, 1945. Young DeBellevue, too, was destined for military aviation greatness.

Chennault, who from a child had despised bullies in any form, fought the Japanese alongside Chiang Kai-shek from 1937 to 1945 and then stood with the Generalissimo in his losing battle with communist forces led by Mao Tse Tung. During his many years in the Orient, Chennault often flew over French Indo-China, which became Vietnam, a place that would later provide the setting for DeBellevue's appointment with destiny.

In the spring of 1954 Chennault helped support and air evacuate beleaguered French forces surrounded by Ho Chi Minh's guerrilla army at Dien Bien Phu. Young DeBellevue, then 8, studied reading, writing and arithmetic at a small school in Crowley, La., not far from Chennault's childhood home. Like Chennault, DeBellevue too disliked bullies and developed an early love affair with military aviation.

Chennault died in 1958 and was laid to rest in Arlington National Cemetery. As Chennault's life ended, DeBelluvue's began to accelerate. He got caught up in school activities and the excitement of growing up in rural Louisiana. News reports of a faraway place called Vietnam meant little to him. But his growing love affair with military aviation would one day make Vietnam the most important

place in his life.

DeBellevue graduated from Crowley High School in 1963 and entered the University of Southwestern Louisiana to study physics. In the meantime that strange place called Vietnam was constantly in the news. More and more Americans were being sent there. And more and more of them were dying. Now, Vietnam had DeBellevue's full attention.

He graduated from the university in 1968 and, with a commission through the Air Force ROTC program, entered navigator training in the fall. A little over a year later, with shiny new wings and F-4 combat crew training under his belt, DeBellevue joined his first operational unit, the 335th Tactical Fighter Squadron at Seymour Johnson AFB, N.C. In October 1971 he transferred to Thailand and the 555th ("Triple Nickle") TFS. His appointment with destiny was at hand.

During the next year, flying over terrain once so familiar to Chennault, DeBellevue visited the historic Hanoi area nearly 100 times. Not unexpectedly, he and the pilot of his F-4 Phantom were never welcome there. The receptions they received were downright hostile.

Charged primarily with sweeping the skies of MiGs sent up to attack U.S. fighter-bombers, Captain DeBellevue and the two pilots he usually crewed with -- Capts. Steve Ritchie and John Madden -- consistently showed communist fliers who was the boss. When the contrails cleared and the debris settled, DeBellevue was the leading American ace with six aerial victories. And the North Vietnamese air force was short four MiG-21s, two pesky MiG-19s and their veteran combat pilots.

In all, DeBellevue flew 220 missions and logged 550 hours of combat time while in Southeast Asia. After returning to the United States from his tour of duty as a weapon systems officer, DeBellevue entered pilot training at Williams AFB, Ariz., in 1973 to earn his second set of wings. Then it was back to the fighter he loved so much, the F-4 Phantom. This time he strapped into the front seat. The weapon systems officers who flew the back seat with him got the best possible training, with more than a little inspiration thrown in.

Having endured the pain of 9½ Gs in a tight turn, with MiGs to the left and right and rear, and possible death but a heartbeat away, DeBellevue was quick to pass on the secrets of combat success he'd learned the hard way. Just as Chennault had instilled in his hopelessly outnumberd and outgunned Flying Tigers the values of decisiveness, sharply honed flying skills and precision teamwork, DeBellevue stressed the same values with the same objective: victory.

"In today's violent air to air confrontations," DeBellevue would tell younger pilots and navigators with characteristic intensity and candor, "two kinds of fliers emerge, the living and the dead. One mistake, even a small one, is frequently the last. Staying alive day in and day out under constantly changing combat conditions demands decisiveness and total commitment."

"You survive," he would add, "when you have a good aircraft, know that aircraft and yourself, and the enemy and his aircraft, and always do the unexpected. The time to learn yourself, your aircraft and your job is not when an enemy missile is coming up your tailpipe or when a MiG is rolling in for the kill. Do your learning before you get into that situation."

Just as Chennault's P-40s had challenged and defeated the more maneuverable Japanese Zeros in early World War II, Phantoms over North Vietnam had done likewise with the somewhat swifter and more maneuverable MiGs. DeBellevue had an explanation for the decisive edge enjoyed by U.S. fliers.

"The secret's in teamwork," he'd say. "Just as individual man and machine must be one, every aircraft and crew member in a formation must work as a precisely and decisively executed unit. But the team doesn't stop there. The crew chiefs, load crews and specialists have to do their part for the team to be complete. Without the effort of those on the ground, our formations were not worth much in the air. Teamwork is required by everyone to get the job done. Anything less and you're all in trouble."

"You take the decisive edge," he'd add. "That means you outthink, outfly and outgut your opponent. Take advantage of even the slightest enemy weakness. Be willing to hurt more than your adversary. When your neck gets eight sizes larger and your eyeballs are down on your lap from the G forces in a tight turn, you're competetive. . .assuming you're turning the right direction at the right time and in the right manner."

DeBellevue continued to fly the F-4 with units at Holloman AFB, N.M. and then Elmendorf AFB, Alaska. After completing Armed Forces Staff College at Norfolk, Va. in 1980, he logged a tour of duty at the Pentagon. Then it was back to flying the F-4 and to his first operational unit, the 335th TFS at Seymour Johnson AFB. His flying career had made a full circle. After serving as squadron assistant operations officer for a year, Colonel DeBellevue was transferred to his current position as chief of the maintenance training division, 4th Tactical Fighter Wing, also at Seymour Johnson. He still flies his beloved F-4 Phantom.

Now when DeBellevue reflects on his experiences in Vietnam more than a decade ago, he's mellowed a bit but he's still emphatic about what it takes to be a winner in aerial combat. "Our adversaries have made quantum advances in their aircraft and weapon systems. But so have we. The formula for success is still the same: outthink, outfly and outgut the enemy."

Surely General Chennault would agree with that assessment.

Sense of God, country got him through

Flynn fought greatest foe as POW

By Lt. Col. Ken White
Air Training Command Office of Public Affairs

Duty...Honor...Country.

No living American personifies the spirit of those powerful words more than retired Air Force Lt. Gen. John P. Flynn.

His military career began in February 1943 when he left his hometown of Cleveland, Ohio, to enter aviation cadet training. After earning his pilot's wings in 1944, General Flynn began a flying career that spanned three decades and three wars.

His first combat came in a P-51 Mustang in Italy. There, he learned the skills necessary to survive in the presence of seasoned and desperate German fliers fighting savagely for their honor in the final hours of the Third Reich.

Following World War II, those same skills earned him a spot on the Air Force's first aerial demonstration team, predecessor of today's Thunderbirds.

Already an expert in the P-80 when the Korean War began, General Flynn was quickly back in combat where he became a pioneer in developing new tactics for that early jet fighter. He helped institute cruise control, a technique to increase range and capability of the Shooting Star. And he pioneered the concept of armed jet reconnaissance.

After the armistice in Korea, General Flynn was a key force in developing nuclear delivery tactics for fighters, and he was on the team that built what is today known as Central Command.

When the crisis erupted in Lebanon in 1958, General Flynn was the first Air Force member in the country, and the last out.

Following years of working to improve fighter tactics, he volunteered in 1967 for duty in Southeast Asia, flying F-105s from Korat Air Base, Thailand.

The remainder of the John P. Flynn story is one of unsurpassed courage, integrity and patriotism. In late October 1967 his "Thud" was shot down over North Vietnam and for the next 65 months he was a prisoner of war.

As the senior U. S. POW in

Vietnam, his leadership and courage inspired others to survive incredible torture and degradation. Through the hundreds of dark nights of isolation, torture and pain...through hundreds of days of hunger and relentless attack by insects and his captors...General Flynn held fast to the principles of duty, honor and country.

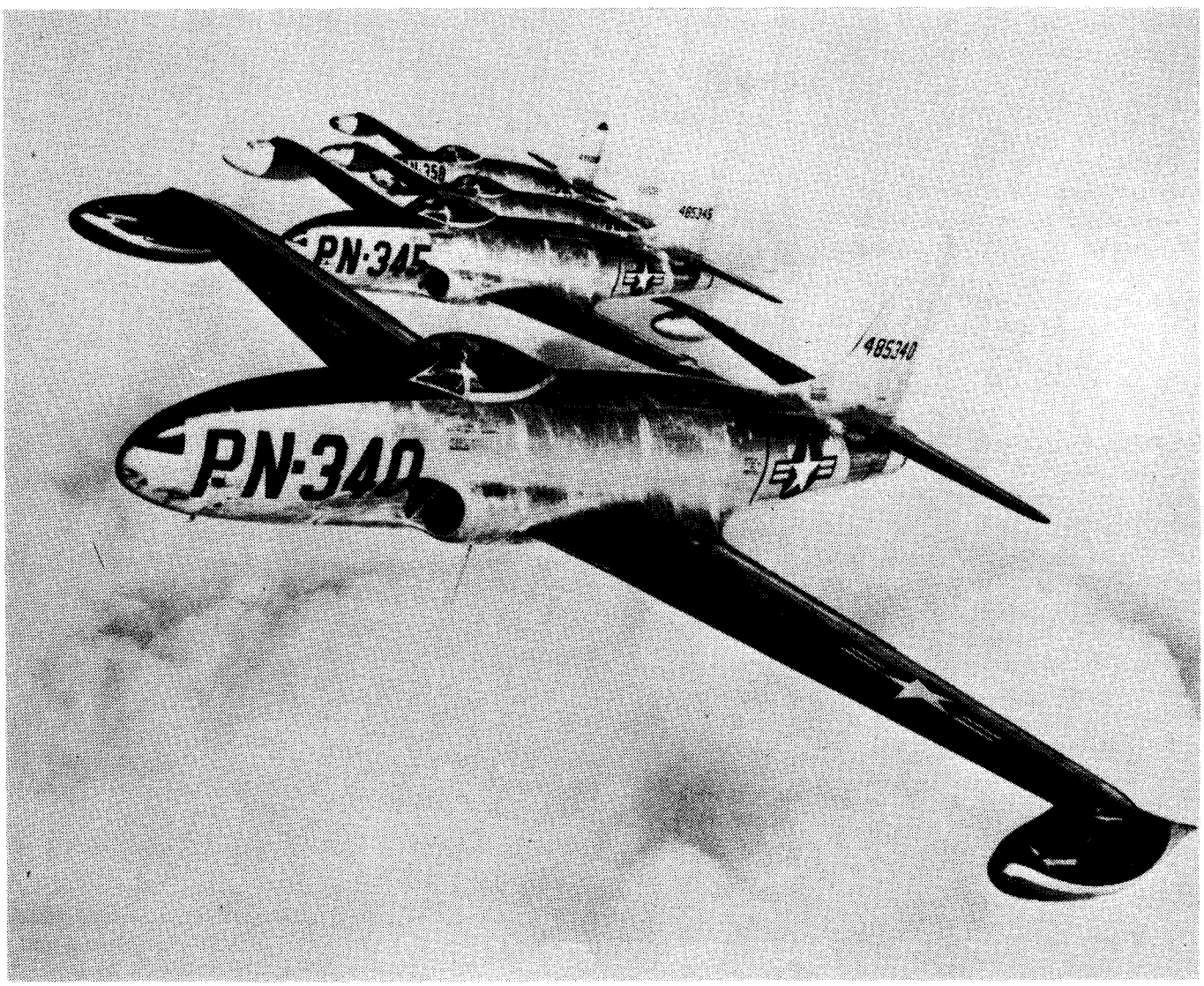
He refused to be broken mentally or physically as he drew strength from memories of home, family, country and from God, an ever present visitor in his tiny, rat-infested cell. Through it all, he refused to bend, or to compromise his ideals, or to lose hope. His unshakable courage earned him the undying love of his comrades and respect of his captors.

When John Flynn returned to the land and people he loved so much, he came with dignity and with a heartfelt thanks to a nation that hadn't forgotten him during his darkest hours.

Following his return to the states, General Flynn served as commandant of the Air Command and Staff College, then as commander of the Air Force Military Training Center at Lackland AFB, Texas. He completed his career with a tour of duty as Inspector General of the Air Force.

In each of those positions, he continued to demonstrate strong people-oriented leadership. The thousands of young officers and airmen who met him were touched by his integrity, his compassion and his unqualified love of God and country.

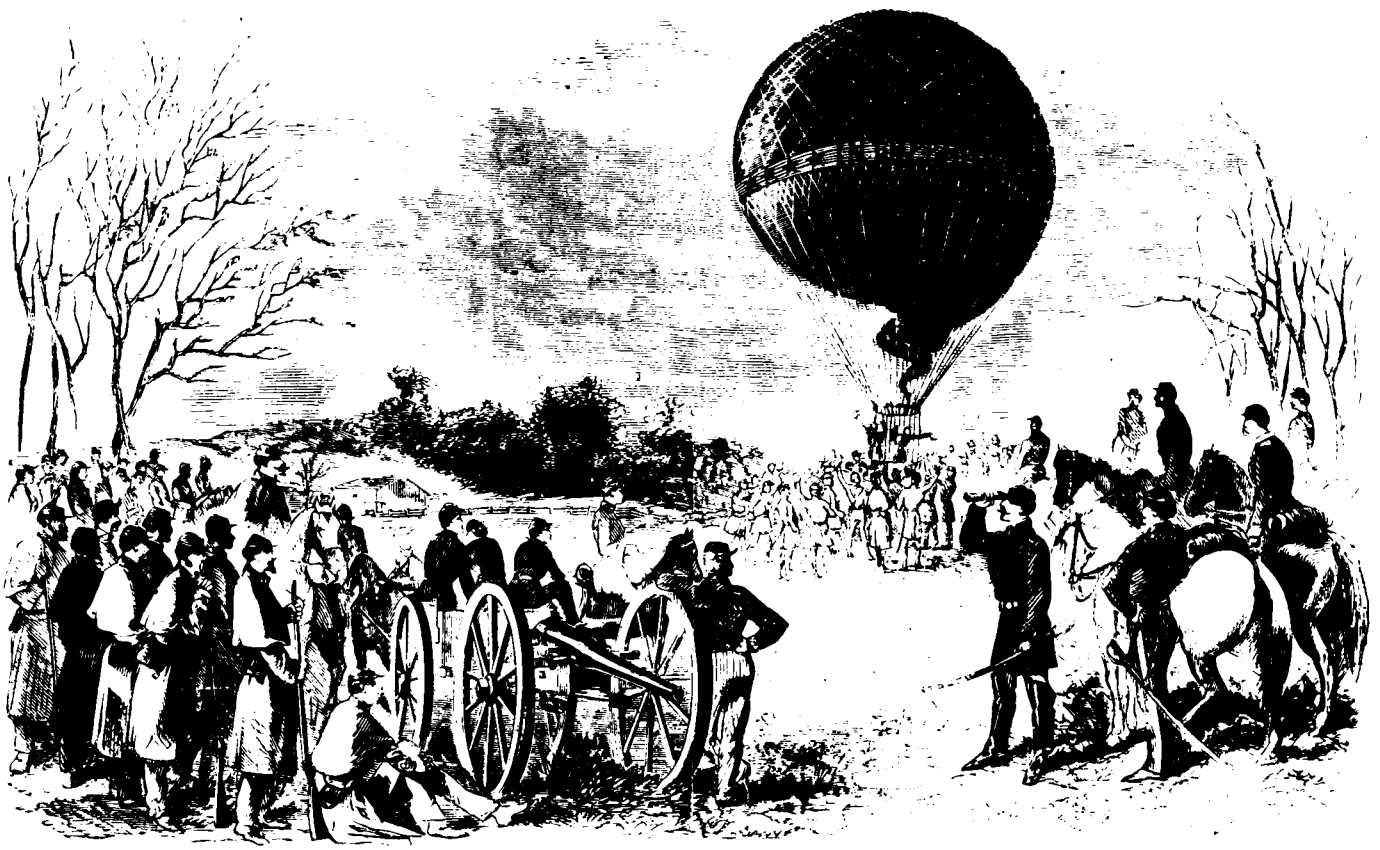
General Flynn retired from the Air Force in 1978. But his love for the Air Force and concern for his fellow man continues. The patriotism that burned within his breast through three wars grows ever stronger.



