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A PUBLICATION OF THE SOUTHERN MUSEUM OF FLIGHT
BIRMINGHAM, AL

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THE LTV A-7E "CORSAIR II"



MESSAGE FROM THE DIRECTOR



Well, the summer season is coming to a close, football is kicking-off, and we're looking forward to a host of exciting programs, events, and activities this fall at the Southern Museum of Flight!

When it comes to the fall season at the museum, a few things certainly come to the forefront – our long-standing Veterans Day traditions and programs. This year, we are excited to welcome back Birmingham's Veterans Day Parade! This annual event, hosted by National Veterans Day Birmingham, is the nation's oldest and largest event of its kind. A couple of years ago, the parade was re-routed due to interstate construction in the downtown area, and last year's parade was moved to the virtual realm due to COVID-19 mitigation measures. We're certainly looking forward to bringing some of our military vehicles back to the old route for 2021, so stay tuned!

In addition, we've always hosted our own *Veterans Day Salute* at the Southern Museum of Flight. Historically, the museum's *Veterans Day Salute* has consisted of various programs, guest speakers, or events to honor our nation's veterans, which we have proudly hosted in the museum's South Wing. This year, our *Veterans Day Salute* will be a collaboration with our friends at Opera Birmingham.

The Southern Museum of Flight and Opera Birmingham are proud to present this year's program entitled, *Unknown*. The program will feature a dramatic song cycle by the same title commemorating the 100th anniversary of the founding of the Tomb of the Unknown Soldier at Arlington National Cemetery.

Stay tuned for this wonderful event coming to the Southern Museum of Flight. More information will be available soon on both the Southern Museum of Flight and Opera Birmingham websites!

I hope you will join us for these wonderful events this season, and if you haven't had a chance to visit the Southern Museum of Flight in a while, I invite you to stop by and check out some of the exciting new happenings!

Brian

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Flight Lines

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Comments are welcome and should be addressed to:

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THE FLYING CHAINSAW - XP-79B



In 1942, Jack Northrop, the founder and head of Northrop Corporation, conceived the XP-79 as a high-speed rocket-powered flying-wing fighter aircraft. A contract for two prototypes was issued in January 1943 by the United States Army Air Forces.

The fighter that eventually became this aircraft, the XP-79B, had a parallel development to the German Me-163 but, in contrast to the Me-163, the Northrop design was later adapted for jet power. Another difference between the XP-79B and its distant German cousin lay in their methods of attack. The Me-163 was meant to attack with wing-mounted 30mm cannons or unguided rockets. Northrop didn't intend for the XP-79 to shoot enemy bombers down; he wanted it to fly right through them.



Instead of relying on heavy guns, the XP-79 would collide with other aircraft, using its strong wings to tear through the wings or fuselages of enemy bombers.

Even among the USAAF brass, someone must have recognized the absurdity of that idea, because the XP-79B order also stipulated that the fighter should accommodate four - .50-caliber Browning machine guns.

The jet-powered XP-79B only took to the skies once. The test pilot had the plane airborne for just over 14 minutes when his first banking maneuver at around 10,000 feet resulted in an uncontrolled spin. The pilot bailed but unfortunately his parachute failed to open.

With Hitler already dead and the atomic bomb attacks on Japan, the need for a jet-powered interceptor that could literally cut through enemy bombers was just not as pressing. No XP-79 would ever fly again.

Today, Northrop Grumman continues to advance flying wing designs, most notably in the form of the B-2 "Spirit" and forthcoming B-21 "Raider".

Morphing Towards Our New Mission

What has traditionally been utilized as the General Aviation Hangar with twenty-two display aircraft, as well as an area for assembling our young patrons and school groups for educational projects, lectures, and museum activities, is now being converted into working space for all educational activities associated with one of the museum's new endeavors; the Aviation Work Initiative (AWI).



