

A Message From Our Executive Director

By Kim Kovesci, MAPS Executive Director

Directors and Volunteers,

I want to share something that came to mind when I had a minute to reflect. We had just finished the last three events of the year and my mind started to clear. I was thinking of how well our volunteers handled the Veterans Concert, the MAPS Christmas Party and the Santa Fly-In. They did a wonderful job coordinating everything and we all had a great time at each event. My mind started to wander - I thought we were slowing down in the fall but someone stomped on the gas!

- The OV-1 and the rotors for the H-19 were acquired *because you did it*.
- Contractors bricked in the front of the building with your help.
- Contractors and students are making progress upstairs with your help.
- Vendors brought drywall & studs to the second floor with your help.
- Vendors replaced all of the exterior lights, gallery lights and hangar bay lights with your help.
- The seats are being installed in the C-47 because you did it.
- The Chaplin display is up along with the father/daughter display because you did it.
- The artifact inventory is being entered because you are doing it.
- The Library records are being input because you are doing it.
- We packed the hangar *with your help*.
- The cameras were installed and displays rotated in the OMM room because you did it.
- The OV-1 was blasted because you helped.
- The A-26 was fully assembled because you did it.
- The gift shop contents were inventoried because you did it.
- The stairwells are being enclosed with Plexiglas *because you are doing it.*
- The vending machines were moved because you did it.
- We acquired the EA-6B Prowler because you helped.

There are many more areas and activities happening also: H-19, FG-1. PT-19 F-86A and the staffing that people do every day to support MAPS.

These are amazing results in such a short period of time. I want to thank all of our wonderful volunteers, the YOU in all of our results for your effort and dedication to our outstanding organization.

It is an honor to work with all of you. God Bless and I am looking forward to the results we achieve in 2019.



★ Mission Statement ★

MAPS Air Museum is a non-profit organization dedicated to educating people about the history of aviation and its impact upon society. It accomplishes this mission by acquiring, restoring, preserving, studying and exhibiting the impact of aviation on the culture of man.

2018 Financial Results

By Kim Kovesci, MAPS Executive Director

MAPS 2018 financial results were presented at the February Membership Meeting.

On the front page of the Briefing, I talked about all the accomplishments made by our wonderful volunteers. Now I want to talk about the financial status of the organization. Last year, 2018 ended the year breaking records in some areas and maintaining results close to last year's numbers in other areas. In total, we had a great year even though weather hampered attendance at both the Car Show in June and the Collings Foundation visit in August.

Because of this, our revenue was reduced to \$374k from \$382k in 2017. We were able to increase the number of visitors from 36,795 to 40,915 primarily due to the CAK 5K run and increased hall rentals for special events. In 2009, the number of visitors was 6,400.

Our volunteer hours continued to grow with documented levels of 57,799 hours (28,728 in 2009) which corresponds to a value of \$1,427,000 in the eyes of the government. Membership decreased by 8 to 730 members (2009 was 394 members).

Continued on next column

Financial results significantly out-performed our budget even with the addition of one part-time hourly employee. Our operating income budget was projected at \$2k but the final results are projected to be somewhere in the high \$10k's after depreciation is taken out.

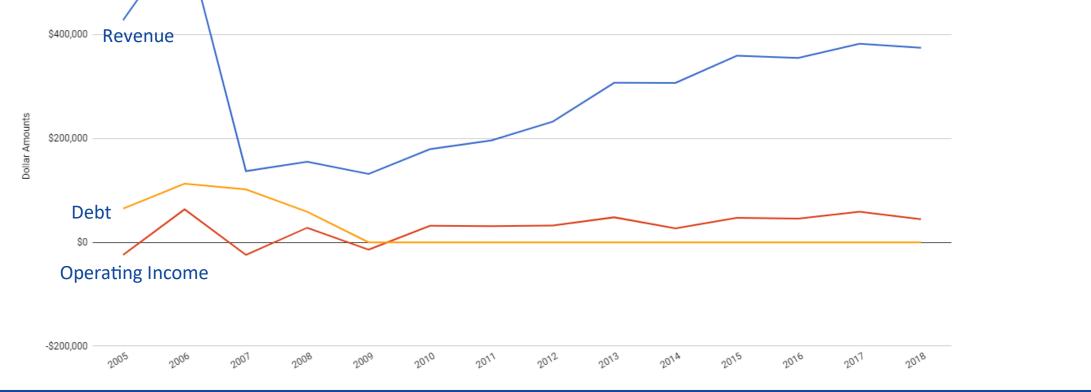
Our sales have fallen off in the gift shop but this was expected as the emphasis has been on reducing the inventory. Nonetheless, we have been able to maintain a very good profit with less sales.

This year we had the largest group go through the High School US History Program that we have ever had. There where 3 counties involved, 22 schools, 3,389 students and teachers participating.

I believe that the continued growth of the organization is directly related to the focus on our mission, the contributions of the directors and the dedication of our volunteers. I want to thank everyone in the organization for your support.

The following chart shows our revenue and operating income from 2005-2015. Note there is no debt and the reduced operating income reflects the addition of an hourly employee and shows that we are putting money back into the organization because costs have remained relatively stable.

Financial Year-End Results Year				
\$600,000		Revenue		
		 Operating Income 		
		- Debt		



C-47 GETS AN UPGRADE!

By Reed Kimball, MAPS Director of Education

The MAPS C-47 Skytrain (Serial Number 45-928) has a long and honorable history. Built in July 17, 1945, it did not participate in World War II but represents all of the C-47s that flew for the United States Army Air Corps during that conflict. It has been painted to represent a C-47 that would have participated in the D-Day landings as the opening phase of OPERATION OVERLORD on the morning of June 6, 1944.

The C-47 is one of the highlights of our outside collection of aircraft and a favorite of many guests that visit the museum. It is also one of the central displays for the MAPS American History program conducted each Spring. In order to enhance the display and improve the historical accuracy for guests and for the high school presentations a number of "upgrades" have been made to both the exterior and the interior of the aircraft.