JOHN FLYNN helped develop combat tactics for the F-80 Shooting Star.

Balloonist shot from sky by own troops

War was literally a losing proposition



UNION SOLDIERS used air power more than 120 years ago to spy on Confederate forces. The earliest efforts were shot down by their own forces.
(Air & Space Museum Illustration)

By TSgt. Paul Zimmerli
Office of Public Affairs
Sheppard AFB, Texas

The U. S. Army got exactly one manned flight out of its first balloon. That shot $850. Literally.

In June 1861, the Army's Topographic Engineers asked Pennsylvania balloonist John Wise to build a 20,000 cubic foot hydrogen balloon. Wise accepted, for $850, and the balloon was delivered to Washington on July 21.

The balloon was immediately detailed to be used for air observation at the battle of Manassas, then in progress. The inflated balloon was walked across the Potomac to Fairfax, VA., by a ground crew and then fastened to a wagon.

Maj. Albert J. Myer, the Army's chief signal officer, took charge and the party headed for the Manassas battlefield.

Unfortunately, Major Myer got impatient and ordered the wagon driver to speed up. The balloon immediately snagged in the trees, and ripped when the major tried to free it.

Three days later, the repaired balloon made an observation ascent at Arlington, VA. Then, on July 26, they decided to walk the balloon closer to the battlefront.

The wind caught the balloon and forced the tow ropes against telegraph wires. The ropes parted and the balloon quickly started floating toward the Confederate Army's position.

To keep the Confederates from capturing the balloon, the Union troops finally shot it out of the sky.

Self-inflicted wounds of this sort were common.

Balloonist John La Mountain came up with the idea of free flights using the prevailing east wind to blow him over the Confederate lines, then rising and catching the west wind to return to Union territory.

It worked -- for a while.

Then, Oct. 18, 1861, returning to the Union lines, he decended into the midst of Brig. Gen. Louis Blenker's German Brigade. The troops only knew he had come from the direction of the Confederate lines, and La Mountain was put out of the

ballooning business by a volley that riddled the lower half of the balloon's gas bag.

La Mountain left the Army's service a few months later.

Thaddeus S. C. Lowe, La Mountain's constant rival, became the most famous military aeronaut. In June 1861, Lowe sent the first telegraphic message ever from a balloon, at Washington, D. C. A wire connected the key in the balloon to a line with terminals in the White House and the War Department.

The first message went to the White House. Others went to the War Department. The Army and President Lincoln were impressed.

After encountering a few problems with some senior officers, Lowe finally got his balloon into action. Sept. 24, 1861, Lowe established a first by directing artillery fire by telegraph from a balloon near Arlington. The ground receiver post then signalled the gunners with flags to adjust the fall of the shot.

Lowe continued his ascents during the Army of the Potomac's campaigns in northern Virginia, creating another first, of sorts.

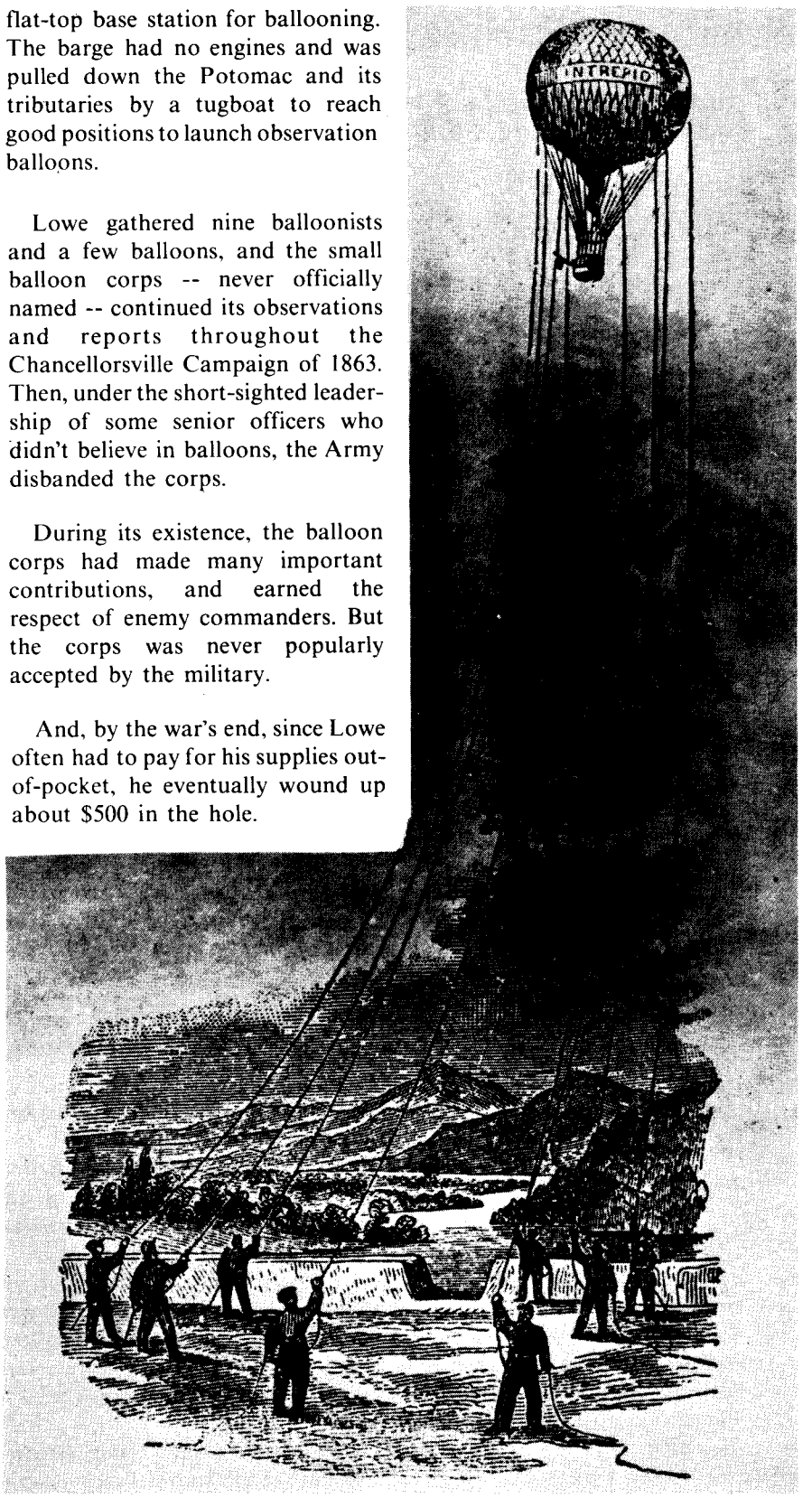
Laying logs across the breastworks to simulate cannon was a common Confederate tactic. However, Lowe's airborne observation post forced the Confederates to abandon this ploy. In addition, Confederate commander Gen. Pierre G. T. De Beauregard had to order his troops to use camouflage to hide positions from the overhead observers.

Also, in Nov. 1861, the U. S. Army fielded the world's first "aircraft carrier" -- the USS George Washington Parke Custis, a Navy coal barge specially converted into a flat-top base station for ballooning. The barge had no engines and was pulled down the Potomac and its tributaries by a tugboat to reach good positions to launch observation balloons.

Lowe gathered nine balloonists and a few balloons, and the small balloon corps -- never officially named -- continued its observations and reports throughout the Chancellorsville Campaign of 1863. Then, under the short-sighted leadership of some senior officers who didn't believe in balloons, the Army disbanded the corps.

During its existence, the balloon corps had made many important contributions, and earned the respect of enemy commanders. But the corps was never popularly accepted by the military.

And, by the war's end, since Lowe often had to pay for his supplies out-of-pocket, he eventually wound up about $500 in the hole.



Bong, McGuire, Kearby & Lynch

Top pilots locked in fatal quest

By Lt. Col. Ken White
Air Training Command Office of Public Affairs

The paths of four of America's top World War II fighter aces crossed in a diabolical way.

The four were Richard Bong, Thomas J. Lynch, Neel E. Kearby and Thomas B. McGuire, Jr. The place: the South Pacific. The time: 1942 - 1945.

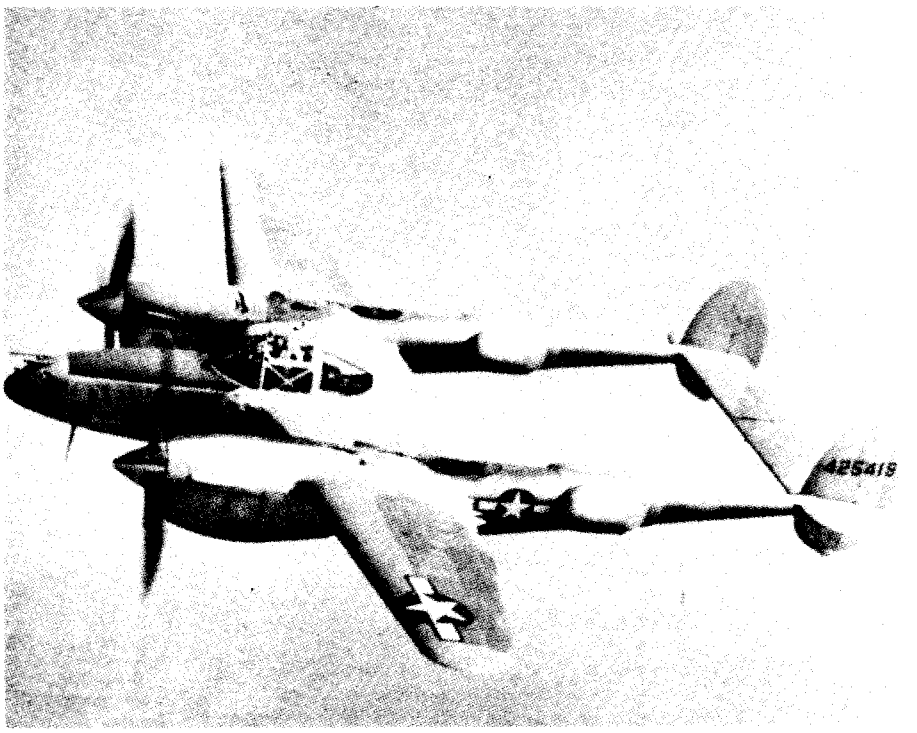
Bong and Lynch began the strange saga on Dec. 27, 1942, when together they flew their first combat missions near Port Moresby, New Guinea. Piloting newly arrived P-38 Lightnings, the two ripped into a large formation of Japanese bombers and fighters. When the aerial debris cleared, Bong and Lynch each had two victories.

Like young hunters leaving the forest after killing a ferocious bear, the two winged back to base wildly excited. But older pilots dampened their youthful exuberance a bit when they explained just how lucky the two had been. On that first combat mission Bong and Lynch had made two potentially fatal mistakes...wasting ammunition from long range at bad angles and dogfighting with the faster turning Zeros.

But like all who survived their first tests of fire with the crafty, well trained Japanese pilots, Bong and Lynch learned quickly. Both possessed natural flying abilities which they expertly mated to the P-38's strengths. Man and fighting machine became one. Then, seemingly charmed, the two pilots racked up victory after incredible victory.

In June 1943 Kearby, commander of the 348th Fighter Group, joined them in the wild aerial melee over the South Pacific.

Anxious to test the mettle of the P-47 Thunderbolt and his skills against the already legendary Japanese Zeros and their pilots, he roared into New Guinea loaded for bear. It didn't take him long to prove the "Jug" and his tenacity were more than a match for the swift Japanese aircraft. On Oct. 11, in an exceptionally bizarre chain of events, Kearby downed seven enemy aircraft in a single mission, establishing a new American record. He was promptly awarded the Medal of Honor for his courageous exploits.



LIGHTNING STRIKING -- The twin-boom P-38 Lightning was the weapon of choice for Lynch, Bong and McGuire

By March 1, 1944 Kearby had closed the gap with Bong. Both had 22 victories. Lynch had 19. Competition among the three, although friendly, was becoming increasingly more spirited.

Three days later, Kearby and three wingmen jumped 15 Japanese aircraft over Wewak, New Guinea. Kearby immediately disintegrated the leader of the pack and, turning back toward the mass, vaporized still another Japanese aircraft with an exceptionally long range and bad angle machine gun burst. For a brief instant Kearby was the leading U. S. ace.

But three Zeros immediately swung in on the tail of Kearby's "Jug." While he dived and gyrated wildly to shake them, his wingmen downed one of the Zeros. But there was no escape. One of the pursuing Zeros, piloted by an old hand at the business, slid gracefully into position and poured an angry red stream of hot steel directly into Kearby's cockpit. His Thunderbolt nosed over and exploded in an orange ball in the jungle below. There was no chute...and no chance.

A little later that same day, many miles away, cherub-faced Dick Bong downed two more Japanese aircraft, again tying the score with Kearby. Lynch held at 19.

By then Bong and Lynch were extremely valuable resources, too valuable to risk in day-to-day combat. Their talents, officials directed, would be better used training

inexperienced pilots arriving for duty.

Lynch was named Gen. Paul Wurtsmith's operations officer and Bong served as Lynch's assistant. But there was no keeping them out of combat.

On March 9, 1944, Bong and Lynch roared off in their P-38s for a hunt over Tadji, New Guinea where they surprised a similar force of two Japanese aircraft. Lynch downed one and Bong the other.

Failing to spot more enemy aircraft, the pair attacked a Japanese ship, a corvette class, headed for Hollandia. In pass after pass they raked the decks with machine gun fire. The ship's crew responded in kind.

Without a word, Lynch broke off the attack and headed for shore, one of his engines trailing smoke. Bong watched as a propeller tore from the P-38 and Lynch struggled from the cockpit. Just as Lynch prepared to jump clear, the Lightning exploded into a huge fireball.

Bong circled the blackened wreckage bobbing gently on the sea below. But there was no Lynch. Bong turned for home alone, saddened at the loss and angered at the bad luck that had taken his friend.

