

# Hangar Digest

VOLUME 2, ISSUE 2

APRIL 2002

## From The Editor:

What a terrific response I received from the readers of the January issue of the new and revised "Hangar Digest". I thank you! However, apologies are in order as to the quality of the photos. I believe I have done better this time.

I have begun a two part series on Building 1301, the home of your Air Mobility Command Museum. You will discover a part of Dover Air Force Base's history that is not generally known to other than those of us that call Building 1301 home for 40+ hours a week.

In this and in future issues, you will find "Around The Bases" in which I will highlight a particular installation which is host to or under the jurisdiction of the Air Mobility Command. In this issue, I have featured McGuire Air Force Base, New Jersey. So to all you AMC wing historians, Public Affairs folks and web site maintainers, make sure you are up to date as your web site will be my primary source of information for this feature. However, if you have a wing brochure or pamphlet detailing your base's history, please send that to me. I am certain that all of the readers of the "Hangar Digest" will be interested in knowing about your base, your wing and your mission.

For some of you this is your first or second issue of the "Hangar Digest". You will find that on page nine I have included a membership application giving you the opportunity to become a "Friend" of the museum. Your contribution is tax deductible and will be used to benefit our many ongoing educational, aircraft restoration and archival preservation programs.

Again, I thank all of you for your participation and support in helping to preserve our airlift and tanker heritage.

Harry E. Heist (Editor)



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## LOOKING BACK

Two MATS bases, McGuire AFB, New Jersey and Travis AFB, California, have been selected as sites for the nation's first tactical missile, the BO-MARC.

The IM-99 BO-MARC is an area defense pilotless interceptor designed to knock down aerial invaders hundreds of miles from their targets.

Source: The MATS Flyer September 1958.

## **From the Director Mike Leister**

Months of preparation and preliminary restoration work have paid off for the C-133 and KC-97. In mid February, the pros of Worldwide Aircraft Recovery arrived and with the help of MSgt. Rich Breckenridge and our dedicated restoration volunteers, all the major pieces were back together on both planes within two weeks.

I can't say enough about working with Ben Natrass and his crew. They hit the ground running and nothing deters them. Our guys do the restoration and conservation work but when it comes to disassembling or reassembling vintage aircraft no one comes close to Worldwide.

Most wing and tail fairings still need to be cleaned and installed; however, both planes are now more weather resistant, moveable and secure and should be available for exhibit during the May AIRSHOW. Yes, Dover AFB is having a major airshow on Memorial Day weekend with the Thunderbirds, Stealth fighters and all the rest. It's free, it's centered at the museum and it should be great. Check your local papers and our website at the airshow link for details.

The newly installed mezzanine has given us additional exhibit space including an updated Dover AFB Timeline; an exhibit featuring the development of aerial refueling will be added in the future. The overhead view of the hangar airplanes is quite unique. Over the next year we will begin construction on a dedicated student "classroom" situated at the mezzanine's ground level.

Back by popular request, we are going to have The Big Band Dance again in October. The Swing City Band will provide the music, it will be up to you to provide the dancing. More next issue.....

## **The Curator's Corner: by Jim Leech**

What would you do if your "war souvenirs" suddenly showed up in a long lost box? Many items that are donated to the AMC Museum are things put away many years ago and forgotten, only to be rediscovered most often by accident. But what is the decision process you go through to determine if you want to keep them, give them to the kids, trash them or donate them to the museum? I'll try to help you make that decision, strictly from a professional point of view.

**OFFER YOUR ITEMS TO THE MUSEUM.** Actually, the first thing that I would suggest is to try to attach an historical event to each item and to determine just how and where you obtained it. A helmet from World War II with a nick on the top is just that and nothing more but if you are able to attach an accurate story to that helmet, such as you were shot at while under enemy fire at the Battle of the Bulge, that nicked helmet is then placed in an historic environment and that in itself tells a story. YOUR helmet not only has a place in your past but if accepted by the museum it also reminds others of your sacrifice and the sacrifice of many other veterans.