During the Summer of 2017, Bob Zeh designed and constructed new entry stairs for the C-47. These replaced the stairs that had been with the C-47 for a number of years, widened the entry and provided a "swing" gate to allow for opening and closing the "jump" door without removing the side rail of the steps.





During the Spring of 2018, Ted Mathies designed and installed simulated jump lights near the rear jump door. He also designed and added a set of military stretchers with strapping to the display as the C-47 was often used as an evacuation ambulance.

During the Summer months of 2018, a team from restoration and the students from the Portage Lakes Career Center re-painted a majority of the exterior of the aircraft. The "invasion stripes" and other markings will be completed this Summer.

Seats had been placed in the cargo bay of 45-928 to simulate the orientation and number of paratroops that could be carried. As the only portable chairs that were available at that time were folding chairs, they were used with an explanation to guests that the seats actually used were significantly different from what they saw. To purchase original seats would have cost the museum over \$15,000.

Starting in June of 2018, Ron Duplain and Dave Gibson, started work on what turned out to be an outstanding addition to the display and to the presentations made in this aircraft. Logging over 400 volunteer hours on this single project and using only historical photographs, they completed their project in December with installation of the seats in the C-47. The addition of the "jump" seats significantly enhances the authenticity of the display and will add to the realism possible for discussions of the part the C-47 played in World War II.

Page 3



Before

For those that have not paid a visit to the C-47 recently, it is worth the trip to view these tremendous upgrades.

MAPS DIRECTORY

EXECUTIVE DIRECTOR Kim Kovesci **DIRECTOR OF EDUCATION** Reed Kimball **EVENT COORDINATOR** Kent Kleinknecht DIRECTORS **Dennis Bachtel Rick Hamlet Bob Hollis** Jim Jackson Valerie Kinney Ken Ramsay Bob Schwartz (Chair) MARKETING **Doug Perry MUSEUM DISPLAYS** Gary Haught **GIFT SHOP Bob Hollis LIBRARY Barb Johnston Betty Tober** LUNCH ROOM Mary Ann Cameron **MEMBERSHIP Bob Schwartz NEWSLETTER EDITOR** Marylou Thompson **OMM DISPLAYS Tim Rhodes** PR / PUBLICITY **Barb Johnston RESTORATION MANAGERS Ron Duplain** Jim Jackson Jim Schoop Clay Tober **SAFETY** Ted Mathies SCOUT COORDINATOR Jim Felner **SECURITY Rick Hamlet TOUR COORDINATOR Reed Kimball TREASURER** Mac McFarland WEBSITE & WEBMASTER **Ron Schultz**

Marketing MAPS

By Doug Perry, MAPS Marketing Manager

In order to ensure the museum's long term success, our Executive Director began to actively market the museum when he first took the position years ago. This included placing print ads and, significantly, placing signs on Interstate 77.

Five years ago, an intern (and MAPS member) created the official MAPS Facebook Page and I was asked to be an administrator of the page and then asked to be Marketing Manager for the museum.

Among other things, while I still place print ads, take advantage of any potential free advertising, place ads with Western Reserve Public television, and send contact information to over 500 bus companies, the purpose of this article is to acquaint you with a major free marketing effort that we do on Facebook.

I know that some of our members do not spend much time on computers, much less on Facebook. Some may think that Facebook is just someplace for people to post pictures of themselves, what they are having for dinner, or cat and dog pictures, etc. But, it can be, and is, much more than that for MAPS.

This article explains just how important this "free" advertising platform is to our efforts in telling our story to the public or as they say, "put butts in the seats."

I have built the Facebook page to the point that as of this writing, we have 5,521 people who "follow" our page on a regular basis. Every time a follower "likes" one of the posts I put on the page, each one of those people's Facebook "friends" sees that they do. Since just about everyone on Facebook has at least 100 friends, that means that one of our posts has potentially reached 55,210 people.



Many people have many, many more "friends" than 100 and users of Face-

book have friends world-wide.

Marylou Thompson tracks the information our visitors record in the visitor log when they visit the museum. She reports that in 2017 we had visitors from 32 states and 12 foreign countries and in 2018 we had visitors from 49 states and 21 foreign countries!

There are many ways people discover that MAPS is here and one of those ways is through Facebook. In the last year, our Facebook posts have reached 344,600 people. That is an average reach of about 29,000 people each month just from our Facebook page.

Most of our Facebook followers are from the United States but, we have followers from 44 foreign countries!

As we move forward, Facebook will continue to be a major source of "free" advertising to let the world know about "your" MAPS Air Museum.

New Arrival at MAPS - an EA-6B Prowler

On a cold and windy Thursday, January 17th, MAPS most recent acquisition flew into the Akron-Canton Airport and taxied to the MAPS hangar for decommission-ing and permanent display.

The flight crew that brought the plane here was from the Marine Tactical Electronic Warfare Squadron 2 (VMAQ-2,) Marine Corps Air Station Cherry Point in Havelock North Carolina where the plane was last assigned.

The EA-6B Prowler is a twin-engine, four seat, mid-wing electronic warfare aircraft. The crew consists of one pilot and three Electronic Countermeasures Officers. It is capable of subsonic speeds and has carried out numerous missions for jamming enemy radar systems and in gathering radio intelligence on those and other enemy defense systems. It is capable of attacking some surface targets on its own, in particular, enemy radar sites and surface-to-air missile launcher. It is also capable of gathering electronic signals intelligence. The USMC plans to operate the Prowler until 2019.