Adjacent to the newly built "office areas", our SMF restoration experts are also restoring the rare Fairchild C8B in space that will eventually become an area for student training in the curriculum of the AWI. Most of the experimental

and commercially built private aircraft will be temporarily stored off site until future exhibition arrangements are finalized.

Our visitors will observe classrooms being built along the east and west walls of the "hangar" that is yet to be officially named for its new educational and mission-changing role. The hangar's center section will contain equipment and workbenches where the AWI students will hone their skills with hands-on training.



An exciting time for the museum and its first class of students is close to being realized. The SMF looks forward to congratulating its first graduating class in the very near future.



AROUND ALABAMA

Dothan Mural Tribute To A Tuskegee Airman

In downtown Dothan, Alabama, there are a number of murals painted on many of the historic buildings. They cover an eight-block area in the downtown region, and travelers come from everywhere to see the Mural City of Alabama.

One of those murals honors Sherman Rose (1919-2008), a Dothan resident and an early student and subsequent instructor in the Civilian Pilot Training Program at Tuskegee Institute. After graduation, he remained as a flight instructor for Tuskegee where he taught the famed 99th Pursuit Squadron and the 332nd Fighter Group to fly during



World War II. Rose helped inspire, motivate and train the remarkable young Americans who became the first black military aviators in the history of the nation; the famed Tuskegee Airmen of World War II. Much of the success of the Airmen was due to the excellent basic aviation foundation given them by Rose and the other dedicated instructors hired by Tuskegee Institute.

He retired as a Department of the Army civilian in 1974 after serving more than 19 years as a fixed and rotary wing instructor pilot at Fort Rucker. He not only trained fixed wing pilots at the post, but also became one of the best helicopter instructors in the U.S. Army.

In 2001, a mural on the façade of one of the City's most historic downtown buildings in Dothan was painted by Wes Hardin with a picture of Rose surrounded by a collage of key aviation associations and events in his life.

He has been lauded for his work with city leadership in obtaining a number development grants, including an industrial park. He was a great Dothanite and did a lot for his community.

Why Is There A Skills Shortage In Aviation?

One clear reason:

a lack of interest in aviation from younger talent pools.

The age of maintenance, repair and operations technicians (MRO) in the industry has climbed to above-average levels, creating space for younger aviation technicians to enter the workforce. However, this gap is not being filled.

Aviation is falling in popularity with school students, meaning young people are choosing office jobs instead of becoming engineers. If numbers of aviation technicians continue to fall, the sector will face challenges of unprecedented proportions.

PILOT AND TECHNICIAN OUTLOOK 2020-2039

Region	North America	World
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GROWTH MEASURES

Economic growth (GDP)	1.90%	2.50%
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NEW COMMERCIAL PERSONNEL DEMAND

Pilots	129,000	605,000
Technicians	123,000	607,000
Cabin crew members	156,000	874,000
Total	408,000	2,086,000

NEW BUSINESS AVIATION AND CIVIL HELICOPTER PERSONNEL DEMAND

Pilots	79,000	158,000
Technicians	69,000	132,000
Cabin crew members	13,000	29,000
Total	161,000	319,000

TOTAL NEW PERSONNEL DEMAND

Pilots	208,000	763,000
Technicians	192,000	739,000
Cabin crew members	169,000	903,000
Total	569,000	2,405,000

MEET THE “RAIDERS”



On April 18, 1942, 80 men and 16 - North American B-25 “Mitchell” medium bombers set off on what some said was an impossible mission; to change the course of World War II. The actions of these 80 volunteers, led by Lt. Col. Jimmy Doolittle, were instrumental in shifting momentum in the Pacific theater and setting the stage for victory at the Battle of Midway.



These men, dubbed the Doolittle Raiders, launched the B-25s off the flight deck of the USS Hornet, despite the plane not being designed for carrier operations. The raid acted as a catalyst to many future innovations in U.S. air superiority from land or sea. That bold, innovative and courageous spirit of the Doolittle Raiders has been the inspiration behind the name of

America’s next generation bomber, the B-21 “Raider”, in development now by the U.S. Air Force and Northrop Grumman.