Not every item that is offered to the museum as a potential donation is accepted. We have certain criteria that we must follow regarding all donations. Here's a quick lesson on donating to the museum. You find an item you wish to donate. First call the museum and describe what it is that you have. Often, we will be able to determine immediately whether or not it is an item that fits our collection mission statement and if we are interested in acquiring it. We may then ask you to bring it to the museum so we can inspect it; however, if you're not in the area you may mail it to us. If it is an item that we decide not to add to our collection, we will return it to you. If we decide to include your item in our collection we will notify you and the paperwork begins. You will be asked to fill out a "proffer of gift" that releases the item to the museum. We are not permitted to place a value on any item donated to the museum, so if you wish to claim the potential donation for tax purposes, you should have the item appraised and refer to applicable tax laws. Several documents will be mailed to you for your signature including a "certificate of gift." These and other in-house

(Continued on Page 3)

## **Curator's Corner (Continued)**

documents will comprise a permanent file for your donation. The item is then assigned a tracking number and included in our permanent collection.

Depending on its use and/or historic background, your item will be then placed in one of the following categories: (1) Accessioned Collection, (2) Exhibit Support, (3) Reference Library, (4) Photo Archives or (5) Restoration Support.

Another aspect of the donation process is the accurate placement of the item. For example, if you had George S. Patton's pearl handled pistol and wanted to donate it to us, we wouldn't accept it as it does not fit into our mission statement. Instead, you may consider donating it to an Army Museum. We are networked with the other service museums and will try to assist you in placing your item into the correct arena.

Not all items donated are placed on display. Some artifacts we receive are too fragile and proper conservation procedures may require that the item be placed in the proper environment for its own survival, which may mean climate/humidity controlled storage. But at least your donation is preserved and not set aside to slowly deteriorate. We surely wouldn't want that now, would we?

Sometimes saying no to a potential donation is difficult especially when we see that it means so much to the donor. We just cannot accept everything that comes through the door. However, don't let that deter you from thinking of the Air Mobility Command Museum when you come across that long forgotten box or trunk.

## **Museum Fundraiser Nets \$\$\$\$\$**

Through the generosity of the "friends" of the museum \$1,315.00 has been received, to date, as a result of our recent fundraiser.

Many people are under the impression that the museum, located on an Air Force Installation, has unlimited funds at its disposal. This is not the case. We do receive an operating budget from the Air Mobility Command which is used primarily for the maintenance of the museum's buildings, supplying the heating and air conditioning, etc. Supplementing this fund, received through fundraisers, new and renewed memberships, Commemoration Park brick sales and the museum's gift shop, assists us in our restoration, preservation projects and educational programs.

So, to all of you who participated in the fundraiser and who are financial supporters of your AMC Museum, again, thank you!

## **Meet Museum Volunteer Harry Shirey**



Harry is one of the museum's volunteer docents.

During World War II he was assigned duty as a tail gunner on a B-17. On 8 May 1944, over Bremen, Germany, his aircraft was crippled by enemy fighters; refusing to leave the aircraft, he remained at his guns keeping the enemy fighters at bay while the rest of the crew safely bailed out. He continued to return fire until his aircraft exploded. Severely wounded in both legs, he finally bailed out barely escaping with his life. Harry was captured and spent the remainder of the war as a German POW. For his heroism he was awarded the military's second highest honor, the Distinguished Service Cross.

He was discharged in 1946 and in 1950 settled in Smyrna, Delaware. He has been a volunteer since DAFB's restoration of the B-17 "Shoo Shoo Baby."

## **C-133 News**

After several months delay, the C-133 restoration is back on track.

With tools in hand, Ben Natrass and the Worldwide Aircraft Recovery Team from Omaha, Nebraska returned to Dover on 19 February. Once the team was back on the project it was not long that the airplane began taking shape. With tail in the air and engines in the horizontal, it looks like it is again ready to launch on one of those memorable missions that some of us now only dream upon which we could venture.