Tail Number 163047 (Nicknamed "Death Jesters") was constructed in 1986 by Grumman Aerospace Corp. (later Northrup-Grumman) and was active for 32 years until 2018. The MAPS Prowler has a long and proud history! The plane served aboard six aircraft carriers; USS Ronald Reagan, USS Independence, USS Dwight D. Eisenhower, USS George Washington, USS Forestal and the USS Enterprise. The plane has served in the Sea of Japan, fleet exercises in the Western Pacific, the Persian Gulf, Arabian Gulf, combat operations over Serbia and Kosevo, Operation Enduring Freedom in support of the Global War on Terrorism and its final deployments from 2014 to 2018 in Qatar and Turkey.



(L-R) Kim Kovesci, MAPS Executive Director, Lt. Col. Andrew Rundl "Grundy"/Commanding Officer, Capt. Ryan Mikolajczyk "Poodini"/ECMO, Capt. Patrick Madrid "Spanish"/ECMO, and Capt. Andrew MacDonald "Ducks"



Death Jester on tail of Prowler and on helmets of the crew.

How was MAPS fortunate enough to acquire this plane? It was born out of a desire of a local woman to have one on display in the area. Maureen McFarland, Ph.D., Lt. Col. USMC Reserve, is the Interim Associate Dean of the College of Aeronautics and Engineering at Kent State University. She graduated from the US Naval Academy in 1996 and earned her wings in 1998. From 1996 to 2004 she was on active duty with the USMC, serving as a countermeasures officer. She completed three deployments and is mission commander qualified. Ms. McFarland flew in a EA-6B Prowler! She made contact with the Marine Museum in Quantico and the rest is history.

Another reason the Prowler is a special plane to MAPS. Mac McFarland, MAPS treasurer, suffered the loss of

Page 5

his son, David in 2015. David had proudly served his country in the USMC for six years as a Captain on the A-6 Intruder (forerunner to the Prowler) and had been deployed to support Desert Storm.



MAPS Mourns the Loss of Three Members

It is with heavy heart and great sadness that we inform you of three recent losses to the MAPS family.

William Humphreys 1943-2018



William E. Humphreys, age 75 of Massillon, passed away on Wednesday, December 19, 2018 at his home. He was born in Springfield, Ohio on February 1, 1943.

Bill served his country with the U.S. Air Force during the Vietnam War. After the war, he went on to work at the Hoover

Company and retired on June 30, 2001.

He was a member of First Baptist Church in Massillon, and helped out in many areas. He was also active with the MAPS Air Museum, serving as a tour guide. He joined MAPS in 2010.

He is survived by his wife Betty Anne (Strohm) Humphreys, whom he married on August 30, 1980, his daughter and son-in-law, Traci and Michael Tanksley, his grandson Dawson Tanksley, his sister and brother-inlaw, Edith and Richard Speegle and David Bagley, who he met through the Big Brothers/Big Sisters program and whom he treated like a son.

Thomas Koteff 1950-2019

Thomas "Tom" J. Koteff, age 68 of Canton passed away on January 21, 2019. He was born on April 19, 1950 to the late John and Kath-

George Richard "Dick" Pashley 1928-2019

George Richard "Dick" Pashley, 90, passed away on Wednesday, January 16, 2019. He was born June 9, 1928 in Lakewood, Ohio to Emil "Fred" and Dorothy Pashley.

He served in the U.S. Army, was the owner/operator of

Mercury TV, and worked as a realtor for Twin Oaks Realty. Dick was a member of Myers Lake Ski Club, Barberton, Norton, Kenmore Kiwanis, Classic Thunderbird Club of Northern Ohio and Boy Scout Troop 101.

Dick joined MAPS in 2008 and was active in the Curator De-

partment until the middle of 2016 when is health started to decline.

Dick was preceded in death by his parents; his wife of over 55 years, Mary Ellen (nee Douglas) Pashley; brother, Fred Pashley; and great-grandson, Cyrus Damavandi.

He is survived by his son, Phillip (Maureen Sloan) Pashley; daughter, Anita Lynn (David) Staats; grandchildren, Dan Staats, Amy (Darius) Damavandi, Brian Staats, and Bill (Rachel) Pashley; great-grandchildren, Gus Damavandi, Graham Pashley, Heath Pashley; and sister-in-law, Ann (nee Douglas) (Bill) Heflin.

Please remember MAPS members who are ill



Page 6

leen Koteff. He was a 1968 graduate ofSt. Thomas Aquinas High School.Tom was trained as a Tool and Die Mak-

er at the Hoover Company and worked there for over 30 years until his retirement. He was a certified pilot and enjoyed flying, watching auto racing and volunteering for the MAPS Museum.

Tom was a Life Member of MAPS and was very active in 2007 and 2008 helping to restore the F-100 Super Sabre. Sadly, he developed health issues and had to back away from one of his favorite activities.

He is survived by his son Larry Koteff; his sister Susan DiMenna; his brother David (Marti) Koteff and his friend Allen Zedell. or dealing with health issues in your thoughts and prayers.

MAPS Endowment Fund

A message from Kim Kovesci, Executive Director

Our Endowment Fund has been set up to ensure the long term survival of the organization. If you plan to have a financial review done, MAPS Air Museum would appreciate being considered in your plans. Thank you!

MAPS Welcomes Three Interns

MAPS is fortunate to have three interns during the last semester of the school year from two local schools: Kent State and Walsh Universities.

Among other activities, the interns will spend time in the library for research activities, work with the curators to learn about and assist in creating exhibits, restoration activities, accessioning and other recordkeeping procedures.

<u>CJ Dupre</u> CJ hails from Hudson and attends Kent State



University where he is in his last semester of a Masters in Library and Information Science (MLIS) program. He also works as a graduate assistant and assists professors with research projects. The internship program requires CJ to work 150 hours during the 15week semester. CJ also has a BA in History and an MA in Political

Science from the University of Akron.

CJ has always been interested in military history so MAPS was the perfect place for him to do his internship. He collects military surplus firearms and currently has approximately 20 firearms from WW I and II in his collection.