The first B-21 stealth bomber will roll out of its California factory in early 2022 and make its first flight from Palmdale to Edwards AFB a few months later. The second, nonflying test model is also in assembly.



Contracts should be coming soon for constructing hangars and maintenance facilities at operating bases. Despite the COVID-19 pandemic, the project appears to be on track. But how many Raiders will be built—and at what pace—remains an open question.

Ellsworth Air Force Base, SD, has been selected as the preferred location for the first operational B-21 Raider bomber and formal training unit. Whiteman AFB, MO, and Dyess AFB, TX, will receive B-21s as they become available. The U.S. Air Force will make its final B-21 basing decision following compliance with the National Environmental Policy Act and other regulatory and planning processes. That decision is expected in 2021 and is part of the overall U.S. Air Force Strategic Basing Process.

The Southern Museum of Flight will keep history alive with its display of two of the B-25s of the World War II era - the Raiders of that period in military aviation evolution.

The Museum’s B-25s

On display at the museum are 2-B-25 “Mitchell” bombers that provide visitors a unique learning experience relative to their place in aviation history.

One B-25 was recovered from a lake in South Carolina following its crash during a training session in 1943. The “Lake Murray” B-25 fuselage is displayed on a specially designed sand base, with lighting to make this fallen warrior look as though it is still resting on the lake bottom.



The second B-25 was formerly on display at the Octave Chanute Air Museum in Illinois. At the time of their closing, this historic bomber was relocated to our museum.

Upon additional research, it was determined that this particular B-25 was originally part of the multi-engine training program with the Tuskegee Airmen

In July 1945, S/N 44-30635 was transferred from Flying Training Command at Turner AAF in Georgia to the 2143rd BU (Basic/Advanced Pilot School), Tuskegee AAF in Alabama.

This B-25, when restored, will be proudly incorporated into the existing Tuskegee Airmen diorama exhibit in the South Wing Hangar.



THE LTV A-7E "CORSAIR II"



In 1964, Ling-Temco-Vought (LTV) won the Navy design competition for a new, light attack aircraft to replace the Douglas A-4 "Skyhawk". The first A-7 "Corsair II" flew on September 27, 1965 and saw combat in Southeast Asia beginning in 1967. The A-7E was last flown in combat in 1991 during the Iraq conflict and was replaced in the U.S. Navy's inventory by the F/A-18 in 1993.

This A-7E, on loan from the National Museum of Naval Aviation, arrived in Birmingham in 1996. The Heart of Dixie Squadron of the Association of Naval Aviation secured funding for



the placement and erection of the pylon and was the sponsor of the museum's efforts to put a navy carrier-based aircraft on display at the museum. Museum restoration technicians invested five years preparing the Corsair for pylon-mounting on the south side of the museum's grounds. The finishing touches on the aircraft was the professional paint application and decal placement through the generosity of Pemco Aeroplex and its employees then located at the Birmingham – Shuttlesworth International Airport.

The squadron selected retired Admiral Leighton W. "Snuffy" Smith of Alabama to be honored as representative of all the Navy aviators who flew the A-7. His name was placed in the traditional position below the cockpit canopy and his biographical sketch was shown on a plaque attached to the aircraft's mounting pylon.



ADM L. W. Smith, Jr.

As a naval aviator, Admiral Smith flew carrier-based light attack jet aircraft during multiple deployments to the North Atlantic, Mediterranean, Western Pacific and Indian oceans. These included three cruises in waters off North Vietnam where he flew over 280 combat missions.



Leighton Smith grew up in Mobile, Alabama and graduated from the U.S. Naval Academy in 1962. He earned his wings in 1964 and joined the Light Attack community where he flew, first, the A-4 "Skyhawk", and then the A-7 "Corsair II".

