

# FLIGHT LINES

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A PUBLICATION OF THE SOUTHERN MUSEUM OF FLIGHT  
BIRMINGHAM, AL

[WWW.SOUTHERNMUSEUMOFFLIGHT.ORG](http://WWW.SOUTHERNMUSEUMOFFLIGHT.ORG)

The Flight To Freedom  
Of A Prized MiG-15



## MESSAGE FROM THE DIRECTOR



**A**s we “gear up” for a potential re-opening of the Southern Museum of Flight, let us take this opportunity to reflect upon the dedication, hard work, and support of all members of the Southern Museum of Flight Team – our staff, volunteers, board members, patrons, and community partners. During the COVID-19 Pandemic and throughout all of the response efforts, your support has not waived.

For this reason, we have been able to continue our operation through a number of alternative means, including virtual tours and supplemental programming for our local K-12 students.

We have also utilized this time to implement a number of mitigation measures for the safety of our visitors and team members in the concentrated effort to combat the spread of the novel coronavirus. Upon reopening, visitors will most certainly notice a number of changes across the Southern Museum of Flight’s physical landscape. Polycarbonate shields, hand-sanitizing stations, and social distancing markers have been strategically placed throughout the museum campus. In addition, we will adhere to the guidance of state and local health officials with regard to capacity restrictions throughout our galleries and venue spaces.

We invite all to play an active role in any of the museum’s upcoming offerings to include our traditional tours, educational programming, volunteer opportunities, and of course our newest component, the Southern Museum of Flight’s **Aviation Workforce Initiative**. Our Aviation Workforce Initiative, or AWI, aims to “bridge the gap” between the growing aviation industry in Alabama and our workforce. Last year, Boeing’s Pilot & Technician Outlook, a respected industry forecast of personnel demands, projected that 804,000 new civil aviation pilots, 769,000 new maintenance technicians, and 914,000 new crew members will be needed to fly and maintain the world fleet over the next two decades. The forecast is inclusive of the growing commercial aviation and business aviation industries in our state with the expansion of Boeing, Airbus, Lockheed, and General Electric, among others, right here in Alabama.

Please join us as we continue our education-driven mission. Together, we will continue our incredible journey as one of the finest aviation museums and educational resources in the country!

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### Flight Lines

is published monthly by the Southern Museum of Flight as an information source for its members, patrons, volunteers and friends. Articles that appear in this publication may be reprinted indicating the Southern Museum Of Flight as the source.

Comments are welcome and should be addressed to:

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# OPERATION MOOLAH - THE MiG-15



In November 1950, the communists introduced the Soviet-built MiG-15 into battle. Its advanced design and exceptional performance startled United Nations forces. The US hoped one of the planes could be acquired for technical analyses and flight evaluation, but MiG-15 pilots were very careful not to fly over UN territory where they might be forced down.

On September 21st, 1953, Lt. No Kum-Sok, a North Korean pilot, made a decision that would change his life forever. The MiG he normally flew, No. 408, was not available that day and he was assigned No. 2057, a MiG-15bis (*a more advanced version of the MiG-15*). Flying at over 600 miles per hour, it took only 17 minutes to cross the heavily fortified border and land at Kimpo Air Base. He was not chased by North Korean fighters, nor was he shot at by South Korean forces. The US radar near the air base was temporary shut down for maintenance so by the time he reached the landing zone, nobody had reacted yet. Being unfamiliar with procedures on Kimpo he landed downwind, almost flying into an American F-86 Sabre coming in to land from the opposite direction.



*The North Korean MiG-15 (#2057) On The Ramp After Landing At Kimpo Air Base in 1953*

History was made that morning when the security detail at Kimpo Air Base looked up and saw a North Korean MiG on the runway. It had touched down and streaked by so fast that the security detail barely got a glimpse of the red star on the fuselage. The Air Police jeep wheeled around and headed down the taxiway toward the MiG now pulling in next to the startled ready-alert F-86 pilots sitting in their fighters. As Lt. No jumped down from his aircraft, the Sabre pilots realized that America had just been handed its first flying MiG-15.