Nicole Stilwell Nicole is a native of South Canton and attends Walsh University where she is studying for a



Bachelor's Degree in Museum Studies with a minor in Art Histoty. After completion, she plans to enroll in a Masters in Museum Phil Keren



Phil has just begun his studies toward a Masters in Library and Information Science (MLIS) with a specialty in Museum Studies at Kent State University. He also has degrees from Miami University in Political Science and Psychology.

Phil currently works full-time as a journalist for the Record Currier Newspaper that publishes seven weekly papers in Summit County.

He has previously been both Editor and Reporter for the paper. Earlier in his career, he attended broadcasting school and did radio broadcasting for five years.

Phil loves history, learning new information, researching and reading. He is especially interested in information on historical events and preserving data. MAPS is the perfect place for him to further these interests.

Phil lives in Mogadore with his wife of 21 years and their three sons aged 18, 16 and 12.

MAPS Hosts Food Pantry

MCTV President Robert Gessner and the Akron-Canton Regional Food Bank got together and provided almost 20,000 pounds of food for local government workers that were working without a paycheck.



Page 7

Studies at Kent State.

Nicole has served with the Army National Guard for the last four years and works in human resources where she processes paperwork for 700+ soldiers. She also is

a pre-school teacher at Campus Pre-School.

Nicole's love of art and history began at a young age. Her mom took her to art museums and her dad took her to history museums. In addition to art and history, her interests include drawing, reading, metaphysics <u>and</u> she plays the ukulele!

After graduation, she hopes to work in a museum as she loves the museum environment, being with people of mutual interests and learning new things. Hosted at the MAPS Air Museum, workers impacted by the partial government shut down were welcomed to stock up on groceries and paper goods to help relieve some of the pressure caused by missed paychecks. About 90 local employees were affected: Akron-Canton Airport TSA workers, Air Traffic Control (ATC) and Customs Border Protection (CBP.)

PLCC aviation students taking classes here at MAPS as well as MAPS volunteers helped to unload the trucks, set up tables and help carry food to the government employee's vehicles.

MAPS was very happy to have been able to help out and give back to our Community - it was the right thing to do!

Chairman's Notes

By Bob Schwartz, Director Chair

Legacy Awards

The MAPS Legacy Award was created to acknowledge MAPS members who have lived their lives as examples to our young. These individuals have been pillars of society and as volunteers have significantly contributed to the success of MAPS Air Museum.

Previously, the MAPS Legacy Awards were presented at different venues in the area. It was felt that we really needed to bring the award ceremony home, so 2018 was the first year that presenting the MAPS Legacy Awards has been made part of our Annual Christmas Party.

Previous Recipients

2014 – Don Block, Ralph Lynn, Bob Withee
2015- Jim Boyea, Bob Johnston, Ted Mathies
2015 – Ken Ramsay, Mac McFarland, Jim Mosley

2017 – Jim and Maryann Cameron, Rick Hamlet, Bob and Pat Schwartz

The 2018 Legacy Award Recipients

Paul Gates joined MAPS in August of 1990. His membership number is Number 6. The stars on our official logo, located on the floor of the main entrance, has 14 stars. Paul's star is the 6th one on the right at the top of the logo. Paul resides in Mansfield and commutes about 55 miles one way about twice a week. Paul has volunteered in restoration for the entire time. He also was a member of the Ohio National Guard based at the Mansfield Airport. He was crew chief on the actual F-84 that he recently restored here at MAPS. Paul has been a steady

Upcoming Events

MARCH

WED, MAR 6	DIRECTOR MEETING	3 PM		
SAT, MAR 9	MEMBERSHIP MEETING	11 AM		
SAT, MAR 23 &				
SUN, MAR 24	HUNTING & FISHING SHOW			
	9 AM-4PM			
SUN, MAR 31	NE OHIO MILITARY COLLI	ECTOR'S SHOW		
	9 AM-4 PM			
<u>APRIL</u>				
WED, APR 10	DIRECTOR MEETING	3 PM		
SAT, APR 13	MEMBERSHIP MEETING	11 AM		
SAT, APR 13 &	PINEWOOD DERBY			
SUN, APR 14	9 AM-4 PM			
SUN, APR 28	SPRING PANCAKE BREAKFAST			
	8 AM-1 PM			
MAY				
WED, MAY 8	DIRECTOR MEETING	3 PM		
SAT, MAY 11	MEMBERSHIP MEETING	11 AM		
<u>JUNE</u>				
WED, JUN 5	DIRECTOR MEETING	3 PM		
SAT, JUN 8	MEMBERSHIP MEETING	11 AM		
SAT, JUN 8	ANNUAL MAPS CAR SHO	W		
	9 AM-4:30 PM			
FRI, JUN 14 FLAG DAY RETIREMENT CEREMONY				
(Please check website for updates)				

Page 8

and active MAPS member for 28 years.

Jim Jackson joined MAPS in April of 2012. He and his wife, Bernice, live in Jackson Twp. Jim came on board at an opportune time. Kim had been the Executive Director for about a year and things were about ready to really explode! Jim has worked in facilities since his tart, helping, directing, and suggesting the best and most efficient method to accomplished the varied activities needed to reach our goals. Jim also can operate most, if not all, of our varied pieces of equipment and helps when extra help is needed by one of the restoration crews. Jim also consistently ranks in the top 5 for volunteer hours. It also should be pointed out that Jim has a knack for demolishing walls.

Reed Kimball joined MAPS in June of 2011. He and his wife, Candy, live in Copley. Reed is another member who joined MAPS at the right time. Reed accepted the new Education Director position on July 1, 2013. In addition to his scheduled working hours, Reed volunteers many extra hours each month, sometimes exceeding 90 hours in a month. Reed developed the Air Academy during which young people can learn and experience a number of aviation related activities. Reed is an excellent speaker with a broad knowledge on a wide-range of historical subjects. He is a retired Army Colonel and High School principal.