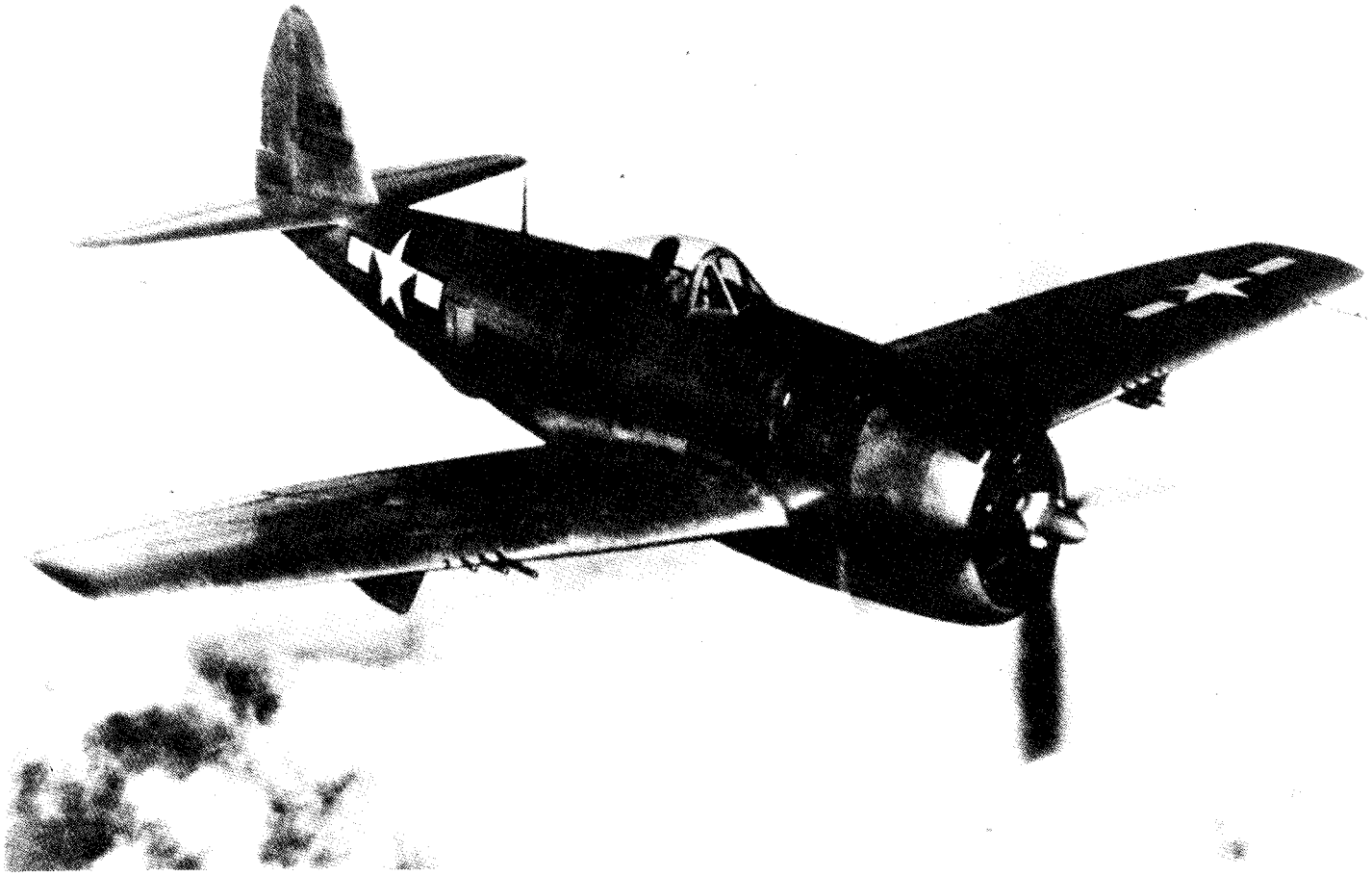
Richard Bong

Thomas J. Lynch

In early April, 1944 Bong downed his 27th enemy plane to surpass Eddie Rickenbacker's World War I record and to become America's leading fighter ace of all time. Gen. George Kenney promptly removed the young pilot from combat and made sure Bong didn't get back into the air again, by sending him back to the States for a rest.

Meanwhile...Tommy McGuire, who had arrived in the theater in the spring of 1942 for assignment to Bong's old unit, quickly racked up a string of impressive aerial victories. But for some unexplainable reason, he always remained at least eight behind Bong. Whenever Bong was grounded by authorities, McGuire always seemed to be grounded by jungle illnesses.

Bong returned to the war and by December 1944 had pushed his record into the 30s, despite stern warnings from General Kenney that he was to participate in combat only



FLYING JUG -- Kearby flew his P-47 Thunderbolt to 23 victories and briefly led the Pacific Ace Race, when three Zeroes shut the door on his bid and his life. (U.S. Air Force Photo)

to "defend" himself. His primary job was to train new pilots.

Occasionally, Bong and McGuire teamed up to do the training, and in Bong's case "defend himself." When Bong's total reached 40, General Kenney had had enough. The ace was going home for good. His 146 missions and 400 hours of combat had pressed luck beyond the limit. Bong was reassigned to California as a test pilot in the nation's new jet fighter.

To insure Bong's welcome back to the States was not marred by the possibility of McGuire breaking the hero's victory record, General Kenney grounded McGuire temporarily.

Then on Jan. 7, 1945, after the cheering California crowds had properly welcomed Bong, McGuire took to the air again. He went up on a training mission with two new pilots over a Japanese airfield on Negros Island. It was to have been a milk run but the three were jumped at low level by a single Hamp, a variation of the Zero.

The Japanese flier casually rolled in on the tail of one of the new U. S. pilots and began blasting large chunks from his P-38. McGuire, determined to drive off the lone attacker, pulled his Lightning into a tight, low level turn. In the surprise and excitement of the Hamp attack, he forgot to drop his heavy wing tanks. His P-38 stalled and tumbled into the jungle where it exploded violently.

Unperturbed by the remaining P-38, the Japanese pilot pressed his attack on his initial victim, splattering the Lightning in a trail of fire and debris across the treetops. Then ever so casually, he turned his fighter away from the black smoke rising from the two downed P-38s and disappeared over the jungle.

Little did he know at the time, but the Japanese pilot had just contrib-

Neel E. Kearby

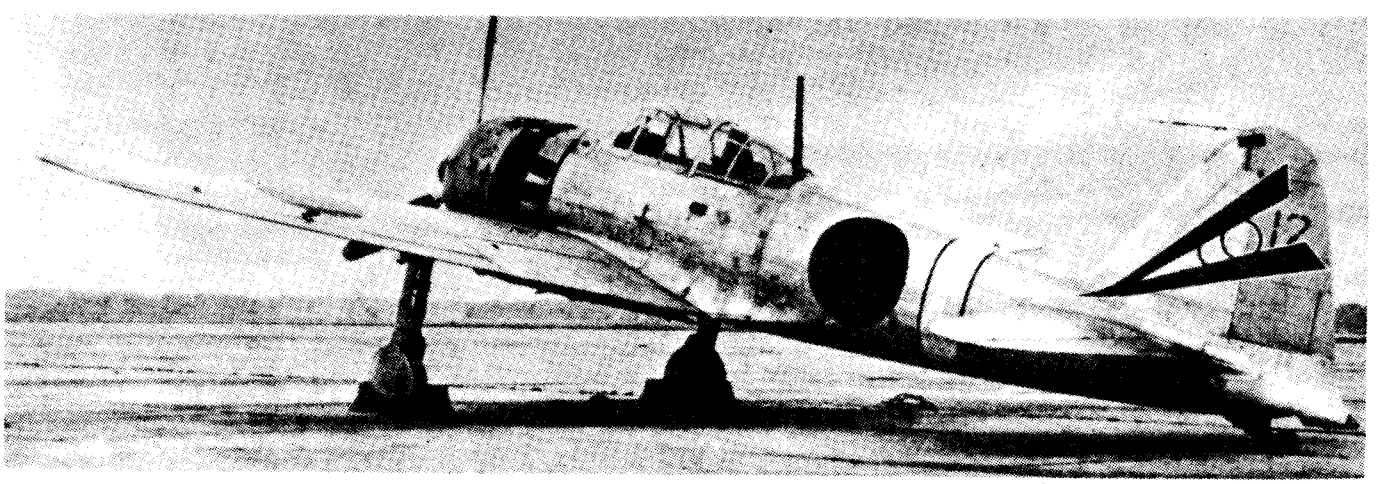
uted to the death of the only U. S. fighter ace who had a chance of surpassing Bong's record of 40 victories. That pilot was Shoichi Sugita, Japan's second leading ace. His brazen one-on-three attack ended McGuire's string at 38.

The same Aug. 7, 1945, American newspapers that carried headlines about the nation's first use of the atomic bomb on Japan contained still another chilling story. Dick Bong had died the day before in a flaming crash of the P-80 Shooting Star he was flight testing in California.

With Bong's death and the arrival of the atomic bomb, one era in warfare ended and another began. The deadly aerial confrontations Bong, Lynch, Kearby and McGuire had mastered so well were swept away into the history books. Never again would thousands of airplanes and pilots -- ranging over broad areas of the world -- blaze away at each other for years to determine the outcome of war.

But that in no way lessens the deeds of Bong, Lynch, Kearby, McGuire and the hundreds of thousands of military fliers on both sides of the World War II conflict. They were a special breed characterized by courage and unbelievable sacrifice. They must never be forgotten.

Thomas B. McGuire, Jr.



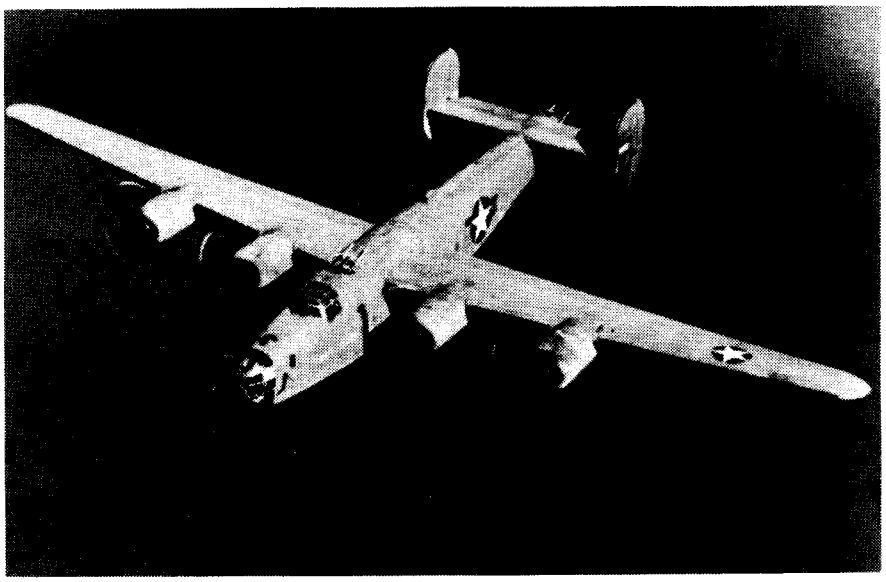
HUNTER/HUNTED -- Japanese fighters like this Zero were prime targets for American Pacific aces. For more than a few American pilots, they were also messengers for deliverance. (U.S. Air Force Photo)

AUTHOR'S NOTE: I wish to thank Edward Jablonski, author of the "Airwar" series, for inspiring me to write about Air Force people, aircraft and battle campaigns. His works are frequently my primary reference source and always a source of inspiration. He is an author with exceptional perspective and a great love for those who flew. I am deeply indebted to him.

Vital target; doomed mission

Ploesti raid claimed terrible toll

By Lt. Col. Ken White
Air Training Command
Office of Public Affairs



HEAVY METAL -- B-24 Liberators were built to World War II American specs: powerful, sturdy, well armed. American pilots who flew them were among the best. But the raids on Ploesti's oil refineries took heavy tolls on both men and planes. (U.S. Air Force Photo)

Murphy's Law states that if anything can go wrong, it will...at the worst possible time and place, and in the worst possible way.

The hundreds of fliers and their B-24 Liberators that took part in the ill-fated raid on German oil refineries at Ploesti in August 1943 must have thought Murphy wrote his law specifically for them.

Events leading to that day began months earlier when strategic studies revealed that the highly efficient and growing German *Luftwaffe* stood squarely in the way of two important Allied objectives: truly effective strategic aerial bombardment of Germany and a ground invasion of Europe in 1944.

Therefore, ways had to be found to cripple or neutralize the German air force. Strategic airpower could be used, it was reasoned, in one of three ways to do that: hit the German aircraft industry, devastate key transportation systems and attack oil production facilities, in that order.

The "What" that needed to be done seemed simple enough. The "How" was another matter altogether.

Maj. Gen. Ira C. Eaker, commander of Eighth Air Force Bomber Command in England, needed to get 300 heavy bombers airborne in a single raid, it was reasoned in early 1943, to wreak enough devastation to cripple German aircraft production. To do that he needed a total bomber force of around 800 aircraft. He had but a fraction of that number.

Furthermore, he needed long range escort fighters to help ward the pesky German fighters off his bombers. Available American P-40s and British Hurricanes and Spitfires had too little range to do the job. And it would be nearly a year before our P-47s and P-51s would become operational in significant numbers.

Faced with this dilemma, planners began to search for the best ways to use available airpower to inflict punishment on the *Luftwaffe*, without suffering heavy losses themselves.

The studies quickly and decisively pointed to German oil fields at Ploesti in south central Rumania. Fully one-third of the oil needed to power the *Luftwaffe* and the German war machine came from there.

Furthermore, a raid against Ploesti on June 11, 1943, by 13 B-24s had been reasonably successful. Intelligence indicated German defenses were not particularly strong at Ploesti, despite the high value of the target.

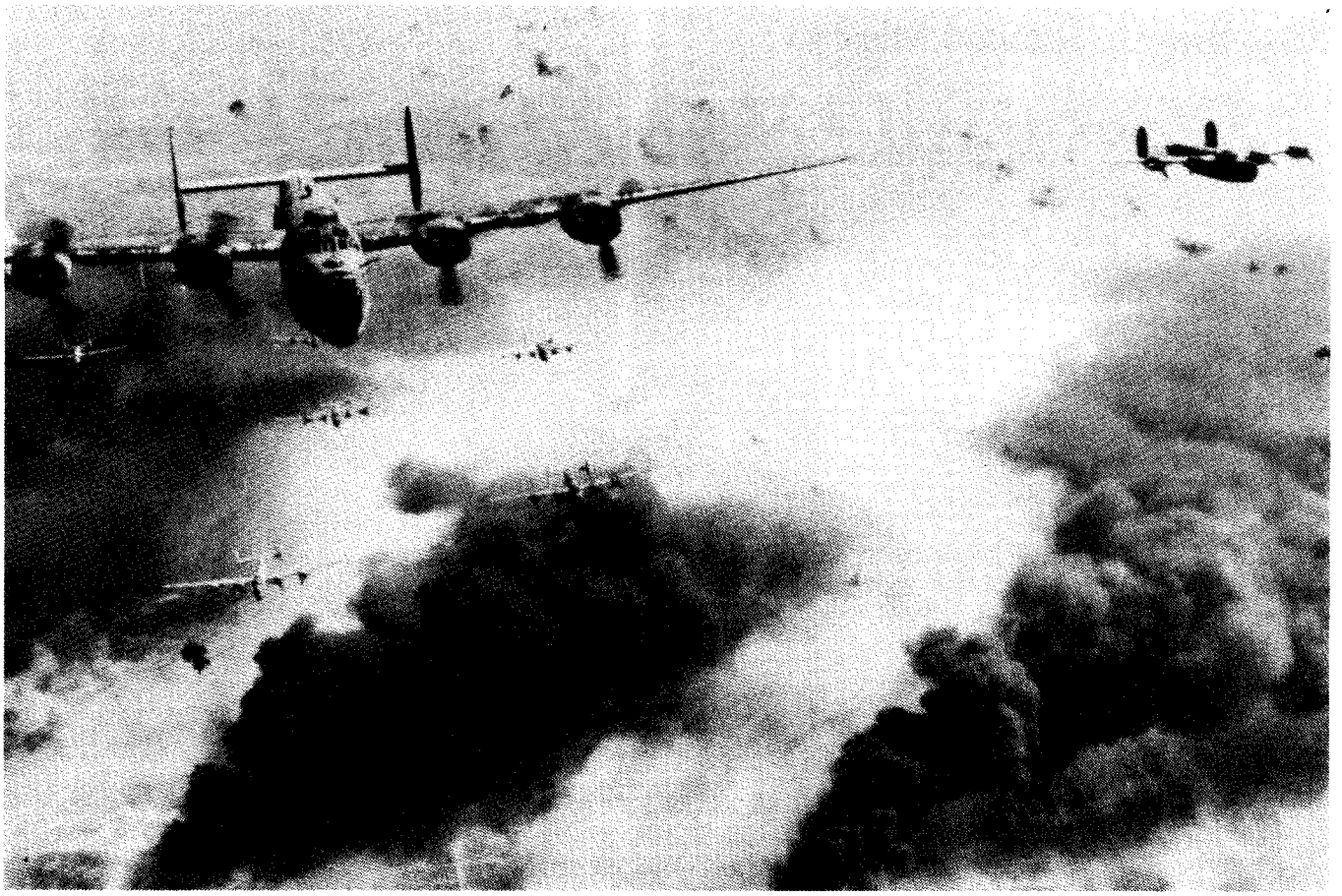
So, Ploesti it would be. Ninth Air Force Liberators would strike from Bengazi in Libya, flying north across the Mediterranean and over Albania and Yugoslavia into Rumania. To gain the element of surprise the B-24s would strike from low level. And therein lay the first glitch.