He went on to command Attack Squadron 86, a Carrier Air Wing, the USS Kalamazoo, the aircraft carrier USS America and Carrier Battle Group Six.



In 1964, he was promoted to Admiral and became Commander-in-Chief, U.S. Naval Forces Europe and Commander-in-Chief of the NATO Southern Command.

ADM Smith retired from the Navy in 1996.



OUR NEW MISSION – AWI



The Workforce Development Wing of the Southern Museum of Flight

When we unveiled our Aviation Workforce Initiative last year, we recognized that the aviation industry will most certainly need to adopt innovative training solutions to meet a host of personnel demands associated with fleet growth, attrition, and “Baby Boomer” retirements. As hundreds of thousands of pilots and technicians reach retirement age over the next decade in our industry, educational and career pathway programs will be essential to inspiring, recruiting, and training the next generation of personnel.

Regarding maintenance technicians in particular, the Southern Museum of Flight’s Aviation Workforce Initiative (AWI) aims to address the projected shortfall of more than two hundred thousand trained personnel in North America alone over then next twenty years. We launched our initiative with the intent to fill gaps, and we will continue to do so as our programs grow, and our offerings expand. Through our partnership with Birmingham City Schools, we will bring a general awareness campaign to students, teachers, counselors, and administrators. Our general awareness campaign will include Flight Clubs, whereby Southern Museum of Flight instructors will bring both the museum and workforce development educational experiences to the schools. By the time students in Birmingham reach their junior and senior years, they will be “geared-up” to enroll in dual-enrollment/college-level courses offered at the Southern Museum of Flight’s Eastlake Campus!



Workforce development programming within the sphere of aviation

maintenance is simply not available in the Birmingham area – another gap we intend to fill!



Construction within our AWI’s Aviation Workforce Technology Center is currently underway, and the first of many program offerings will begin this fall. Museum team members are also conducting a “gap analysis” for members of the United States Military who wish to transition to civilian careers in aviation or translate their military qualifications and competencies to the civilian industry. This represents yet another gap our Aviation Workforce Initiative aims to bridge as we strive to ensure that our both our military members and students in Birmingham are provided with pathways to career success!

Historic Relics Worth A View



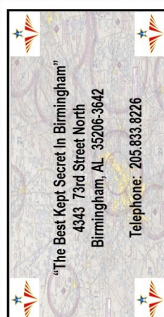
In a display case located in the museum’s Shadow Gallery, our visitors can view some very historic relics from events associated with the Lockheed A-12 “Cygnus”.

An engine inlet “spike” from an A-12 along with a turbine engine vane from Article 131 (the aircraft on display in the museum’s Memorial Airpark)

that were presented to Colonel Hugh “Slip” Slater at various ceremonial events, can be viewed along with some other historic artifacts.



Colonel Slater was a World War II pilot and became Joint USAF-CIA Commander for classified Area 51 from 1964 to 1968. He had flown the Lockheed reconnaissance aircraft U-2 and the YF-12, the armed interceptor version of the A-12.



THE SOUTHERN MUSEUM OF FLIGHT EXTENDS A SPECIAL OFFER TO ALL AVIATION ENTHUSIASTS DURING SEPTEMBER 2021.

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WE LOOK FORWARD TO YOUR VISIT SOON !!!



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NORMAL ADMISSION FEE:

\$ 7.00 - ADULTS

\$ 6.00 - SENIORS / STUDENTS

ACTIVE MILITARY - FREE!

MUSEUM HOURS

TUESDAY - SATURDAY,

9:00 AM - 4:00 PM

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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

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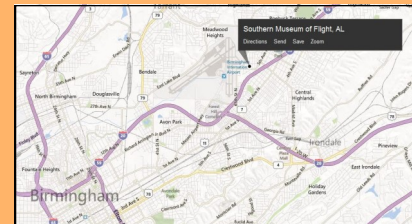
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A City of Birmingham Museum



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