Congratulations and Thank You to our Legacy Award Recipients!

HONORING OHIO WOMEN IN AVIATION FOR MOTHERS DAY

By Doug Perry, MAPS Marketing Manager

Ohio has roots in many pursuits in industry, education, and aviation. Because of the way things were, and still are in some ways, our Lady Buckeyes have many times not received their "credit where credit is due."

This article is to bring to the forefront some local women so they can get or continue to receive our respect for their contributions. This is in keeping with our mission to "educate the public on the History of Aviation and its impact on man."

To begin with, we will have to turn back a few years - 1909 to be exact. In 1908 Mr. William Martin of Plain Township, here in Stark County, built his aeroplane. On January 12, 1909, after waiting for enough snow to be on the fields, he took that craft to the top of a hill on his farm and, with the help of "Billy" their farm horse pulling it with a rope, the craft took flight.

On that same day Mrs. Almina Holtz (Pontius) Martin, who supported her husband's efforts and had hand stitched the English broadcloth covering, took her turn at the controls and made several flights herself. Thus she became the first woman ever known to have flown a heavier than air machine. There is some unconfirmed history that says Mrs. Martin may have even been the first to pilot the craft! Other family members also took turns, most notably Mr. Martin's grand-daughter Blanche who was only 8 years old at the time. Surely not only the youngest female to fly such a craft but, more than likely the youngest person ever to fly any such craft.

Next up we have Ms. Bernetta Miller. Born in Canton, she became interested in flying and in 1912 took flying lessons at the famous Moisant Aviation School on Long Island. She earned her license in September 1912 and became only the 5th woman in the U.S. to hold a pilot's license. Moisant chose her to demonstrate the Moisant-Bieriot monoplane to the US Army in October of that same year. She has said that she "had no illusions as to why I was sent …that I could overcome some of the fears others might have of the monoplane.... on the basis of the idea that if a mere woman could learn to fly one, so surely could a man."

Unfortunately, she gave up flying because of the wide-spread disapproval of women flying at the time. She went on to volunteer with the YMCA during World War I as a canteen worker. Wounded at least once while working under fire, she was awarded the French Croix de Guerre in 1919. This award is for individuals who distinguish themselves by acts of heroism involving combat with enemy forces.

Ms. Miller served as Bursar of the American College for Girls in Istanbul from 1926 to 1933. Upon returning to the U.S., she served as Bursar of St. Mary's Hall, a private school in New Jersey. Between 1941 and 1948 she worked at the Institute for Advanced Studies at Princeton as first secretary and bookkeeper to the director. When she began to lose her eye-sight, she worked as a greeter at the entrance where, among other things, her job was to keep people from disturbing Al-

Page 9

bert Einstein who she referred to as "the dear." She was a member of the Early Birds because she had flown before 1917 and a member of the Woman's Overseas Service League.



Another local "Buckeye" is Mrs. Louise Timken. She obtained her pilot's license in 1943 and served in the Civil Air Patrol during World War II. In 1958 she became the first woman to both own and fly a jet aircraft. In 1965 she became the first woman to be type-rated in a Lear-jet and in 1973 she chaired the FFA's Women's Advisory Committee on Aviation.

Louise was a trustee of the AFA's Aerospace Education Foundation, member of the EAA President's Council and a past president of the Akron-Canton Regional Airport Board. Widely known for her efforts to advance programs that benefit fliers and flying, she was one of the air industry's most active supporters. She was enshrined at the Arizona Aviation Hall of Fame at the Pima Air & Space Museum in 1994 where her Learjet is on display.

Louise passed away in 1998 at the age of 88. The Louise Timken Aviation Library is housed at MAPS. *Doug's article continued on following page*

MAPS Anniversaries

November 1, 2018 to January 31, 2019 ** designates Family Membership

<u>15 YEARS</u>

5 YEARS

Cabral, John

Glock, Fred

Koskoris, Jeff **

Holloway, Bruce **

Kovesci, Kevin

Luczynski, Thomas

Hamlet, Richard Brubaker, Grant Spencer, Cathy **

10 YEARS

Milich, Robert ** Knickerbocker, Ron **

> **Congratulations! Thank You For Your Continued Support!**

Women Aviators continued

Judith A. Resnik (Ph.D.) was a local woman who graduated from Firestone High School in Akron in 1966. She was a classical pianist, obtained her Bachelor of Science degree in Electrical Engineering from Carnegie-Mellon in 1970, and a Doctorate in Electrical Engineering from the University of Maryland in 1977.

She was selected as an astronaut candidate by NASA in 1978 and worked on many projects in support of Orbiter Development. She first flew in space in 1984, completing 96 orbits of the earth. Unfortunately, Ms. Resnik died on January 28, 1986, along with the entire crew, when the Orbiter "Challenger" exploded after launch.

Welcome New Members

November 1, 2018 to January 31, 2019 ** designates Family Membership

Klouda, Paul ** McQueen, Rick ** Cosentino, Adriana Valentine, Armando Koprivec, Larry ** Schulze, Andrew ** Pham, Anh Romar, Mitchel ** Nicely, Richard Williams, John Palmer, Marianne ** Stanley, Deborah ** Dupre, CJ Keren, Phillip Etherton, Jonathan ** Lococo, Jacob Paugh, Ernest Romar, Mark Stilwell, Nicole Abbey III, Nelson Bridges, James ** Conrad, Dave Thesing, Thomas Belliveau, Robert Luecke, Joel Haag, Charles Pesut, Paul Reese, Keith Forsythe, Lynn Freihof, Chris **

New LED Lighting at MAPS

This past fall, we converted a large number of our lights to LED. We started out with the administrative office because we were having problems with the lights flickering and a large delay when turning them on. The improvement was amazing so we moved on to the restrooms, gift shop and main entrance. The next area was the library, under the mezzanine and the parking lots. We finished up with the Gallery of Heroes and finally, the main hangar bay lights. We still have some areas identified in restoration and the motor pool but we are pleased with the results and we would like to thank <u>**Ron Fain**</u> for the sup-

Page 10

Ms. Resnik was joined in the astronaut corps by Ms. Nancy J. Currie, born in Troy, Ohio, who first flew in space in 1993 and Ms. Sunita L. Williams, born in Euclid, Ohio, who first flew in space in 2006.