Liberators had not been designed for low-level work. And the difficulty of tree-top level navigation was magnified by some astronomical factor over high altitude, particularly on the route the bombers were to take.

Surprisingly, however, pilots learned that the B-24 behaved reasonably well on the deck during their training exercises in preparation for the Ploesti raid. Ways would be found to lick the low-level navigation problems.

Finally, everything was set. At dawn on Sunday, August 1, 1943, one hundred and seventy-eight B-24s lifted from their windswept, sandy airfields in Libya and headed north on the first leg of the 2,700-mile round trip.

With extra fuel for the long trip and hastily-added armor to protect crewmembers from enemy shells, the B-24s lumbered along heavily just above the gentle Mediterranean.



SMOKE 'N' LIBERATORS -- By the time the task force had arrived over Ploesti, it was mayhem. Bombers were approaching from two directions into smoke from the first bomb runs, and German defenses were zeroing in on the fliers' positions. Even so, with everything that had gone wrong, the bomber force hit 40 percent of their targets.

(U.S. Air Force Photo)

Even with the weight tradeoff for extra fuel, however, the force carried 311 tons of devastation in its bomb bays, enough to wipe Ploesti completely off the map.

Shortly after takeoff, the usual mechanical problems occurred, forcing some Liberators to return to home base.

And then disaster struck in a strange and diabolical way. The B-24 carrying the mission's lead navigator experienced unknown difficulties, wallowed dangerously in the sky and finally plunged nose first into the Mediterranean. The true significance of this event would not be fully realized until hours later when the bomber force approached the target area.

The second application of Murphy's Law occurred in Albania in the form of tall cloud buildups over the Pindus Mountains. Group commanders chose different ways to get their B-24s past the obstacle, some flying through the clouds and others attempting to fly over them. The end result was that when the bombers emerged on the other side of the mountains the groups were scattered.

Additionally, Liberator crews spotted airborne enemy fighters below. The primitive Albanian aircraft couldn't climb high enough to intercept the bombers but their presence told the northbound bomber force commanders they had lost the element of surprise.

Still, it was a long way to Ploesti. And there were other potential targets ahead. Perhaps defenders would make faulty deductions and the way to the oil fields would remain relatively clear.

Even though the groups were now separated and still flying under radio silence, the bombers made their way across Yugoslavia and into Rumania without significant problems. But as the bombers approached the target area, the loss of the mission's lead navigator returned to haunt the force.

Mistakenly identifying landmarks as it sped along at low level, the crew of the lead B-24 turned east toward Ploesti too early. Everyone within sight followed. Shortly thereafter, instead of seeing the smokestacks of Ploesti, the pilots saw the church spires of Bucharest.

The simple navigation mistake had now created two problems. Bombers in that group would have to strike from the south instead of from the west as planned. That would complicate the jobs of bom-

bardiers in finding and hitting their assigned targets. And perhaps even worse, there could be no doubt now that all elements of surprise were lost. German defenders at Ploesti at that very moment were feverishly preparing for the arrival of the first Liberators.

Realizing this, one of the group commanders broke radio silence in an attempt to coordinate a successful attack, despite the difficulties heaped on the bomber force by Murphy's Law.

As the first B-24s approached the oil fields at full throttle and a few feet above the ground, their crews were startled to see haystacks and railroad cars instantly transform into German 88 anti-aircraft gun positions, firing point blank into their slab-sided bombers.

Barrage balloons floated high over the targets. Their steel cables began to chew away the wings of attacking Liberators.

And then it was "Bombs Away!" for the first bombers over the oil fields. Once again, Murphy's Law struck. Bombs set to detonate one to six hours later exploded when they impacted, starting fires and creating clouds of harsh, black smoke.

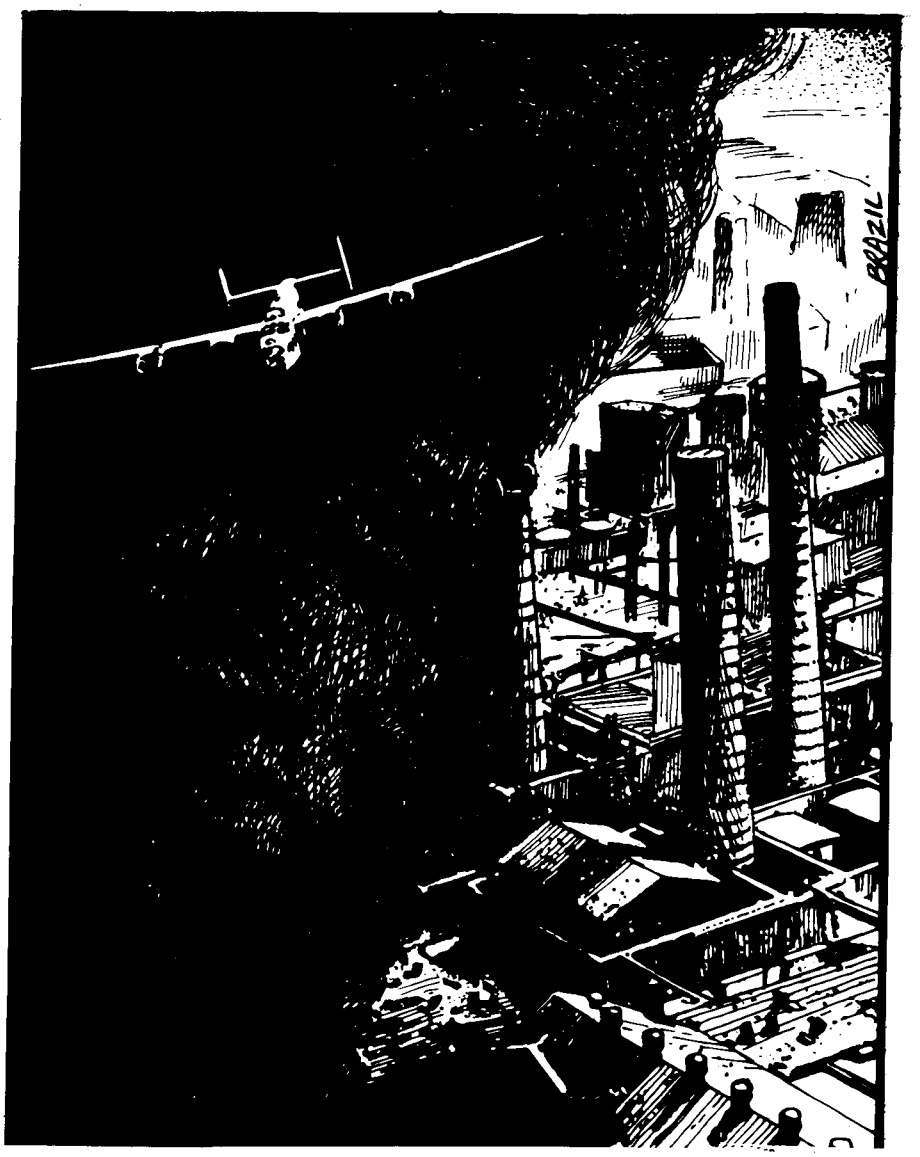
Trailing B-24s were forced to fly through the billowing flames and smoke. To further complicate matters, the groups that had gotten separated from the others over the Pindus, and navigated correctly, charged down on Ploesti from the west. This meant those bombers were on a collision course with those striking from the south. The result was pure pandemonium as dedicated pilots, pressing their attacks, bore down on their targets while trying to dodge other B-24s.

"Pure hell!" was a description of the situation offered by one crewmember. His words, if anything, were an understatement.

All factors -- intense and highly accurate German anti-aircraft fire, barrage balloon cables, collision headings of attacking bombers, enemy fighters, fire and smoke, and severe turbulence -- combined to take a devastating toll of the B-24 force. Of the 164 Liberators that reached Ploesti, 41 were lost in the immediate area. Another 14 were lost to other causes.

Of those B-24s returning to Libya, only 30 were in condition to fly again within a few days. The bombs had destroyed but 40 percent of the assigned targets. And worst of all, 540 crewmembers were lost on the flight to and from Ploesti.

Needless to say, it was a "Bad Day at Black Rock" when the final tallies were made at Bomber Command headquarters. But astute German strategists took little comfort in the decimation of the Liberator force at Ploesti.



PLOESTI, REVISTED -- B-24s returned to Ploesti again and again to stem the flow of oil to the German war machine. By the end of the war Ploesti -- like virtually all of the Axis' war-making manufacturing -- laid in ruins. (U.S. Air Force Illustration by Marty Brazil)

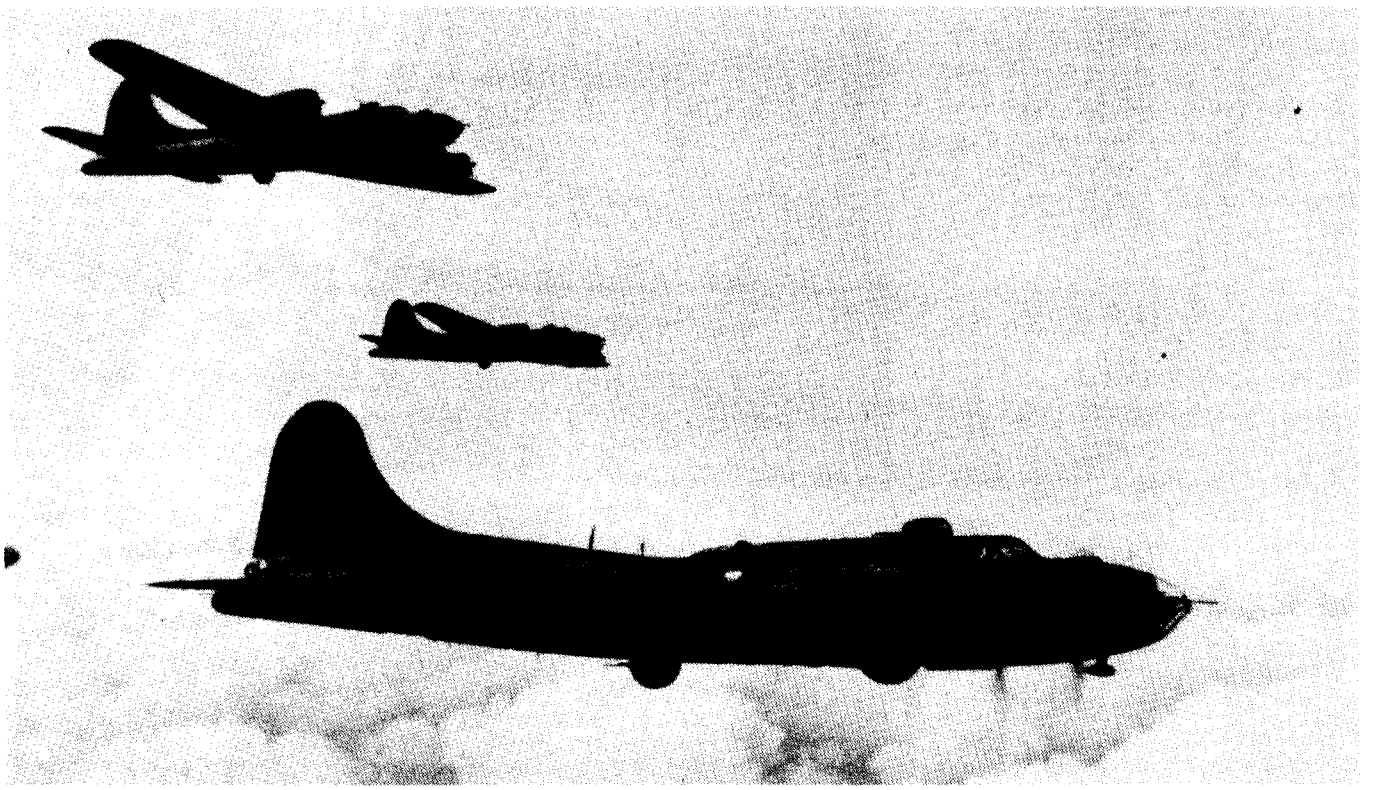
They saw, instead, a growing American air force staffed by skilled, tenacious and courageous fliers who would not rest until the Third Reich was in ruins. Time, of course, proved their fears well founded.

Even the most devastating manifestations of Murphy's Law for the Liberator crews over Ploesti would not deter our Air Force from its course. The courage of those American fliers in the face of unspeakable danger earned them the undying respect of their enemies.

And so shall it ever be, Murphy's Law or not.

Regensberg became deadly exchange

Fortresses fly into the gauntlet



B-17 FLYING FORTRESSES led by Colonel Curtis E. LeMay flew a deadly gauntlet of anti-aircraft fire and German fighters to drop their bombs on the Messerschmitt aircraft factory in Regensburg on August 17, 1943. Twenty-four of the heavy bombers and 240 crew members failed to return from the strategic mission.

(U.S. Air Force Photo)

By Lt. Col. Ken White
Air Training Command
Office of Public Affairs

The time: 0935, 17 August 1943.

The place: Airbases in fogbound England.

The force: 146 B-17 Flying Fortresses of the 3rd Air Division led by Colonel Curtis E. LeMay.

Destination: North Africa by way of the Messerschmitt aircraft factories, Regensburg, Germany.

Take-off time. The cacophonous bleat of hundreds of idling engines. Swirling, unrelenting, maddening fog. Nerves on edge as pilots firewall throttles and one after another the heavily laden bombers grumble down the dark runways to quickly disappear in the gloom.

Once airborne, tension increases even more as pilots coax their Fortresses up through the thick overcast. Every available eye on every B-17 searches for other bombers to avoid collison. And then sudden relief as one after another the bombers break through the clouds to begin the laborious maneuvers to create formations and turn east across the North Sea.

Now the search focuses on the tiny dots signifying arrival of the promised fighter escorts. But none appear. The thick fog has kept them grounded in England. Disappointed, the bomber crews gird themselves for the savage battle they know lies just beyond the approaching coastline.

Minutes after landfall, German flak peppers the sky around the lumbering Fortresses. A few stagger from the impact of concussion and fragmentation. And then, suddenly, the flak stops, and the air is filled with swift, expertly piloted German fighters, mostly Me109s and FW190s. The desperate, agonizing fight begins.