Our museum had the good fortune of having both an F-86 and a MiG-15 in its "inventory". And so the idea of recreating that scene in a diorama format was born. During the same time, a young Eagle Scout wanted to build a museum-related project and built the Quonset hut, which was part of the background for the exhibit.

Until recently, most of the information and historical data for the exhibit had come from magazine articles and the four known photos which were not confiscated by the Air Police at Kimpo. Early one morning, then SMF

Director Jim Griffin got a call from a Tom Feltman. Tom explained that he lived in Birmingham and wanted to talk with him about the Korean War exhibit that was to be built. Tom was the same Tom Feltman who was one of two Air Force "Air Police" on duty near the end of the runway that September morning. Tom's story was fascinating. Once he arrived at the aircraft, officers on the scene ordered him to confiscate all the cameras being used by the growing crowd of on-lookers. Tom explained that there were many people in the area with cameras but only a few surviving photos. The Air Police were told to remove the film, expose it and return the empty cameras. Tom was a genuine asset in the

development of the SMF diorama. Later in that week Tom emailed Lt. No Kum-Soc. 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. Tom Feltman recounted his Korean War exploits in his book, "**Destination Evil**".



*Tom Feltman (left) reunites with Lt. No Kum-Sok (Ken Rowe) At The Museum In 2007*



# AIRCRAFT PERSPECTIVES



## The Republic F-105F-1 "Thunderchief"

s/n 63-8365

*This Next-To-The-Last F-105 was produced  
by Republic Aviation, Farmingdale, NY.*

- ♦ Delivered to USAF on Nov 30, 1964
  - ♦ Dec 1964 - to Mobile Air Material - AL
  - ♦ Jan 1965 - 18th Tactical FW - Japan
  - ♦ Mar 1967 - 41st Tactical FW - Japan
  - ♦ Aug 1967 - 23rd Tactical FW - KS
  - ♦ Jul 1972 - 507th Tactical FS - OK
  - ♦ Nov 1978 - 465th Tactical FS - OK
  - ♦ Nov 1980 - 466th Tactical FS - UT
  - ♦ Feb 1984 - Dropped from inventory
- There were 833 F-105 models built and  
143 of those were the F-105F-1 version*

**Wingspan:** 34.9 ft.  
**Length:** 69.9 ft.  
**Height:** 19.7 ft.  
**Weight (MTOW):** 54,000 lbs.  
**Service Ceiling:** 48,600 ft.  
**Max. Speed:** Mach 2.25  
 (@38,000 ft.)

**Range:** 778 mi.  
**Armament:**  
 5 - Hardpoints & Bomb Bay with  
 capacity of 14,000 lbs. of  
 ordnance combinations

**Engine:**  
 1 - Pratt & Whitney J75-P-19W  
 26,500 lbf Thrust (w/afterburner)

**Flyaway Cost:** \$2,200,000

### A Bit of History:

Nicknames included the "Squat Bomber", "Lead Sled", and the "Hyper Hog" and/or "Ultra Hog". Its offensive capabilities were also referred to as a "Triple Threat" — it could *bomb* you, *strafe* you, or *fall* on you. The name that was originally spoken with a sneer ultimately became one of utmost respect throughout the air fraternity.

There is a Vietnam-era jet fighter-bomber displayed at the Memorial Airpark next to the museum. It happens to be the next-to-last F-105 "Thud" produced and was the type aircraft that a former Madison, Alabama resident and Medal of Honor recipient flew in Vietnam.

**Leo Keith Thorsness (1932–2017)** was a Colonel in the USAF who received the Medal of Honor for his actions during the Vietnam War. He was awarded this honor for an air engagement on April 19, 1967. Two weeks later, he was shot down and spent six years in captivity as a prisoner of war at the Hoa Lo Prison, nicknamed the Hanoi Hilton. His cellmate happened to be John McCain (1936-2018), a subsequent member of the U.S. Senate.