These women were some of the most highly skilled, highly trained, and highly intelligent people of whom you may have never heard. Today, we acknowledge their achievements and thank them for their significant contributions to aviation. We apologize to any Buckeyes we have missed but we honor them, and all women, just the same.

Thanks Mom!

Happy Mother's Day to all MAPS moms!

port of his company in this project.

LED lighting not only brightens an area but they are extremely energy-efficient and consume up to 90% less power than incandescent bulbs. Since LEDs use only a fraction of the energy of an incandescent light bulb, there is a dramatic decrease in power costs.



Curator's Corner

By Brooke Anderson, Curator Department

Look for a new display this Spring in the Gallery of Heroes, honoring Major General John B. Anderson, career officer, a combat Corps Commander during WWII and grandfather of North Canton resident, Dr. Michael Van Ness. Dr. Van Ness has just completed a biography of the General, due for release in the Spring of 2019, and has chosen MAPS as the home for his grandfather's display.

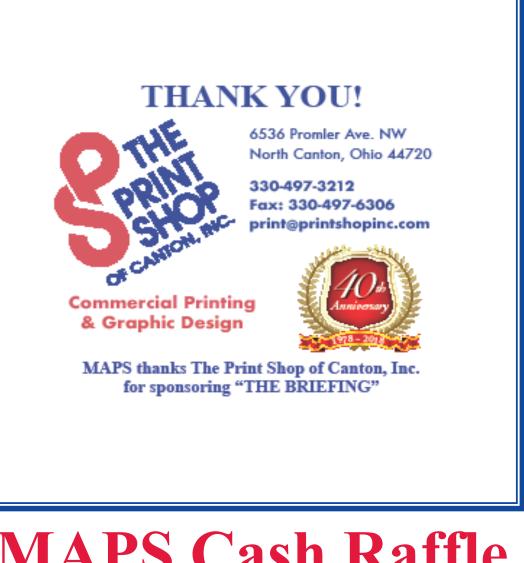


General Anderson, son of Danish immigrants, received an appointment to the United States Military Academy – West Point – in 1910, and was a member of the graduating class of 1914. Anderson chose to be an artillery officer and served in the United States Army until retirement in 1946. Some high points of his career include the following: serving with

General Pershing as a member of the 6th Field Artillery during the Mexican Intervention in 1914-1917, duty in WW1 with the 1st Division (the Big Red One) 1917-1918 as an artillery officer whose Battery C, 6th Field Artillery, fired the first United States cannon shot of WWI. During the inter-war years, he was a member of the U.S. delegation to the 1929 Geneva Conference, which established the protocol for treatment of prisoners of war.

In September of 1942, he was named commanding officer of the newly formed 102nd Infantry Division and was responsible for the training of its 15,000 men prior to combat. Their training was evaluated in the Louisiana Maneuvers of 1943, judged by General George C. Marshall, a stern task master. The 102nd passed with flying colors.

This success led to Anderson's promotion to Commander



MAPS Cash Raffle

It's time for our annual MAPS Cash Raffle! This is the 13th year for this major fundraising event. Your participation in last year's raffle directly contributed to our organization in the continued construction on the second floor, the continued restoration of the F-16, OV-1 and FG -1 as well as numerous other projects.

For those of you who are new members, each member is sent 10 raffle tickets in the mail. Each raffle ticket can be purchased or sold for \$5 each. Many members sell them to family and friends and some members simply buy them all and turn the money back to the museum. If you would like more than 10 tickets, please stop by Head-

Page 11

of the XVI Corps in General Wm. Simpson's Ninth Army. The XVI Corps was assigned to General Bernard Montgomery, and became the spearhead for Operation Plunder, the crossing of the Rhine River in March of 1945. The crossing was a success, and Winston Churchill, Prime Minister of England appeared during the operation and was ferried across the Rhine with Montgomery, Simpson and Anderson, among others, for a brief visit.

The Van Ness family has preserved many of the General's artifacts, including uniforms, medals, weapons, photographs and significant paperwork. This will be an important new addition to the MAPS Gallery of Heroes. Completion date scheduled for late March/early April 2019 to coincide with the release of the General's biography. **Don't miss it!**

quarters and pick up more.

The annual raffle has turned into one of the most reliable fundraisers for MAPS. It also provides a way for those who are unable to actively volunteer to support MAPS in another way.

Sold tickets are due by Wednesday, April 10th. The top seller will receive 10 free tickets for the drawing which will be held on Saturday, April 13th during our monthly membership meeting.

If you have let us know that you do not wish to participate, we have made note of that and have not sent tickets to you. If you receive tickets and don't wish to participate, send the tickets back and we will take your name off the list for next year.

What is that big black plane in the hangar?

By Ken Ramsay, MAPS Director and A-26 Restoration Crew Chief

Aircraft History

It is an A-26C Invader, built by Douglas in 1944. Ours is the bomber version of the aircraft, which is identified by the Plexiglas nose. There was also an attack version identified by a solid nose with eight 50 Cal machine guns or other armament. The A-26 was designed and built during WW II. Its first flight was in July of 1942 with deliveries to the Army Air Corps in 1944. It was the fastest bomber in WW II. Another unique thing about the Invader is that it only had a crew of three, pilot (no co-pilot), bombardier and aft gunner. In 1948, with the deactivation of the B-26 Marauder, the A-26 was re-designated the B-26 and kept this designation until 1963 when it was again identified as the A-26. In addition to WW II, these aircraft also served in Korea and Vietnam and were commonly used in the counter-insurgency role (COIN). They were also used for training, VIP transport, cargo delivery and drone control. Post-war uses included aerial refueling, fire fighting, executive transport and aerial surveying.