Seconds transform into eternity as tracers explode from the twinkling wings and noses of the attacking fighters. Bomber gunners respond in kind, painting angry stripes of fire around the madly maneuverable Messerschmitts.

For many of the combatants -- both American and German -- in this eerie confrontation high in the frigid skies over Germany, this will be their last day on earth. But since no one yet knows who those will be, each fights with superhuman effort, determined to make a good account of themselves should their number

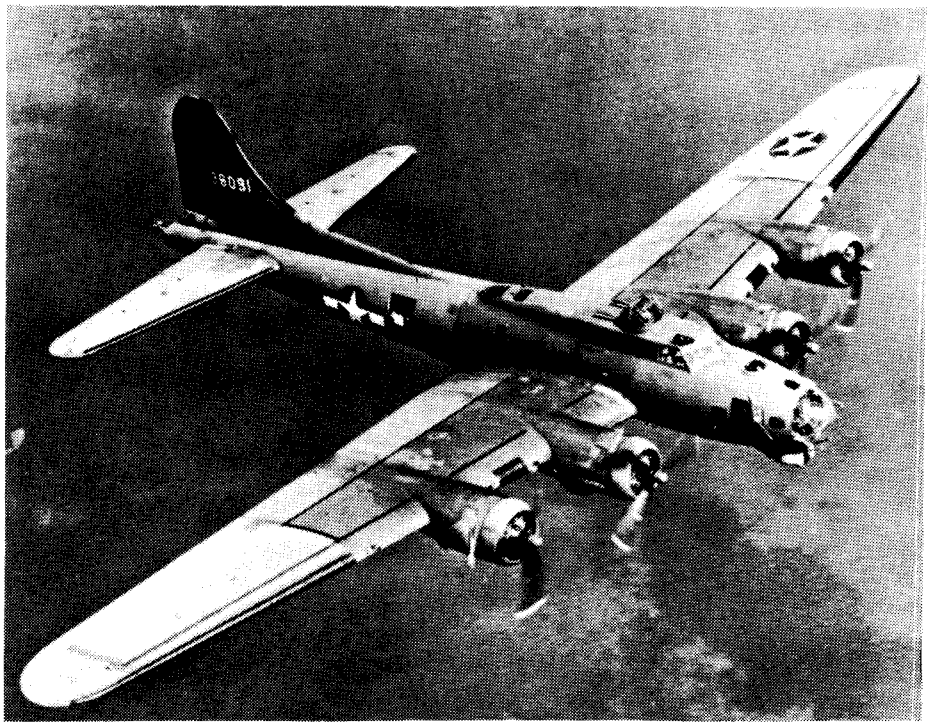
be called.

For the next two hours, Colonel LeMay and his bomber force is subjected to pounding from every quarter and in every conceivable way. Ju-88s and Me-110s, normally used as fighter-bombers, join the fray to fire rockets through the Fortress formations. Some of the FW190s trail bombs on cables to detonate them as they slash through the bombers. Still other German aircraft climb above the force to drop bombs detonated to explode among the B-17s.

During the brief respites between fighter attacks, German anti-aircraft crews on the ground again take up the chorus with their devastating radar-controlled 88s. Then the fighters reappear, new groups from other bases, to dart through the bombers, leaving blood, fire, death and devastation behind them. Many of the black-crossed demons wing over for the last time -- the victim of some sharp-eyed Fortress gunner -- to begin their final, fiery plunges to the German countryside below.

Despite their great structural strength and capacity for punishment, Flying Fortresses begin to come apart in strange, unusual ways. Some, mortally wounded, trail flames and smoke as their pilots struggle to hold place in formation. Others burst from within, fragmenting into many pieces which flutter downward in smouldering chunks. Still others seem to vaporize instantly in angry balls of orange as an enemy shells or a rocket finds the bomb bay and unleashes the destruction carried there.

And then, finally, there it is far ahead in the haze, the Messerschmitt factories where the pesky little fighters that have hounded the B-17s for the past two hours are made. Bomber after bomber in the long trail dumps its destruction into the growing cauldron of smoke and fire below. Each bomb steals a little of the gusto of Germany's future war effort. And for the Fortress crews there's a special kind of satisfaction in seeing the factories below slowly disintegrate under the force of their punch.



TRULY A FLYING FORTRESS, the B-17's turrets provided a hail of protective bullets against Nazi FW-190s and ME-109s.

Past the target area and in heavy flak, Colonel LeMay turns south for North Africa, immediately confusing German plotters below who are already executing plans to hound the bomber force on its return to England. Even so, the bomber flight path, away from the heaviest German defenses, is anything but a milk run. Fighters, both German and Italian, continue to harass the B-17s until they're well out over the Mediterranean.

And then bone weary men and machines begin to settle heavily to the ground at airbases in North Africa. Tired as he is, Colonel LeMay continues to reflect on the success of their first shuttle bombing raid...to count losses...and to analyze results.

Twenty-four of the 146 B-17s that followed him across Germany en route to Regensburg and North Africa have disappeared along with their 240 crewmembers. The remaining force that made North Africa is shot up badly. But many German aircraft and pilots have suffered a similar fate.

As the fires continue to smoulder into the night along the bombers' flight path, both friend and foe study the meaning of the day's ferocious encounter. And that analysis continues even today, nearly 40 years later.

Who was the winner? Or, was there a winner?

The answers now, in many ways, may seem academic. But they are not. Germany lost the war. Airpower over Regensburg, Schweinfurt, London, Berlin and countless other places demonstrated an incredible capacity to influence the outcome of international conflict.

And the skill, courage and sacrifices of the fliers, both American and German, on that day in August 1943 should forever remind us of our rich heritage of military airpower, a heritage born in controversy and tested time and again under fire.

As the sounds, images and fury of the Regensburg raid sink deeper into history, the force that Colonel LeMay led that day remains with us. It lives in each of us who wears Air Force blue.

Linebacker II was bold gambit

Bold countermove forced truce

By 1st Lt Randy Hagan
ATC Office of Public Affairs

Military operations are a lot like world-class chess: for every move there are several countermoves, and once opponents arrange all the pieces in confrontation, exchanges usually become fast and furious.

In early 1972, U.S. forces in Southeast Asia were nearly stalemated. North Vietnamese attackers could afford to play a waiting game.

Political pressure was mounting in the United States to end American military involvement in the Vietnam conflict. Recent action there had convinced Hanoi that the Viet Cong could easily overrun South Vietnamese forces once the Americans had departed.

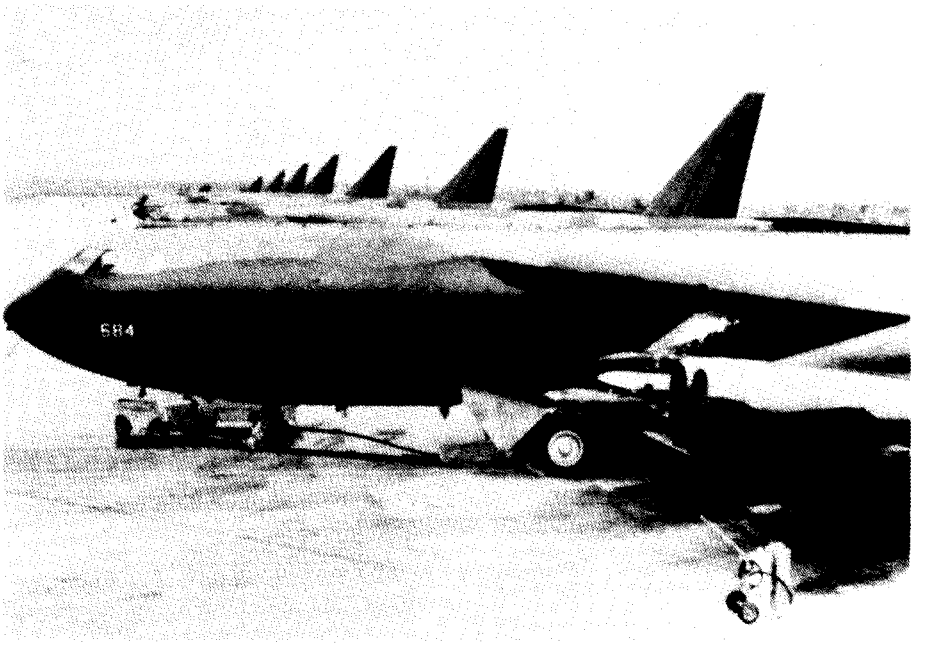
As a result, Hanoi's diplomats backed away from accepting the cease-fire agreement they had negotiated in Paris, and the Viet Cong stepped up its efforts in the South. Eventually, they reasoned, American forces would have to withdraw.

American forces *did* withdraw less than a year later—but not under the terms the North Vietnamese expected. U.S. planners had made a strong, bold countermove to turn things around in an operation called Linebacker II.

Designed to force Hanoi into accepting peace, Linebacker II called for bombing North Vietnam's war-making capability into oblivion. Without the ability to wage war, Hanoi would have to accept the Paris cease-fire agreement.

It was a risky plan. Factories, military bases and supply depots were ringed by hospitals, schools and even prison camps. It would take surgical strikes to destroy military targets without endangering the civilian population.

Hanoi was also well-defended against air attack. In fact, no area in the history of human conflict was better defended. Surface-to-air missile sites were everywhere, as were anti-aircraft gun positions. And the North Vietnamese air force, equipped with high-performance Russian-built fighters, was ready to attack anything approaching Hanoi from any direction.



AT REST AT GUAM, these B-52s took part in the 11-day "Linebacker II" that was credited with forcing the North Vietnamese to the conference table and into a cease-fire agreement.

Air Force planners accepted the risk. Linebacker II would force Hanoi into accepting the cease-fire if it worked, or become a final fiasco in an unpopular war if it didn't.

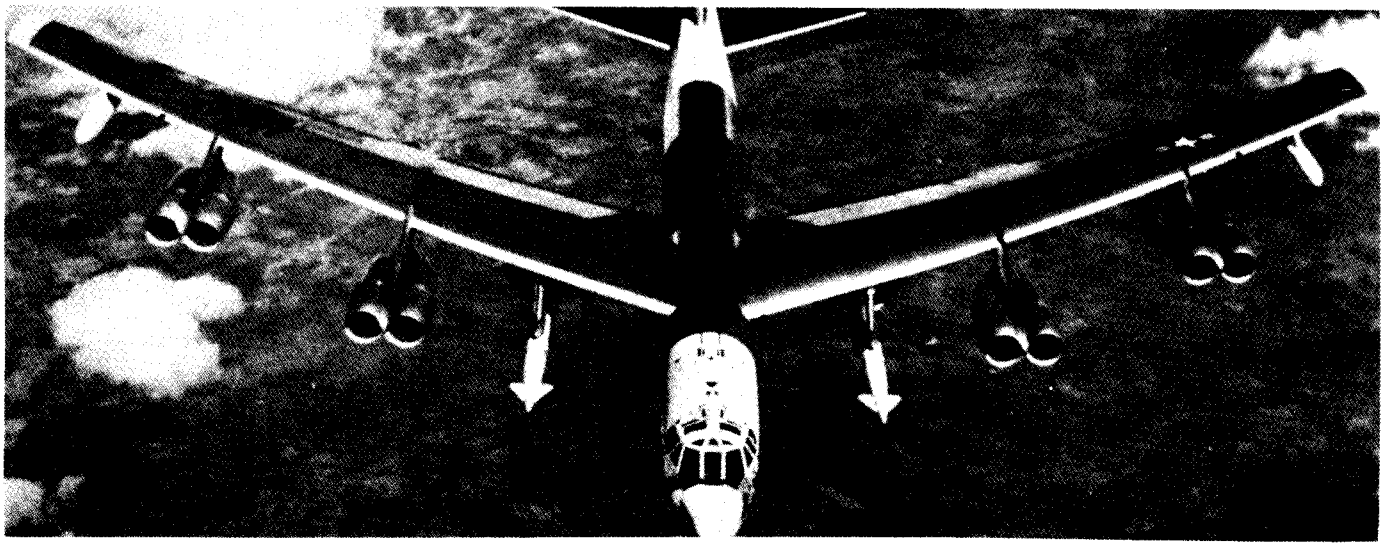
Once the decision to attack Hanoi with heavy bombers had been made, several moves had to be carried out. More than 150 B-52 Stratofortress bombers had to be in place at Andersen AFB, Guam, for the strike. Consequently, B-52s assigned to the base were soon supplemented by planes from every B-52D unit in the continental United States, and nearly 100 were of the newer "G" models from the stateside units.

KC-135 aerial tankers from stateside bases flew to bases in Okinawa, Thailand and the Philippines to support the bomber force. Influxes of new support personnel quadrupled the base population at Andersen by July.

This population explosion forced the base to improvise. Normal housing facilities were overcrowded, so tent cities were built on the flightlines. World War II-era metal buildings designed originally to hold 80 people soon held 200.

After every facility on Andersen was stuffed beyond capacity, spare barracks at Guam's naval facilities were filled, as were quarters at an abandoned Army missile site. Every available hotel room on the island was rented.

Every other support activity met the same challenges. Officer and NCO open messes catered to huge numbers of people around the clock. Base legal services, personnel offices, supply units and recreation staffs were stretched to the limit—long before the bomber assault actually



B-52 BOMBERS dropped more than 15,000 tons of explosives during the 11-day "Linebacker II" assault over North Vietnam. Missions often lasted as long as 18 hours.

began.

Bomber operations also escalated during Linebacker II preparations. Sorties rose from 21 to 66 per day, seven days a week. If a B-52 could not fly a mission, the crew would leave the plane, go to another Stratofortress that had been preflight checked and prepare for takeoff.

Early in 1972, B-52 crews from U-Tapao, Thailand, began flying short missions into the Hanoi area as Andersen crews hit targets along the North Vietnamese panhandle. The U-Tapao crews gathered valuable information about Hanoi defenses, while Andersen crews developed the endurance necessary for the 12- to 18-hour missions they would fly during Linebacker II.

Military planners were satisfied by what they saw. By mid-August, Linebacker II tactical planning was well underway. Air support, from Air Force, Navy and Marine fighters and attack planes, was coordinated. Reconnaissance planes had pinpointed targets. Electronic tricks to confuse the SAMs were ready and waiting.

Bomber tactics were set as well. B-52s would fly daily in three-ship cells—straight level, across the target area in three waves of as many as 33 planes—four or five hours apart. Orders were explicit: anyone who broke away from the three-plane cells was eligible for court-martial.

But a court-martial was the least of any crewmember's worries. Breaking formation decreased the cell's electronic interference against SAMs and increased the chances of missing the target or getting hit. Abandoning one of the three-ship cells was equivalent to suicide.

By Dec. 18, 1972, all the pieces were in place. It was time for the massive air operation to begin.

As the first 27 B-52s lifted off from Andersen, the rest of the strike force was readied at other locations. Crews from Andersen would join up with B-52s from U-Tapao, F-4s, F-111s, A-7s and F-105 Wild Weasels and then proceed to Hanoi.

Defenses at Hanoi were also readied. As the strike force approached, SAM batteries fired, anti-aircraft guns crackled and MiG fighters scrambled to meet the American fliers.

The air battle continued for 11 days. By the end of the campaign, B-52s from Andersen and U-Tapao had flown 729 sorties against 34 targets in North Vietnam. More than 15,000 tons of ordnance were dropped on those targets.

Hanoi forces responded in kind. During the exchange, North Vietnamese forces fired more than 1,200 SAMs at the strike force.