Thorsness enlisted in the Air Force in 1951 and received his commission and wings in 1954. After completing F-105 "Wild Weasel" training, he was assigned to the 355th Tactical Fighter Wing based in Thailand, tasked with locating and destroying surface-to-air missile (SAM) sites.

In April 1967, Thorsness' mission was to pick fights with enemy missiles and guns; then kill them. One of the fighter planes on that mission was hit, and two crewmen had to eject from their plane. Thorsness engaged four enemy planes, damaging one of them and then driving all four planes away. Less than two weeks after his heroism, Thorsness was flying his 93<sup>rd</sup> mission when a MiG hit his plane with an air-to-air missile.

The Medal of Honor was awarded to Thorsness during his captivity, but not announced until his release in 1973 to prevent the enemy from using it against Thorsness. Injuries incurred during the ejection and aggravated by the torture as a prisoner disqualified him from flying in the Air Force and he retired on October 25, 1973.

He earned a bachelor's degree from the University of Omaha and a master's degree from USC. In the 1974 U.S. Senate elections, Thorsness was the Republican nominee against the incumbent, Democrat George McGovern in South Dakota. McGovern won.

From 1979 to 1985, Thorsness served as Director of Civic Affairs for Litton Industries. He then served one term as a State Senator in Washington. Following his retirement, he served on the Board of Directors of the Congressional Medal of Honor Foundation. He moved from Catalina, Arizona, to Madison, Alabama, with his wife in early 2008 to be close to family.

The Vietnam Veterans of America Huntsville, Chapter 1067 named their Chapter as "Home Chapter of Medal of Honor Recipient Col. Leo K. Thorsness, Life Member."





# AN ALABAMA "UNSUNG HERO"



**L**t. Col. Alva Temple, a Red-Tailed P-40 and later P-51 Mustang fighter pilot of the famed Tuskegee Airmen flew 120 combat missions during World War II and was awarded the Distinguished Flying Cross. Temple was born in Carrollton, AL, and attended Alabama A&M and then Tuskegee Institute. He entered the Army Air Corps in 1942 at Tuskegee where he completed Aviation Cadet training, graduating in July 1943. His first assignment was as a pilot flying P-40 fighters in the all-black 332nd Fighter Group which arrived in Italy in January 1944. He flew his first combat mission in March 1944. He served in Italy, France and the Balkans.

One of the least-known aspects of the Tuskegee saga is that in May 1949, three African-American pilots from the 332nd Fighter Group took 1st place, as a team, at the USAF's very first postwar fighter weapons meet flying their P-47N "Thunderbolts." It was called the United States Continental Gunnery Meet, and it would go on to become the famous William Tell competition.

The 332nd FG team was crowned the Air Force's champion piston-engine gunnery, rocketry and fighter-bomber expert. Capt. Temple (*rank at that time*) also won 2nd place in the individual conventional class competition.

In July 1949, less than two months after the Gunnery Competition, the 332nd was deactivated, adhering to President Truman's Executive Order, and its airmen were reassigned to air bases within the United States and throughout the world. In short, it was an end to racial segregation in the military.

The team's achievement wasn't officially recognized until 1995. The Continental Gunnery Meet trophy, lost for years, was finally unearthed in 1996 in a storeroom at the National Museum of the U.S. Air Force. It is currently on permanent display at the museum.

Lt. Col. Alva Temple retired from the USAF in 1965 and settled in Columbus, MS where he ran a business until his death in 2004, at age 86.

## The "Red Hawk"

**T**he T-7A program kicked off in September 2018 when the Air Force awarded Boeing a \$9.2 billion contract to replace Air Education and Training Command's aging T-38C fleet with 351 T-7 training aircraft, along with 46 simulators and associated ground equipment. The capabilities of the T-7 will provide student pilots with skills necessary to more effectively transition to 4th & 5th generation fighter/bomber aircraft.