Our A-26C, S/N 43-22602

It was delivered to the Army Air Corps on February 23, 1944 at Hunter Army Air Field, Georgia. From 1945 to 1951, she was stationed at Granada Army Air Field, Mississippi; Hobbs Air Force Base, Texas; Robbins AFB, Georgia; Biggs AFB, Texas; Barksdale AFB, Louisiana; Hill AFB, Utah; Maxwell AFB, Alabama; Ogden Air Material Command, Utah and Victorville AFB, Long Beach AFB and McClellan AFB, all in California. In 1953, she was deployed to the Far Eastern Air Forces and served at Iwakuni Air Base, Japan; Kunsan AB, Korea; Miho AB, Japan and Johnson AB, Japan. In 1956, 43-22602 returned to the US to McClellan AFB and deployed to the Air Reserve Flying Center at Scott AFB, Illinois. In 1957, she was flown to Davis Monthan AFB, Arizona (Bone Yard) and dropped from the inventory as surplus.

rant, West Palm Beach, Florida and the Historical Aircraft Squadron, Lancaster, Ohio. In February of 2012, a team from MAPS traveled to Lancaster, loaded 43-22602's components onto trucks and transported them to MAPS Air Museum. Restoration began that summer.

Restoration

The restoration of our A-26C began in the summer of 2012. First we brought the forward and aft fuselage sections and all of the tail parts into the restoration building. We made structures to support the fuselage sections and stored the tail pieces on shelves. Most restorations address one or more of the following problems: corrosion, damage, poor paint, dirt and missing parts.

The main problems with the fuselage sections were paint, dirt and missing parts with some minor damage and corrosion. We started cleaning and removing chipped paint from the cockpit, bombardier's station and aft gunner's compartment. Tubing and accessories were removed from the aft end of the cockpit, cleaned, painted and reinstalled. All three areas were basically empty. Using books and photos of the A-26 as guides, we installed equipment and instruments typical of the aircraft. Some of these items came with the plane and others we found at MAPS. The gunner's seat and firing mechanism were fabricated from an old static training turret found in a MAPS storage room. The instruments for the cockpit and bombardier were also found at MAPS.

We received a nose wheel from California, which prompted the restoration of the nose gear well and strut. The strut and wheel well were cleaned and painted. After getting the tire foamed and the wheel painted, we raised the fuselage and lowered the nose strut. Linkage was installed and the strut locked down. The bearings were cleaned and lubricated and the nose wheel installed. For the first time in many years 43-22602 was resting on her nose gear.

In the early 1960s, she was assigned FAA registration number N9992 and flew with companies in Colorado, Minnesota and New Hampshire. In the early 1970s, the records show she was purchased by a company in Vermont. It is interesting to note that there is no record of this company existing nor any flying activities of N9992 in the US. Black Ops, maybe? In 1974, she was acquired by the Military Aircraft Restoration Corporation (MARC), Chino, California and was put on display at Wings and Wheels Museum, Orlando, Florida; Aero Squadron restau-

While the restoration of the fuselage was in progress, we brought in the right wing. It had extensive corrosion on the top inboard surface, on the nacelle skin and in the main gear well. The corroded panels were removed (screaming and kicking) and new panels fabricated and installed. The shallow corrosion was ground out and filled with body putty. The corroded areas of the nacelle were cut out and patched using established MAPS restoration

Continued on following page

techniques. The corroded and damaged areas of the ear well side panels were repaired using a combination of patching and body putty.

The left wing was a much bigger challenge. Again, the upper inboard surface was corroded as were a few areas on the nacelle. The real problem was the gear well. The inner side panels and the lower outer skin were not only severely corroded but badly damaged as well. A decision was made not to try and restore these areas but to remove the corroded/damaged parts and make new ones. It took a while making the inner panels and fabricating the outer skin (compound curves) but the effort resulted in a very nice looking gear well.

The elevators, rudder and ailerons are fabric covered and were in terrible shape. The old fabric was removed and new aviation quality fabric applied. The hinge points were cleaned and fitted with new attaching bolts and nuts. The left aileron was missing, so a new one was made in our shop and installed. Once the restoration of the control surfaces was complete, they were trial fitted to the horizontal and vertical stabilizers. This resulted in some adjustments being made to the attaching hardware, which greatly sped up the assembly of the tail section later on. The horizontal and vertical stabilizers were trial fitted to the aft fuselage section. Three of the horizontal stabilizer mounting studs had to be weld repaired and we had to make four special bolts to attach the vertical stabilizer. The actuation links to operate the elevators and rudder were fitted to the aft fuselage so the surfaces could be made functional at a latter date.

The engines and nacelles were in poor but not terrible shape - mostly dirt accumulation. The engines were cleaned, the rocker covers and cooling baffles removed along with damaged spark plugs and ignition wiring. After cleaning, the engines were reassembled with painted rocker covers and baffles, cleaned wiring and new spark plugs. Magnetos and distributors were installed giving the engines a finished look. The nacelles were cleaned and painted on the inside. The latching mechanisms were cleaned and lubricated to working condition. The two main tires and wheels arrived with the plane. One wheel was complete and the other was missing its assembly locking ring. The two tires were different in manufacture and tread pattern. As luck would have it, a matching tire was found on our flight line. Tires and wheels were sent out for assembly and foaming, and were returned ready for installation.