Damage was extensive to both sides. By the end of the 11-day confrontation, 25 B-52s had been hit; 15 of those went down. Thirty-three American crewmembers were either killed or listed as missing in action.

But American losses paled in comparison to the damage in North Vietnam. Military targets were devastated, with more than 1,600 military structures severely damaged or destroyed. The strike force also tallied 500 rail interdictions, destroyed 3 million gallons of petroleum reserves (about one-fourth of total estimated reserves) and eliminated an estimated 80 percent of Hanoi's electrical production capacity.

Even more important, the North Vietnamese had depleted their defense forces during the 11-day battle. By December 29, Hanoi had no weapon stockpiles and supply lines lay in ruins.

Check.

Ten days after the end of Linebacker II, North Vietnamese negotiators returned to the bargaining table in Paris. Less than three weeks later, on Jan. 29, 1973, Hanoi accepted the cease-fire terms it had refused to consider the month before.

American bomber and tanker crews, and the thousands of support personnel, then headed home.

Checkmate.

None but the brave

Medal of Honor — only for the best

Lt. Col. Ken White
Air Training Command Office of Public Affairs

"None but the brave...,"part of a line from a 17th century poem, perhaps best describes the general criteria for award of America's highest military decoration -- the Medal of Honor.

But the criteria goes far beyond "ordinary" bravery to include conspicuous "gallantry and intrepidity at the risk of life above and beyond the call of duty." For this reason only 58 airmen of the hundreds of thousands who have served the nation through four wars have been awarded the Medal of Honor. Many of those died during the heroic act that distinguished them as ultra-superior warriors.

Started in 1782 by Gen. George Washington to honor extraordinary heroism of members of the Continental Army, the award -- then called the Badge of Military Merit -- was the nation's first military decoration. Only three Revolutionary War soldiers received the award.

Congress created the Medal of Honor in December 1861 as an extension of the philosophy incorporated in the Badge of Military Merit. Originally, the medal was awarded only to enlisted men. Congress amended the law in 1863 to include officers. The basic criteria for the medal expanded in 1918 and again in 1963. The 1963 Congressional change broadened the scope of those eligible to receive the medal, to include participants in covert military operations.

The design of the medal has changed several times over the decades, and the Army and Navy have always had their own versions. When the Air Force became a separate branch of service, the Army version was awarded until 1965 when a new and distinct design was developed just for airmen.

The first four aviators to receive the Medal of Honor were Capt. Eddie Rickenbacker and Lieutenants Frank Luke, Erwin Bleckley and Harold Goetter. All three lieutenants died during the heroic actions which earned them the medal during World War I.

Between the world wars, two special medals -- designated Congressional Medals of Honor -were awarded to Charles A. Lindbergh and Brig. Gen. Billy Mitchell by special acts of Congress.

Thirty-eight airmen were awarded Medals of Honor during World War II, including four enlisted men. Twenty-four of the 38 medals were awarded posthumously.

All four of the Air Force's Medal of Honor recipients during the Korean War were officers who died courageously on hazardous missions in which they sacrificed themselves for others.

Twelve airmen -- 11 officers and one enlisted -- received the Medal of Honor during the Vietnam War. Four of the 12 Medals were presented posthumously.

Those 58 airmen who earned the Medal of Honor constitute a very select group. They were the bravest of the brave.

High-spirited thoroughbred

P-38 Lightning was hard to tame

By Lt. Col. Ken White
ATC Office of Public Affairs

The P-38 Lightning was pure thoroughbred -- from the moment of its conception in 1937 until it was reluctantly put out to pasture in the decade following World War II.

Army Air Corps specifications that launched development of this remarkable aircraft called for a fighter with a top speed of 360 mph at 20,000 feet, 290 mph at sea level and the ability to climb from sea level to 20,000 feet in six minutes.

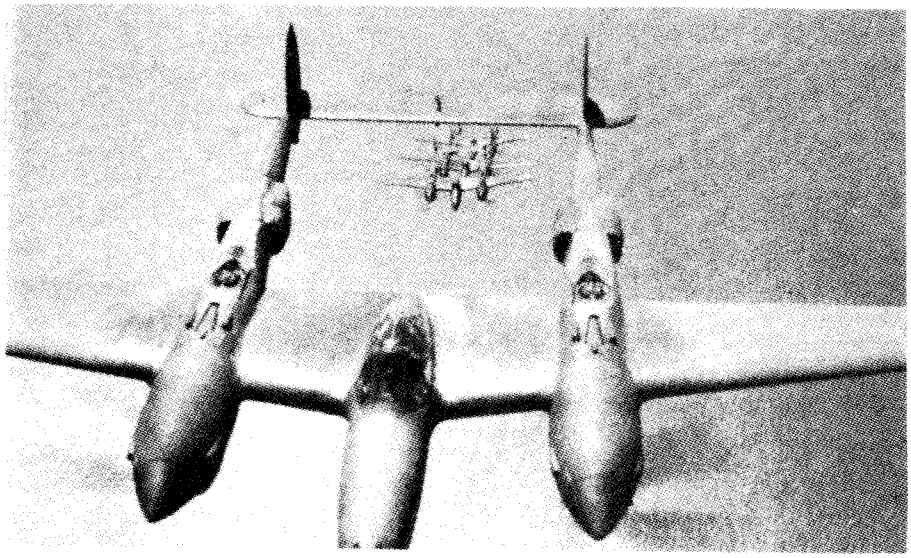
No existing fighter could approach those capabilities. That meant designers of the new fighter would have to create an exotic breed of aircraft they could expect to be high spirited, temperamental and difficult to tame.

Although Lockheed Aircraft Corporation had little experience with pursuit aircraft, that firm entered the heated competition for development of the "super fighter" with a design worked up by Hall Hibbard and C.L. "Kelly" Johnson.

The Lockheed design incorporated radically new elements, including tricycle landing gear, extremely high wing loading, flush riveting and -- most unusual of all, twin engines mounted on widely separated booms.

Air Corps officials were skeptical of Lockheed's design but they liked the performance Johnson promised for it. As a result, Lockheed got the contract to develop a prototype. It was time for Hibbard, Johnson and other Lockheed engineers to fulfill their paper promises.

Fortunately, Lockheed had two aces up its sleeve: the aeronautical engineering wizardry of Kelly Johnson and special prototype, turbocharged Allison V-12 engines. Knowing high horsepower would be the key to meeting the speed and climb specs of the new fighter, Johnson focused on two of the Allison engines and built his twin-tail design around them.



LIGHTNING CHAIN -- Fast, sturdy and high-spirited, the P-38 Lightning became the mount for America's top two aces in World War II. But before it earned it reputation as one of the toughest fighters of the war, it had a stormy development that cost many airplanes and several pilots. (U.S. Air Force Photo)

Unfortunately, in 1937 Kelly Johnson hadn't as yet established his reputation as an engineering genius. Air Corps experts laughed when he stated that the P-38, when built, would fly faster than 400 mph.

While Lockheed worked feverishly to build the prototype XP-38, military officials began to have second thoughts about the aircraft's unconventional design. Everyone knew a fighter was supposed to have one engine, mounted on the aircraft's centerline.

Skeptics of the twin-tail configuration believed engine weight and torque were located too far from the fighter's center of gravity. This factor, they reasoned, would throw the aircraft out of control if one of the big engines failed. And in combat, a high incidence of engine failure could be expected.

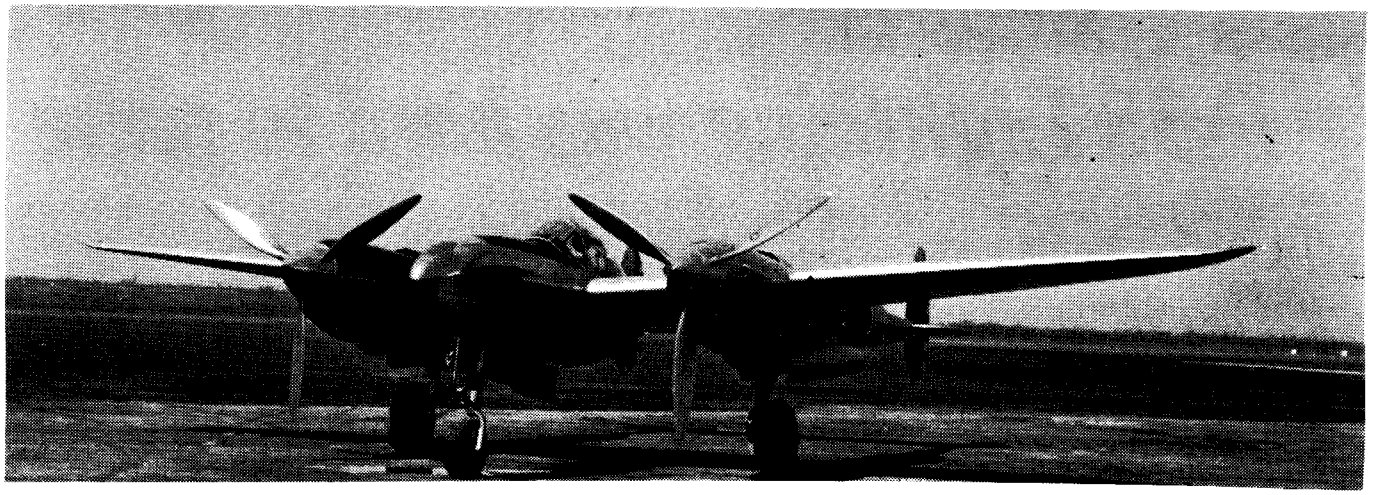
Lockheed officials managed to keep critics at bay while Hibbard, Johnson, Jimmy Gershler and others solved one perplexing engineering problem after another.

Finally, in December 1938, the prototype was completed and moved to March Field, Calif. After ground testing, the XP-38's first flight came on Jan. 27, 1939. There were problems, but the Lightning had more spirit and speed than even Johnson had anticipated.

Impressed with the speed, Air Corps officials quickly took a crack at the transcontinental speed record. On Feb. 11, 1939, Lieutenant Ben Kelsey, a military test pilot with only five hours in the aircraft, took off from March Field. His destination: Mitchell Field, N.Y., with stops at Amarillo, Texas, and Dayton, Ohio, enroute.

Kelsey turned the big turbocharged engines loose and in but seven hours and two minutes of flight he and his thoroughbred thundered over Mitchell Field. On the final approach for landing, however, the XP-38 lost power. Kelsey crash landed on a golf course, destroying the aircraft.

Critics claimed the crash proved the Lightning was imbalanced and power critical. Despite this setback,



SLEEPING STALLION -- From the moment it was designed, the P-38 Lightning was a thoroughbred. It was the fastest fighter of its time ... and at first one of the most unruly. As the Lightning was tamed, lessons learned were applied to P-47 and P-51 high-performance fighters. (U.S. Air Force Photo)

Air Corps officials gave Lockheed the green light to build a limited number of production models, designated the YP-38.

However, the crash at Mitchell Field was but the beginning of the P-38's problems. Test pilots quickly discovered another of the fighter's high spirited eccentricities. When the aircraft approached Mach .67, tail surfaces mysteriously ceased to function, the wing lost lift, and the Lightning shook violently as it snapped over into an uncontrollable vertical dive.

Johnson was sure he knew what was causing the problem. Even though the speed of the P-38 was well below the speed of sound, airflow around certain fuselage and wing bumps and curves, he felt, approached Mach 1.

He was right, but at the time aeronautical engineers knew virtually nothing about the behavior of aircraft at the speed of sound.

That being the case, Johnson used trial and error. His engineering team tried scores of possible remedies to dissuade the frisky P-38, then the world's hottest fighter, from running away into its frightening death dives.

Prop rotation directions were reversed. Weights were added to the booms. Stabilizers were stiffened and elevator cable tension was increased. A high tail design was even tested.

But nothing worked.

Desperate, Johnson and his team added a giant, spring-loaded tab to the elevator. With the tab installed, test pilot Ralph Virden was able to pull a P-38 out of a sizzling 535 mph dive at 15,000 feet. When he tried recovery at a lower altitude, however, the giant tab snapped the tail from the aircraft and Virden died tragically in the ensuing crash.

Test pilots Tony LeVier and Milo Burcham learned later that if a pilot had enough nerve to ride the Lightning down in one of its blazing dives rather than hit the silk, he could pull it out in the thicker air of low altitude by careful use of the elevator trim tabs. But that was a most unnerving way to make the thoroughbred behave.

Johnson finally solved the problem by adding fillets and an underwing dive brake that stabilized the aircraft and automatically pulled it out of a dive.

And Tony LeVier dispelled the notion that the P-38 would crash if one of its big supercharged engines died. He took off on one engine, and in front of a crowd of Army brass, screamed back over the field doing a series of rolls just above the ground. That gutsy demonstration, and others that followed by test pilots, decisively settled the engine-loss argument.

With most of its wild ways under control, the P-38 entered full-scale production. And none too soon. World War II was fast approaching.

Fully operational when the war began, the swift, heavily armed Lightning was the first U.S. fighter to down a German aircraft, a Focke-Wulf Condor patrol bomber in the North Atlantic. From then until the end of the war, *Der Gabelschwanz Tuefel* -- or "fork-tailed devil," as the Germans called it -- was used in virtually every combat role: bombing, bomber escort, close air support, high altitude reconnaissance and as a fighter.

In the Pacific theater, America's leading ace, Maj. Dick Bong, downed 40 Japanese aircraft with a Lightning. The second leading ace, Maj. Tommy McGuire, scored 38 victories in his P-38.

Just over 10,000 of the fork-tailed devils were built. Virtually all of them, in various configurations, saw combat. Because of their engineering excellence, firepower and flexibility, P-38s took a heavy toll of enemy aircraft, as well as ground and naval forces.

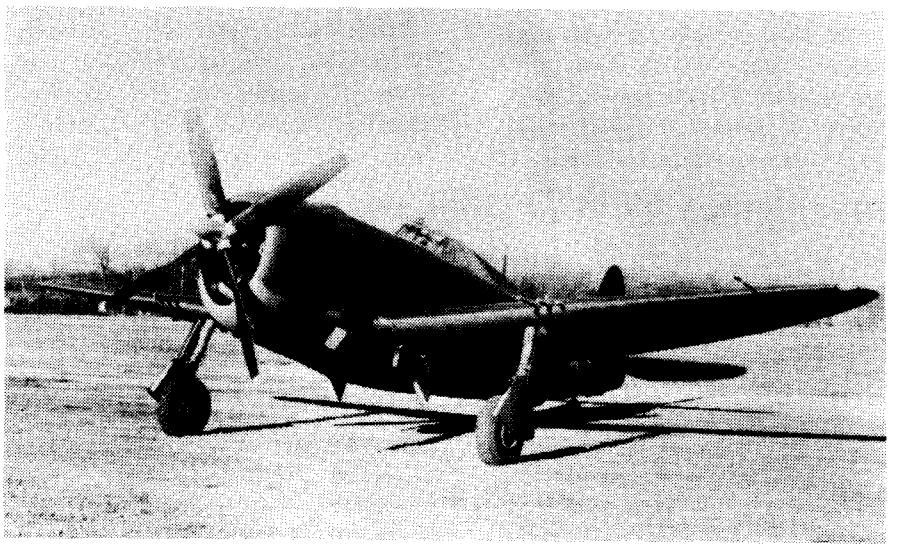
U.S. military aviators' deep love and respect for the Lightning was perhaps best captured in a poem written by a B-17 gunner:

Well, they wouldn't reject us,
So Heaven protect us.
And, until all this shooting abates,
Give us the courage to fight 'em and -- one other item --
An escort of P-38s.

