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Sistership to the Museum's Beech Starship in Flight Above SpaceShip One and its Mothership



THE "FORGOTTEN WAR" - KOREA

The Korean War was a military and diplomatic disaster from its very beginning. The war was technically between North Korea and South Korea, but it played out against a backdrop of Cold War tensions. After three years of a bloody and frustrating war, the United States, the People's Republic of China, North Korea, and South Korea agreed to an armistice, bringing the fighting of the Korean War to an end. The armistice ended America's first experiment with the Cold War concept of "limited war."

This "forgotten war" came on the heels of World War II and was overshadowed by the Vietnam War. It was feared that this tiny peninsula would be the setting for the eruption of World War III. When the United Nations joined forces with the United States and the Republic of South Korea to stop the invasion, this fear was justified. North Korea not only had the support of the Soviet Union government at that time, but also the military support of China. The stage was set for a bloody three years.



In 1945, the United Nations had established the 38th parallel as the boundary dividing North and South Korea. It was the 38th that the North Koreans crossed to invade and unite South Korea under a Communist government. The United States entered the conflict under an assumption that this would be like a police action to drive the North Koreans back across the 38th. The two armies crisscrossed the dividing line several times. When the Chinese feared that their own borders were threatened, they became involved on the side of the North Koreans.

Because the Korean War only lasted three years, it is not thought of as significant, and often not even mentioned. However, if one compares the statistics of the Korean War (54,246) to those of Vietnam (58,226) which lasted over sixteen years, by ratio the Korean War was far bloodier than Vietnam.



The Korean War's Iconic Jet Fighters
On Display At The Museum's Kimpo Air Base Diorama

North Korea was advised, armed and trained by the USSR, and China came to its aid with over 2 million soldiers - the first time the Chinese military had fought on a large scale outside of China. As a result, the conflict was a proxy for the Cold War.

Technically, the Korean War did not end. The fighting stopped when North Korea, China and the United States reached an armistice in 1953. But South Korea did not agree to the armistice, and no formal peace treaty was ever signed. Neither North nor South Korea had achieved its goal: the destruction of the opposing regime and reunification of the divided peninsula.

It was from the Korean War that the United States had a permanent, global American military presence that they never had before. It was a real turning point for America's global role. And in the decades after the war, South Korea transformed into an economic powerhouse, and North Korea became a garrison state with the fourth largest army in the world.

The Southern Museum of Flight's tribute to the history of the Korean War is symbolized by the diorama depicting the defection of a North Korean MiG-15 pilot, Lt. No Kum Sok, as he landed his prized jet at Kimpo Air Base and sought asylum. Now the United States had their hands on Soviet technology which provided the United States the long-awaited opportunity to study its capabilities.

Lt. No had changed his name to Ken Rowe when he moved to the United States in 1953. Ken was fascinated by our plans to build a diorama around his defection. He has since visited the exhibit a number of times and participated in speaker forums and events sponsored by the museum related to the diorama. Ken Rowe wrote an excellent book, "A MiG-15 to Freedom". It provides a rare, North Korean perspective on world events during the Korean War and a fascinating view inside the minds of Korean leaders of the time.

OUR BEECH STARSHIP NC14





A futuristic-appearing craft took to the air in 1983, a radical departure from the traditional conservative designs of Beech Aircraft. It was a bold innovation in aviation design, merging a state-of-the-art lightweight composite airframe with twin rear pusher-propellers, a swept-forward wing, and an innovative variable-sweep forward horizontal stabilizer (called a canard) that changed configuration to compensate for aerodynamic changes during flight. The legendary designer of this "aircraft of the future," known as the Beech Model 2000 Starship, was the unconventional "Burt" Rutan.

The Beech Starship was just one in a series of experimental and unique revolutionary aircraft designs that were Rutan's trademark. They include the VariViggen, VariEze, Quickie, Solitaire, AD-1, Amsoil Racer, Defiant, Long-EZ, Grizzly, Solitaire, Catbird and, most notably, the renowned Voyager, the first aircraft to fly nonstop around the world without refueling in 1986.

Beech built 53 Starships and only sold 11 in the three years following its certification. They attributed the slow sales to the economic slowdown in the late 1980s, the novelty of the Starship, and the tax on luxury items that was in effect in the United States at the time. The last Starship, NC-53, was produced in 1995. In the end, Beech tried to buy back all of the Starships to put a few in museums and destroy the rest to end the cost of supporting the tiny but complex fleet.

Thanks to the personal efforts of longstanding museum board member Randall Whitehouse (1948-2018), the Southern Museum of Flight is proud to display the 14th (*NC-14*) Starship produced and is one of only seven aviation museums in the United States currently exhibiting this legendary aircraft. Whitehouse, a former combat helicopter pilot and retired Vice President of Hanger One/Beechcraft/Raytheon, had been quoted as saying that the Starship "was a Cinderella that was never found by Prince Charming."

Shown on the cover of this Flight Lines is a Starship (one of five currently registered by the FAA) flying as a chase plane for SpaceShipOne, designed and built by the company that Burt Rutan founded, **Scaled Composites**. This Starship has also been the primary chase plane for Scaled Composites' Virgin Atlantic Global Flyer, the X-37, the White Knight 2, and the Predator-B Reaper.