The name Red Hawk honors the legacy of Tuskegee Airmen and pays homage to their signature red-tailed aircraft from World War II, and is also a tribute to the Curtiss P-40 Warhawk, an American fighter aircraft that first flew in 1938 and was flown by the 99th Fighter Squadron, the U.S. Army Air Forces' first African-American fighter squadron.

The Tuskegee Airmen painted their Republic P-47 and P-51's with a red-tailed paint scheme.



The first T-7A aircraft are scheduled to arrive at Joint Base San Antonio - Randolph, TX, in 2023. All undergraduate pilot training bases will eventually transition from the T-38C to the T-7A. Those bases include Columbus AFB (MS), Laughlin AFB and Sheppard AFB, (TX) and Vance AFB (OK).



# WOMEN IN AVIATION



**W**omen in Aviation International's (WAI) Girls in Aviation Day (GIAD) will go on in 2020 despite the global pandemic – and it will be bigger and more far-reaching than ever!

WAI chapters and corporate members will not host in-person events this year, and will instead deliver a virtual experience through a new Aviation for Girls app that is free and

available to all beginning Saturday, September 26, 2020.

*"With the continued growth and success of Girls in Aviation Day – in large part due to the dedicated and tireless efforts of WAI Corporate Members and Chapters all around the world – we knew we had to expand the GIAD experience this year, and canceling wasn't an option," says WAI CEO Allison McKay. "With input from our chapters, partners, the board of directors, and staff, we decided for the safety of our youngsters and volunteers, to provide a virtual experience that takes no chances with safety."*

Without geographic constraints, the Aviation for Girls app is the tool WAI will provide to allow more girls to experience the valuable WAI content, resources, career panel videos, hands-on activities, virtual tours, scholarships, and mentoring opportunities. Key to the GIAD experience is providing participants the chance to meet role models to whom they can relate, see in themselves, and who represent career opportunities they may never have dreamed of. In addition, GIAD attendees using the app will qualify to apply for WAI 2021 scholarships and will receive monthly WAI Connect eNewsletters, and the digital version of *Aviation for Women* magazine.

*"It's important to note the Aviation for Girl app is not meant to take the place of our future face-to-face GIAD events, but rather to complement the big day beyond 2020," adds Outreach Director Molly Martin. "We all agree that the app will extend the power of the day for the girls and help ignite their aviation spark in thousands. And, with year-round availability and a continuously growing library of content, we'll be able to help keep that spark lit all across the world."*

## Girls in Aviation Day



**Save the date for the sixth annual international Girls in Aviation Day on September 26, 2020.**

**Thousands of girls, ages 8-17 around the world, will be able to experience the 6th Annual Girls in Aviation Day through a new and exclusive Aviation for Girls App.**

- Three age-appropriate content tracks for elementary, middle school and high school students
- Career panel videos
- Instructional activity videos
- Social media posts
- Online learning activities
- Meet positive female role models
- Virtual tours
- Scholarship information
- Education resources
- Expanded **Aviation for Girls** magazine

For advance registration information, visit:  
[WAI.org/giad](http://WAI.org/giad)

The fifth international Girls in Aviation Day was a huge success with 119 individual events presented worldwide, WAI's October 5 Girls in Aviation Day 2019 reached approximately 20,000 attendees.

Girls age 8-17 participated not just in the United States but in 17 other countries in Canada and Australia as well as countries in Africa, Asia, and Europe.

Highlights can be viewed on:  
<https://www.youtube.com/watch?v=TS0VwEfQaYg>

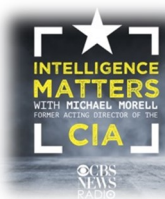
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# VIRGINIA HALL - SUPER SPY



CBS launched a new series called, *"Intelligence Matters DECLASSIFIED: Spy Stories from the Officers Who Were There"*. In June 2020, host and former

acting Director of the CIA, Michael Morell interviewed **Toni Hiley**, the former curator of the CIA's private museum, located at its headquarters in Langley, Virginia. Hiley takes listeners on a tour of the agency's most important exhibits and artifacts, explaining the historical context and personal stories behind each. She discussed an exhibit called, **The Art of Intelligence**, that was established in 2004-2005.