'Jugs' dished out more than they took

Thunderbolts charged WWII skies

by Lt. Col. Tom Buckner
Air Training Command
Office of Public Affairs



P-47 THUNDERBOLT -- The Thunderbolt carved a significant niche in U.S. aviation history. In all, the aircraft flew 545,575 sorties, more than 1.35 million combat hours, destroyed 9,067 enemy aircraft, and destroyed or damanged 86,000 railroad cars, 8,000 locomotive, 6,000 armored vehicles and tanks and 68,000 motor transports.
(U.S. Air Force Photo)

That Jug, it could take a punch.

Jimmy Stewart (not the movie star) sheared a telephone pole with the wing of his P-47 while strafing a Nazi airfield and returned to England with a piece of the pole sticking out of its wing.

Donald Blakeslee, leader of the famed 4th Fighter Group, returned from a mission with 71 cannon holes in his P-47.

Francis Gabreski, the European theater's leading ace with 31 victories, flew his Jug through an exploding Messerschmitt and returned to England with the leading edges of his wings crushed and a 20-mm shell lodged in his engine.

After landing and looking over his Thunderbolt, he walked into the debriefing session and claimed "two Messerschmitt 110s destroyed and one P-47 half destroyed."

Bob Johnson, the first American to break Eddie Rickenbacker's record of 26 downed enemy aircraft, survived an early mission in a P-47 that he described with awe:

"There are 21 gaping holes and jagged tears in the metal from exploding 20-mm cannon shells. I'm still standing in one place when my count of the bullet holes reaches past a hundred -- there's no use even trying to add them all. The Thunderbolt is literally a sieve, holes through the wings, nose, fuselage and tail. Every square foot is covered with holes. There are five holes in the propeller. Three cannon shells burst against the armor plate, a scant inch from my head. One shell exploded in the cockpit, next to my left hand -- this was the blast that ripped away the flap handle."

Not only could the Jug take a punch, it could dish it out, too.

The 56th Fighter Group, which arrived in England with the first production model P-47Bs early in 1943, flew "Bs" and later models of the Thunderbolt exclusively in downing 1,006 Nazi planes while losing only 128 P-47s, mostly to ground fire.

That squadron contained such aces as Gabreski, Johnson, Walker Mahurin, David Schilling and Commanding Officer Hubert Zemke.

The 4th Fighter Group, which edged the 56th with 1,016 total victories, compiled much of its outstanding record with P-47s before getting P-51s early in 1944. That veteran group, many of whose pilots were weaned in combat flying in the agile British Spitfires, were dubious about getting the big blunt-ended Thunderbolts that some described as "flying milk bottles."

But by Aug. 4, 1943, such eventual aces as Group Commander Donald Blakeslee, Don Gentile, John Godfrey, Duane Beeson, Ralph Hofer and James Godson were flying the "milk bottles" well enough. One day they shot down 18 Nazis while losing only one P-47, a one-mission record.

In all, the Thunderbolt flew 545,575 sorties, more than 1.35 million combat hours, destroyed 9,067 enemy aircraft, and destroyed or damaged 86,000 railroad cars, 8,000 locomotives, 6,000 armored vehicles and tanks, and 68,000 motor transports. It served in all active theaters except Alaska.

The Thunderbolt used a 2,000-horsepower 18-cylinder Pratt and Whitney engine for its amazing performance. Nothing could outdive or equal the Jug in zoom climb-outs of those dives. It equalled any enemy fighter in rolls. Early models were hindered in climbing ability, but by adding large paddle-like propellers the P-47 could claw its way upward with the best the enemy had.

Pilots flying P-47s, along with those piloting P-38s, were the first to experience compressibility problems as they approached the speed of sound in dives. Thunderbolts could hit 467 mph in level flight compared to the P-51s' 437 mph and the P-38's

414 mph.

Firepower came from eight .50 caliber guns in the wings, with later modifications for rockets and bombs attached under the wings.

Range was improved by adding drop tanks under the belly, enabling P-47s to escort bombers deep into Germany. The P-47N was introduced in the Pacific early in 1944 and with a range of 2,170 miles escorted B-29s in raids on Japan.

Later in the war, with even more powerful engines and a bubble canopy for improved vision, Thunderbolts became extremely valuable in close ground support as Allied troops swept across France and Germany.

More than 15,600 P-47s were built by Republic, and the P-47D model holds all production records for American fighters with 12,602 built in plants at Farmingdale, N.Y., and Evansville, Ind. Both the D and N models remained in U.S. Air Force service until 1949 and in Air National Guard units until 1953. Foreign air forces used the Thunderbolt into the 1960s.

Like the men who flew them, the P-47 Thunderbolt carved a significant niche in U.S. aviation history. Without a doubt, the old Jug could take a punch -- and could give more than it received.

General was WWII noisemaker

Murphy screamed through the air

by 1st Lieutenant Randy Hagan
Air Training Command
Office of Public Affairs

The story of the Screamin' P-47 began in Paris in September, 1944. Like many stories about Yankee ingenuity, the story revolves around meeting a problem with an unusual solution.

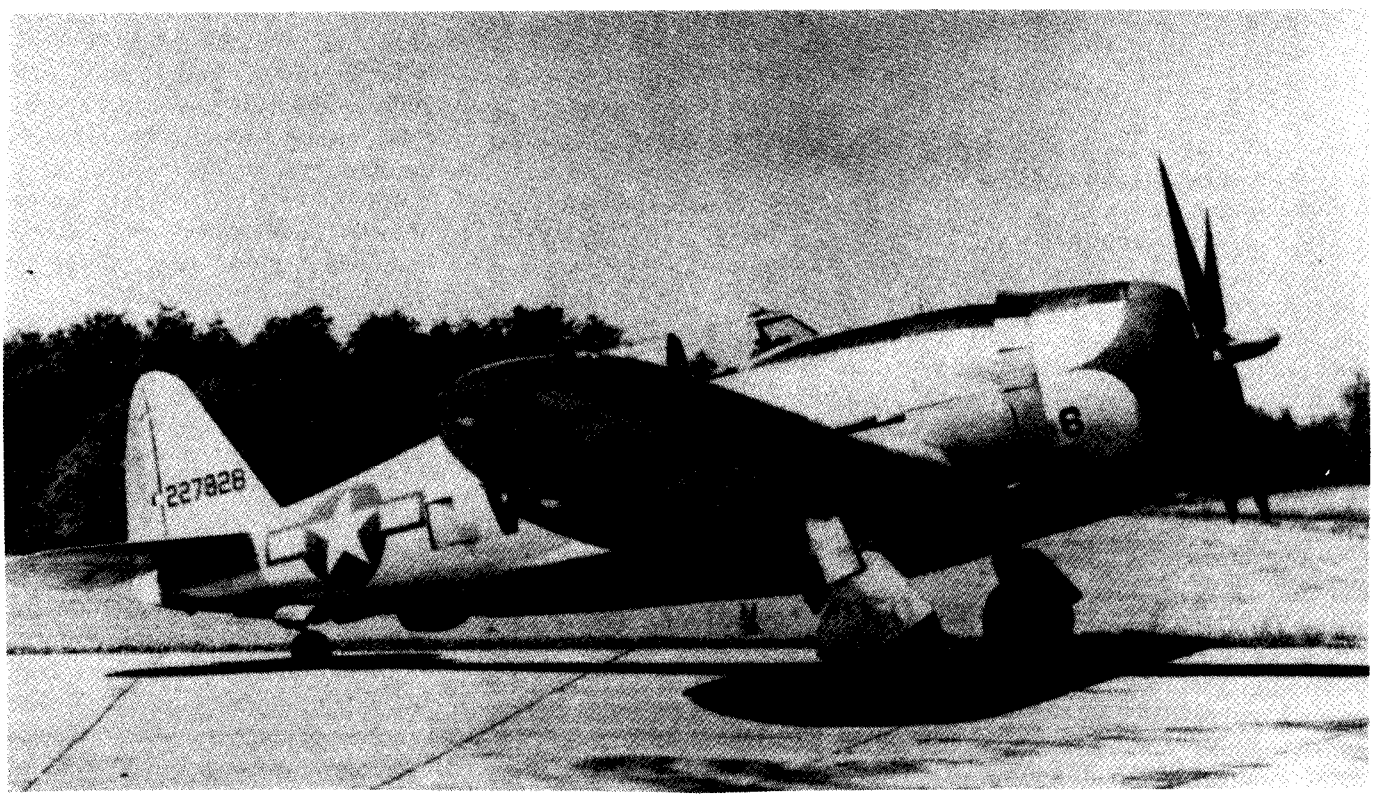
"Making P-47s scream was like so many other things," recalled retired Air Force Lieutenant General John R. Murphy. "It was a conglomeration of ideas from a lot of people at the same time. It just happened."

Murphy retired in 1975, after serving as chief of staff for the United States Forces and United Nations Command in Korea. He is a command pilot who flew 139 missions for a total of 305 hours in P-47s.

In 1944, Murphy was a young lieutenant in the 365th Fighter Group, 9th Air Force. The 365th, nicknamed the "Hell Hawks," flew P-47 Thunderbolts, commonly known as "Jugs."

"They were fine planes," Murphy said, "but they had their limitations. Thunderbolts were big, loud planes. Whenever we were in the area, everybody knew we were around."

Murphy said that wasn't a particular problem earlier in the war, because German *Luftwaffe* fighter pilots preferred to stay away from U.S. fighters. Instead, German pilots



MORE THAN 15,600 P-47 Thunderbolts were built, and American ingenuity continued to make them better--such as the addition of whistles to the bomb racks to make them scream in dives.

would wait outside the fuel range of American fighters and attack Allied bombers after fighter escorts were forced to turn back for more fuel.

But once Allied forces set up airfields in France, P-47s could fly entire missions with Allied bombers. "We were doing all right," Murphy said, "but you look for any edge you can get to make things better for you."

Hell Hawks found one edge when they arrived in Paris. "We had reclaimed the city from Hitler's troops, and they left a lot of equipment behind," related Murphy. "The Germans left in a hurry."

When the 365th arrived in Paris, they checked out some of the aircraft the *Luftwaffe* abandoned when evacuating the city. Hell Hawks inspected Germany's jet fighter and a slingshot-type aircraft that would throw an unmanned aircraft filled with high explosives into Allied naval vessels.

Some of the American fliers, however, were more interested in several Stuka dive bombers left behind by the *Luftwaffe*. More specifically, they were interested in one accessory on the Stukas.

"Those Stukas had small whistles on each side," Murphy explained, "that worked exactly like an organ whistle. It made sound as air blew throught it. And when they were put on a plane flying at 300 m.p.h., a lot of air was blown through it."

Inevitably, the Hell Hawks had to try adding sound effects to their Thunderbolts. "We pirated the screamers off the Stukas and put them on each side of the bomb rack," Murphy said. "When you'd dive with that thing, *everyone* knew where you were."

At first, Murphy said, superiors were unimpressed. Traditional thinking dictated that some noise was bad, so they could not be convinced a lot of it was better.

"There was no way you could sneak up with those screamers on," Murphy allowed, quickly adding, "but then, you couldn't hide a Jug from anybody anyway."

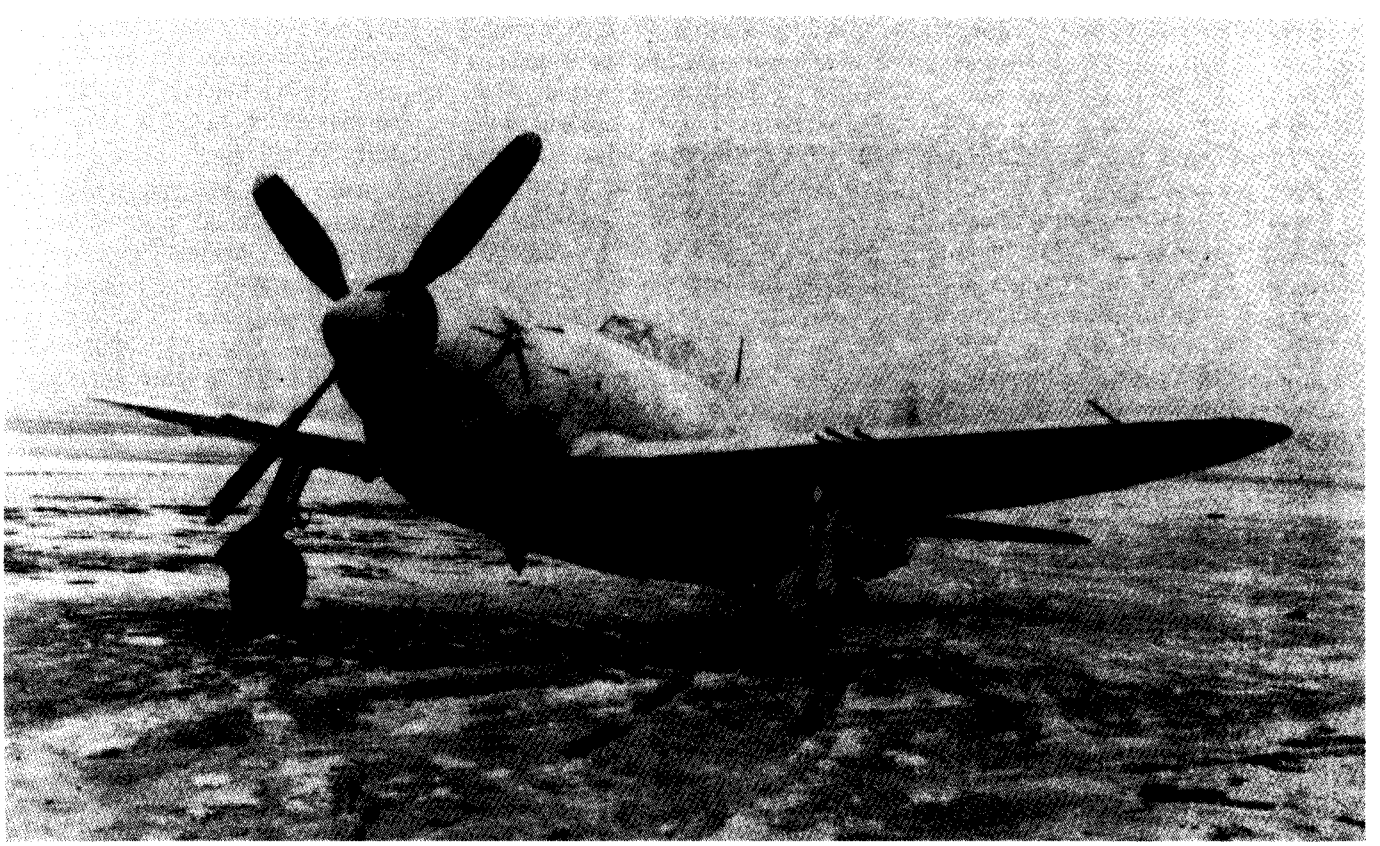
Eventually, higher authorities relented and Screamin' P-47s were in the war. "You'd get four or eight of those P-47s literally screaming through the air and it was a horrifying sound," Murphy reflected. "It'd scare you to death."

The screamers were most effective against *Luftwaffe* fighters. "We'd dive toward them, screamers going, and it sounded like there were a lot more planes than there actually were," he chuckled. "They ran like they thought the world was coming to an end."

Late in the war, P-47s were used for strafing runs. "We found out after the war that whenever we'd start a run, everyone on the ground would start running for cover because the thought we were flying dive bombers."