This record of bold innovation from Burt Rutan and Scaled Composites continued with the development of a space carrier platform known as Stratolaunch, the world's largest composite aircraft. Stratolaunch LLC was formed in 2011 to develop a new airlaunched space transportation system. The project was announced in December 2011 by Microsoft cofounder Paul Allen and Scaled Composites founder Burt Rutan, who had previously collaborated on the creation of SpaceShipOne.

The project originally had three primary components: a carrier aircraft being built by Scaled Composites (called the Stratolaunch), a multi-stage payload launch vehicle which was to have been launched at high altitude into space from under the carrier aircraft, plus a mating and integration system by Dynetics. Ultimately, only the carrier aircraft was fully developed by the time of Paul Allen's death in late 2018, who had been the source of funds for this capital intensive development program. New owners have redirected the mission of Stratolaunch to providing high-speed flight test services.

Burt Rutan has designed 46 aircraft throughout his career, been included in *Time*'s 100 Most Influential People in the World list for the year 2004, been the

co-recipient of both the Collier and National Air and Space Museum trophies, received six honorary doctoral degrees, and has won over 100 different awards for aerospace design/ development. In 1995, he was inducted into the National Aviation Hall of Fame. He has five aircraft on display in the National Air and Space Museum in Washington, D.C. Our museum, in addition to



the Starship, has two (2) VariEze, a VariViggen, and a Long-EZ in its "Rutan Inventory."

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AN ALABAMA GLIDER LEGACY

Prior to World War II, the Laister-Kauffman company had built sport gliders for the civilian market. When U.S. Army Air Corps planners were evaluating the successful use of combat gliders by the Germans early in the war, they recommended the formation of an American Combat Glider program. Laister-Kauffman was contracted by the U.S. Army to build three two-seat training gliders for evaluation.

The company adapted its LK-10 Yankee Doodle 2 glider to meet this requirement to train cargo glider pilots. Apart from the addition of a second seat, this version differed from its predecessor in having wings of constant dihedral instead of gull wings. It was a conventional sailplane design with a fuselage of steel tube construction and wooden wings and tail, covered all over with fabric. The U.S. Army Air Corps expressed interest, but only if Laister-Kauffman could arrange for the manufacture of this modified version.

Laister-Kauffmann delivered the first prototype in late December 1941. When evaluation of this prototype proved positive, the Army placed an order for 75 aircraft, followed by an order for another 75. These were operated as the TG-4A. The first production aircraft was delivered in July 1942 and the last of 150 -TG-4As was completed in June 1943.

The TG-4A, like other early USAAF training gliders, was not an ideal trainer because its flying qualities were very different from cargo gliders and the experience gained on the TG-4 was not



particularly relevant. While the TG-4A could soar (and even gain altitude under the right conditions), cargo gliders could only descend with a small margin for error, especially when fully loaded.

All TG-4As were retired in early 1945. After the war many were sold as surplus which helped build civilian gliding in the USA. Few of these gliders exist today.

The Southern Museum of Flight is fortunate to have TG-4A, Serial No.71 in our collection. This glider was originally transferred to the RFC (*Reconstruction Finance Corporation*) at South Plains Field, Lubbock, TX by the Army on February 1, 1945 and eventually came to the SMF on March 2, 1999.

Glider Training In Mobile

The world will always remember the Wrights' invention of the airplane and that Montgomery was briefly home to the Wrights' first civilian flying school in 1910. Decades later, the same factors that brought the Wright Brothers to Montgomery brought the U.S. Army Air Corps to Mobile as the location of one of the first civilian-operated glider training schools. Both of these events remain part of Alabama's rich aviation history.*

At the outbreak of World War II, and with the use of gliders as effective military delivery systems by the Germans, the U.S. Army Air Force quickly attempted to build training facilities for cargo glider pilots and the capability of transporting personnel and material by cargo gliders. They explored locations in the South and West that had more mild weather and offered more favorable year-round flying conditions than their current training locations in the north.

The main operation got under way at Twenty Nine Palms Army Airfield in the California desert. C-47 "Skytrains" flown by Women Airforce Service Pilots (WASP) were used as tow tugs for gliders, with Laister-Kauffman TG-4A sailplanes used for glider training. Bates Field in Alabama, known today as the Mobile Regional Airport, became one of the first basic glider schools. The school was operated by the Mobile Area Soaring Corp.



During World War II, U.S. companies built 14,612 gliders and the U.S. military trained more than 6,000 pilots to fly them. By late 1944, Training Command ended all glider instruction, After the war ended, military leadership viewed the developing technology of the helicopter as a more suitable aircraft for the missions previously reserved for the glider. Helicopters could carry men and equipment to austere locations and unlike the gliders, were reusable.



Glider training is still in vogue at the U.S. Air Force Academy and few realize that the United States has continued its glider program in a way no one could have envisioned during World War II. The glider the United States now uses is the most technologically advanced aircraft ever built - the Space Shuttle.

* Excerpts From **The Alabama Review** (2004) "Silent Wings Over Mobile", by Billy J. Singleton