The agency's mission is to go where others cannot go and accomplish what others cannot accomplish. They might not have an artifact related to a moment in time, but the picture is worth a thousand words. The paintings enable the CIA to capture that history and ensure that it remains accessible to the workforce. So with a generous donation of fifteen donors, they established the core of the collection, which it turns out are mostly aviation-related paintings. Hiley stated the workforce has complained there are too many aviation paintings but a friend of hers mentioned, *"You know, we don't walk to these places,"* so that was good enough for her. There are 24 paintings in the CIA collection now. The general public can't see the paintings at the spy agency - they are housed in a secure area frequented only by employees, official visitors and VIPs.

The painting of Virginia Hall is one of Hiley's favorites. Virginia Hall was a Baltimore native who joined the State Department in the 1930s and had various postings, and suffered a hunting accident while she was in Turkey, and lost a left leg. She wanted to be an ambassador. She applied several times, noting that women accounted for only six of the 1,500 U.S. diplomats at the time. So she resigned and traveled in France when World War II broke out.

The British recruited her to be a radio operator for an agent network in France, but she was betrayed by one of her agents and had to escape. She made it back to London, where she was picked up by the O.S.S. and inserted back into occupied France on a British torpedo boat two months in advance of D-Day, where she radioed intelligence messages back to London, and that's what the painting depicts.

She would move constantly so the enemy couldn't triangulate on her position, and sent those messages via a suitcase radio with the help of her French counterpart, Edmund Lebrat, who had rigged a temporary generator with a bicycle to generate power for her radio.

After D-Day, she helped train 1,500 French paramilitary. At the end of the war, President Roosevelt invited her to the White House to receive the only Distinguished Service Cross. This is one of our nation's highest awards for valor, and the only one presented to a female civilian during the war.

But she was still operational. She was in Paris at the time. She thought of herself as an intelligence officer first, and she didn't want the publicity of going to the White House, so she politely declined. The CIA museum has her original award.

Virginia Hall went on to serve in the CIA, and was one of the first six women to join, and one of their first paramilitary officers.



*Although she was one of the World War II Allied Forces' most important spies, the exploits of Virginia Hall remained unknown to the world until recently. She worked in battle-torn France for British forces and ultimately became a member of the OSS, the forerunner of the CIA.*



*Unveiled at a ceremony in Washington honoring Virginia Hall, this portrait was added to the CIA's Fine Arts Collection. Painted by artist Jeff Bass, it shows her transmitting messages from occupied France.*

*A copy of this artwork is also on display in the Southern Museum of Flight's Shadow Gallery along with 15 other copies of the CIA's portrait collection.*



*William Donovan, head of the Office of Strategic Services, presents Virginia Hall with the Distinguished Service Cross in 1945. She was the only civilian woman so honored in World War II. President Truman proposed a public ceremony at the White House, but Hall declined because she wanted to stay undercover. The event with Donovan was private. The only outsider attending was Hall's mother.*



# MEMBERSHIP

## When It Comes to Southern Aviation History ... Just Ace It !

### *With a Southern Museum of Flight Membership !*

#### *Yes, I would like to become a member of the Southern Museum of Flight*

Your membership will help the museum continue its work in preserving southern aviation history, restoring historic aircraft and inspiring students to excel in science and technology

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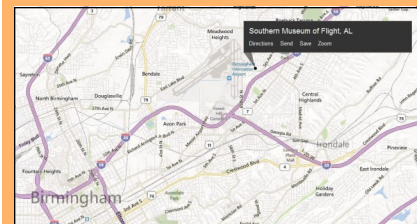
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[www.southernmuseumofflight.org](http://www.southernmuseumofflight.org)  
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