No one knows for sure if Hell Hawks' P-47s were the first American aircraft to use sound as a weapon, but they were not the last. During the Vietnam conflict, for example, F-102s were used to create sonic booms that would confuse and confound enemy forces.

Murphy said, "we found out sound had its effects. We simply used those effects to our advantage."



LAST OF THE LINE, a P-47J model of the Thunderbolt.

Designed in four months

P-51 Mustang: hot rod with wings

By 1st Lt. Randy Hagan
Air Training Command
Office of Public Affairs

If you tend to stereotype fighter planes as hot rods with wings, the best plane to prove your point is probably the P-51 Mustang.

When the British government needed a new, high-performance fighter in January 1940, North American Aviation accepted the request and promised to deliver a prototype in 120 days. Even though the firm had a comparative lack of fighter design experience, its designers were determined to do the job.

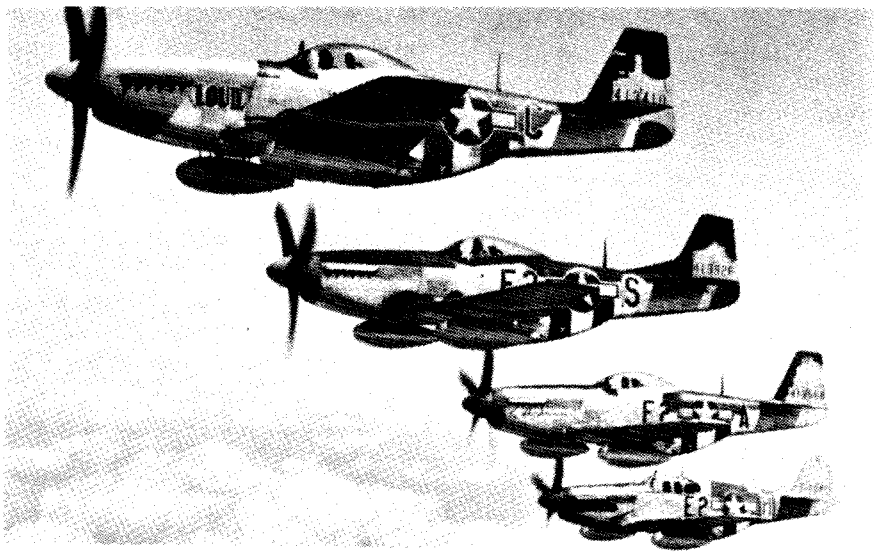
They delivered. The first Mustang was rolled out at Inglewood, Calif., in April. North American had designed the entire airplane and built a working prototype in only 117 days.

The British loved the design. The rear-mounted radiator reduced aerodynamic drag and the airframe's simple lines made it easy to produce. By the end of 1941, the first production planes were on their way to Europe.

The U.S. government initially ordered 150 P-51s for Great Britain under the Lend-Lease program, but retained several for use by our own Army Air Forces. Painted in British camouflage, with RAF tail numbers but with American stars, they were used to defend U.S. airspace after Pearl Harbor.

Once the first Mustangs had rolled off the line, designers began putting more powerful engines in the noses and trimming the weight of the newer models. By the end of 1942, the newest Mustangs had a top speed of 441 m.p.h. and carried 85 more gallons of fuel.

The high-performance modifications were needed desperately by Allied air commands. At the start of the war, Allied forces did not have a high-performance fighter with enough range to escort bombers into Germany.



(U.S. Air Force Photo)

FAST FLIERS -- P-51s in formation reveal some of the differences between early and late model Mustangs. The bubble canopies on the first three identify them as "D" models, while the taller rear deck and more conventional cockpit on the last plane identifies it a "B."

As a result, *Luftwaffe* fighters would wait outside the range of Allied escorts and attack the bombers after their escorts were forced to turn back for fuel. To counter this weakness, the British turned to night bombing while the Americans resorted to daylight bomber formations.

While both techniques reduced the number of bomber losses, that number remained quite large. Allied planners counted on the improved Mustang and the P-47 Thunderbolt to carry the air war well into Germany.

On January 15, 1944, P-51Bs escorted American bombers on a raid inside Germany. *Luftwaffe* pilots were in a holding pattern, waiting for the American fighter escorts to peel off and return to England. The Mustangs did return, but only after shooting German attackers out of the skies and successfully completing their escort mission.

Two months later, the Mustangs escorted 8th Air Force B-17s and B-24s from England to Berlin and back. By the end of the war, all but one of the 8th Air Force's fighter escort groups were flying Mustangs, and North American's P-51H had a top speed of 487 m.p.h. at 25,000 feet.

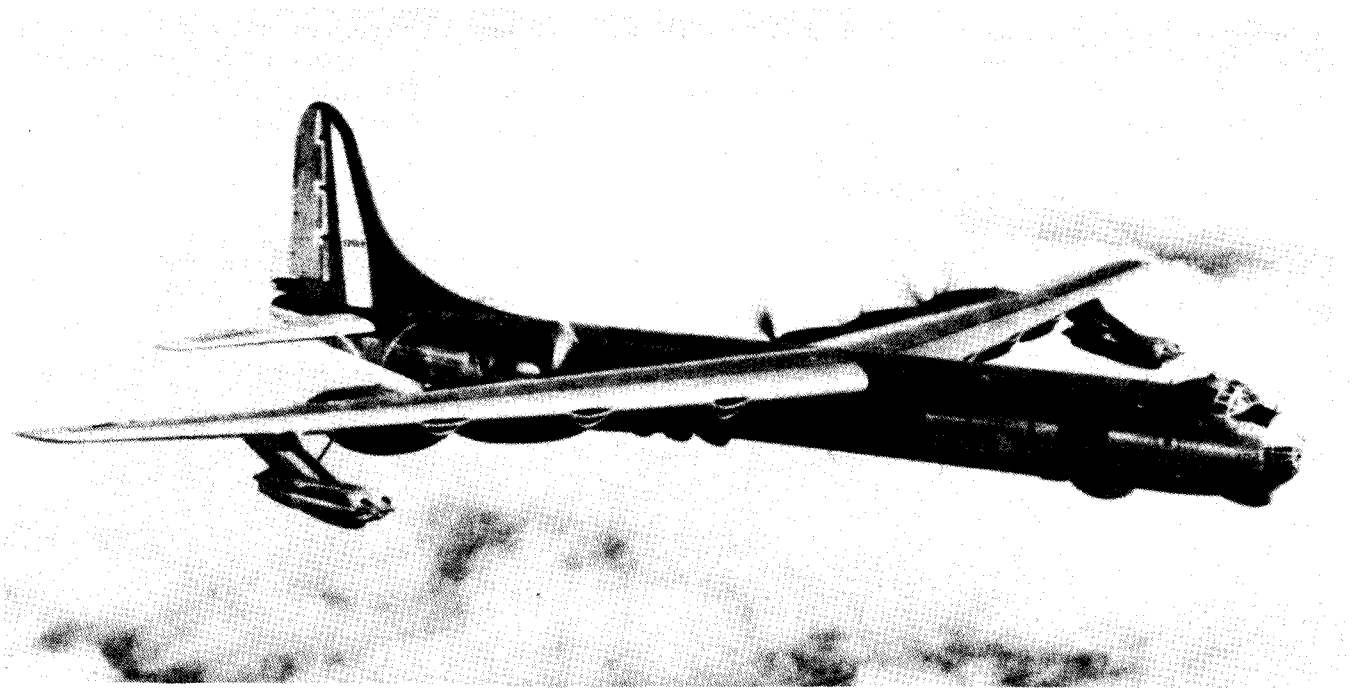
After the war, Mustangs were gradually phased out of the Air Force and turned over to Air National Guard and Reserve units. Redesignated the F-51, they were among the first U.S. fighters to see action in the Korean War. But by then the jet-powered, swept-wing MiG-15 was flying over North Korea, and it was up to America's newest jet fighter, the similarly equipped F-86 Sabre, to defend the skies.

Today, P/F-51s are used in piston-engine air racing. More than 40 years after the first Mustang was rolled off the assembly line, it's winning races regularly around the world.

The racers say if your looking for a hot rod with wings, you won't find one better than the Mustang.

B-36 Peacemaker

Best bomber that never went to war



By 1Lt Randy Hagan
ATC Office of Public Affairs

In 1941, most of Europe was under Nazi domination and American military planners feared Great Britain would soon fall.

The possible need to bomb Nazi targets from the U.S. led to plans and specifications for the first intercontinental bomber. The plane they envisioned had to be capable of reaching a target 5,000 miles away and returning to base without refueling. It would require a maximum speed in the 240-300 m.p.h. range and a ceiling of 35,000 feet, with a maximum bomb load of 72,000 pounds.

Four designs were submitted by the aircraft industry. The Army Air Force selected the Consolidated Model 37. Although this incredible bomber would never go to war, the Model 37 went down in history as the B-36 Peacemaker.

It was huge.

The design called for a 230-foot wingspan, six 3,500-horsepower piston engines and a gross weight of 278,000 pounds. Two prototypes were ordered in 1941, with plans for immediate production if all of Europe came under German occupation.

But the United Kingdom fared well in the Battle of Britain, inflicting heavy losses on the German *Luftwaffe* and guaranteeing a staging point for Allied air attacks. As a result, development of the B-36 took a back seat to production of shorter-range bombers like the B-17, B-24 and B-25.

Two years later, however, production plans for the Peacemaker were accelerated. U.S. planners felt the nation would soon need the B-36 for long-range attacks on Japan. An order was placed for 100 aircraft.

Once again, the Peacemaker was placed on the back burner as American forces leap-frogged across the Pacific and shorter-range bombers were able to do the job. The first B-36 rolled off the assembly line Sept. 8, 1945 -- six days after Japan surrendered. The first one flew 11 months later.

The aircraft was, to put it mildly, awesome. The wing was six feet thick at the root, permitting crewmembers to service the engines in flight. More than 162 feet long, the behemoth of the air incorporated an 80-foot tunnel and wheeled cart to connect the front and rear compartments.

By 1949, the B-36 was in the international spotlight. The newest D model was even more formidable than the first Peacemaker. Thanks to the addition of four jet engines, the plane now had a top speed of 435 m.p.h. and a service ceiling of 45,000 feet.

It also became the focal point of a bitter political debate after an anonymous document was circulated in the press, congressional and aircraft industry circles, charging that the bomber did not perform to specifications and that the contracting process was tainted.

A subsequent congressional investigation cleared the Air Force of any impropriety in selecting additional B-36s and confirmed that the intercontinental bomber was in the best interests of the nation.

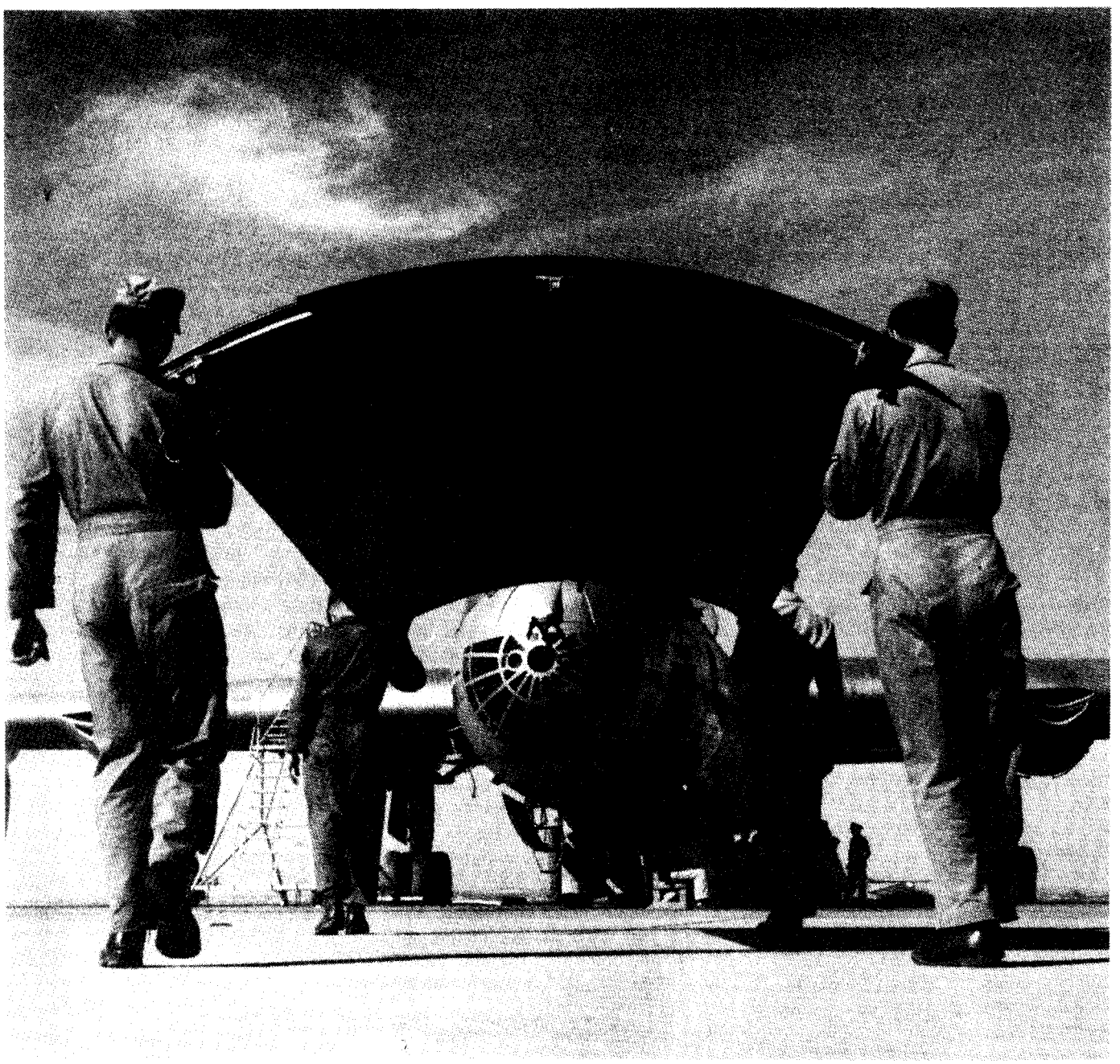
The strategic value of the B-36 was enhanced overnight when the Soviet Union exploded its first atomic bomb in 1949. With memories of the Berlin Blockade still fresh in the American public's mind, there was fear that the Soviets would quickly resort to nuclear blackmail to achieve their foreign policy objectives.

President Truman promptly promised total destruction of the Soviet Union if that nation used an atomic bomb against the U.S. or any of its allies. The B-36, the Russians knew well, could carry out that promise.

With its 10,000 mile unrefueled range, the Peacemaker could easily strike targets deep within the Soviet Union and return. The Russians had nothing to match it.

The B-36 became quickly obsolete during the 1950s as the U.S. Air Force began phasing in the newer B-52 intercontinental bomber. By the time the last Peacemaker was retired in 1959, the Soviets had developed aircraft capable of hitting targets within the U.S. Since then, they have continued to develop more and more sophisticated nuclear delivery systems.

The B-36 was never used in conflict, but it served a vital purpose. The huge aircraft was called "the most important bomber that never went to war." It lived up to its nickname.



THE B-36 PEACEMAKER was an awesome sight as it lumbered down a taxiway. Airstrip architects had to consider new dimensions when designing facilities for this giant aircraft and others to follow such as the B-52 and the C-5.

(U.S. Air Force Photo)