Windscreens, canopy doors, gunner's compartment windows and nose glass were another problem. The glass pieces that came with the plane were discolored, cracked or broken and the large nose piece was missing. New pieces of Plexiglas were bent around the canopy door frames and fastened in place. Molds were made for the windscreens and Plexiglas was formed around them. The right windscreen was installed with out any problems but the left windscreen cracked during installation and had to be done over. The top windows of the gunner's compartment were relatively flat and were made and installed without much trouble. The side windows are five feet long and over two feet wide and a compound curve. After much experimentation, two side windows were made, fitted and installed. We obtained the large nose piece from California. We then fitted and installed the nose pieces very carefully as they are all plastic. A real Norden bomb sight was found in Florida and, wonder of wonders, it mounted in the nose without any modification or hole drilling.

Another of the unique features of the A-26 is its remote controlled upper gun turret. Even though we restored the aft gunners control position, we did not have a gun assembly or turret. We found photos and drawings and proceeded to make our own twin 50 caliber gun assembly complete with ammo cans, bullet chutes, bullets (inert) and drive motor. A woman from Preferred Air Parts spent a day in the restoration building teaching us proper metal forming techniques using hammers, air hammers and the English wheel. Using these methods, a top turret was made from aluminum sheet and installed over the gun assembly.

The main landing gear was another problem, a heavy problem. The gear struts arrived uninstalled. We disassembled the supporting links, cleaned and sanded the various parts and reassembled each strut and then applied a coat of primer. The gear bearings were cleaned and lubed and trial fitted to the axels. The gear struts were then installed in their respective gear well. The right gear took a lot of fitting and grinding. The left gear slipped right in.

Painting

We painted almost everything we could get at. The interior surfaces are camo green or black, which took quite a bit of time due to all of the nooks and crannies. The inside surfaces of the gear doors and bomb bay doors are red for safety purposes. The exterior of the plane is black to depict the Korean War era. Where possible, surfaces were sanded or otherwise roughed up and then primed prior to painting.

Continued on following page

Page 14

Assembly

Now it was time to put this whole thing together. On November 15, 2018 the forward fuselage section was moved from the restoration building to the hanger, rolling on the nose gear and the wheeled aft support structure using the tow bar that was made in our tool and welding shops. The right wing was moved from the sand building where it had been stored along with most of the other aircraft components.

The installation of the right wing was a learning experience. There are four mount lugs and a locating pin. We forgot about the locating pin and it got hung up on the locating bracket on the fuselage. A little drilling and cutting and more sweat and tears and the right wing was attached the next day. Using what we learned, the left wing was installed in a couple of hours. Next, the main gear struts were lowered, the down lock links attached and the wheels installed. 43-22602 was now sitting on its landing gear for the first time in a long while.

The aft fuselage section was assembled before bolting it to the forward section. The horizontal and vertical stabilizers were attached and then the elevators and rudder were installed and connected to their actuation links. The completed aft section was lifted, positioned and bolted to the forward section (72 nuts & bolts!).

The last major items were the engines and nacelles. Like the wings, the right engine installation was a learning experience and the left engine went on much quicker. We also had trouble with the right nacelle. It would not lock in place so it was removed and we found that one of the locking links was broken. The linkage was disassembled and the broken link braze repaired. The nacelle was then installed properly. The propellers slipped onto the shafts rather easily as we had previously cleaned and trial fitted We will continue to complete additional tasks as they are identified such as nose art, painting the propellers, painting the serial number, installing batteries, hooking up the wiring, touch up the exterior paint, etc., etc.

<u>Note</u>

Over 50 MAPS Members worked on this aircraft over the past 7 years (yes, I have a list). I want to thank you all for the hard work and persistence in getting 43-22602 restored for our museum display. It has been a long time but I think the results were well-worth the effort.

Following are some amazing before and after pictures!



Left Wing Corrosion



Left Wing Corrosion Repaired

Left Wing moving to



the hubs. The spinners screwed on without any trouble.

That completed the major assembly of our A-26C and took a little over a week. There was still much to do. In the following weeks, the fuselage tail cone was attached as were the nacelle aft cones and the wing tips. Special main gear locking bars were made and attached to insure no inadvertent gear retraction during aircraft movement. The four main gear doors and two nose gear doors were installed and connected to their respective actuation links. All of the interior and exterior lights have been wired to a central junction box. The wing to fuselage fairings were attached which took some time as the alignment of the sheet metal fairings and the solid structure of the aircraft was not perfect. hangar for installation

Left Wing ready for installation



See more great pictures on following page



Cockpit Before



Engine After



Cockpit After



Installing left engine

Aft Gunner's Compartment Before





Fuselage in restoration building



Aft Gunner's Compartment After



Restored fuse-

Page 15

lage on way to hangar

A-26C Invader on display at





2260 International Parkway North Canton OH 44720 Phone 330-896-6332

ADDRESS SERVICE REQUESTED

The BRIEFING Newsletter Copyright © 2015, MAPS Air Museum

Winter will soon be over and MAPS is gearing up for Spring and many exciting events!



The **Hunting and Fishing Show** will be held on Saturday and Sunday, March 23 and 24 from 9AM to 4PM. This is a great show to get you thinking about summer fun and to see the latest in hunting and fishing gear and equipment!



The **Boy Scouts Pinewood Derby** will be held on Saturday and Sunday, April 13 and 14 from 9 AM to 4 PM. Come out to MAPS and show your support for these great kids. Take a trip down memory lane and remember when you were a scout.



History and military enthusiasts, mark your calendar for the annual **NE Ohio Military Show** to be held on Sun-



day, March 31 from 9 AM to 4 PM. You will see more than 200 tables of field gear, patches, ephemera, insignia, weapons, uniforms, and more from all eras and countries. The first of three **Pancake Breakfasts** this year will be held on Sunday, April 28 from 8 AM to 1 PM. Those of you who have been to one in the past know how awesome those pancakes and sausages taste! What a great way to spend a day



What a great way to spend a day with the family and see all that MAPS has to offer.



Saturday, June 8 from 9 AM to 4:30 PM is MAPS Annual Car Show. Come see all makes, models and years displayed by proud owners.