In addition to the pros of Worldwide, special mention must also go to the C-133 restoration team here at the museum for their true dedication to the project. Good show all around!

## **KC-97 News**

Along with the restoration of the C-133, the Worldwide Aircraft Recovery Team was also contracted to reassemble the museum's KC-97G. Flown in several pieces by C-5s from Beale AFB, California in November 1999, the aircraft was prepped by the museum's restoration folks for reassembly. Over the past two years, extensive work had been done in the cockpit; replacing the floor, cleaning the instruments and also replacing the fabric tail surfaces with sheet metal and generally cleaning all attachment points and assembly parts.



The airplane was first delivered to SAC in 1955 with its assignment to the 384th Air Refueling Squadron at Westover AFB, Mass.

## **Museum Says Farewell To Former And Welcomes New Information Manager**

On behalf of the museum staff and volunteers, I would like to take this opportunity to bid farewell to MSgt Tina Westover and welcome Mr. John Taylor to the museum's family.

Tina has been our information manager for the past five years and she has been reassigned to another unit on the base. If it weren't for Tina's generosity in helping me to better understand the bells and whistles of the computer, this Hangar Digest would not have found its way to your mailbox. Thanks again Tina and good luck on your new assignment!

John comes to the museum from the civil engineering squadron on base. I know he is prepared to take over where Tina left off in keeping my computer up and running and to answer my not so intelligent technical questions. Welcome John!

## **Artifact Facts “A World War II Diary”: by Deborah Sellars**

Thomas C. Farrow was living in Claymont, Delaware when he enlisted in the U.S. Army in 1942. Like many servicemen of the time, he kept a diary filled with missions, photos and news clippings.

With a picture of a pin-up girl on the inside front cover and a map of England on the inside back, this military diary lists events such as dates of promotion in rank, first time under fire (December 1st in Solingen, Germany), letters written and received and much welcomed gift boxes from family and friends. Tom was well known for his fondness for chocolate. Every letter he sent contained a request for more! There’s also space for popular phrases such as “Blow it out your barracks bag” and “Gunner today— Goner tomorrow.”

He was a B-17 gunner assigned to the 384th Bomb Group stationed in England. After enjoying a 30-day furlough back home, he returned to England aboard the Queen Mary on the 10th of July, 1944. Ten days later on July 20th, his B-17 was shot down over Germany. The crew was captured and eventually taken to Stalag Luft IV, a POW camp in German Pomerania (now part of Poland).

On February 6th, 1945, about 6,000 U.S. and British airmen began a forced march to the west in subzero weather. They had inadequate clothing and food and slept in barns and fields. Under these horrific conditions, the men took care of each other and managed to cover 600 miles in 87 days. Fifteen hundred men died on the march, a mortality percentage close to the Bataan Death March. Tom Farrow survived.



## **Museum Aircraft of the Quarter: Beech C-45G “Expeditor”**

The C-45 was the World War II military version of the popular Beechcraft Model 18 “ commercial light transport. Beech built a total of 4,526 of these aircraft for the Army Air Forces between 1939 and 1945 in four versions; the AT-7 “Navigator”, navigation trainer; the AT-11 “Kansan”, bombing-gunnery trainer; the C-45 “Expeditor” utility transport and the F-2 that was designed for aerial photography and mapping. The AT-7 and the AT-11 versions were well know to WWII navigators and bombardiers as many of these men received their training in these aircraft. Also, thousands of AAF pilot cadets received their advanced training in twin-engine Beech airplanes.

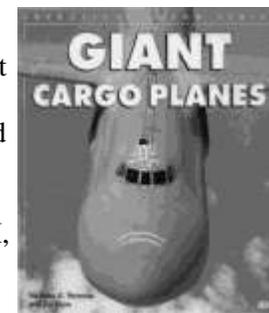
The museum’s C-45 was originally manufactured as an AT-11, S/N 42-37174, and was assigned to the USAAF on 4 March 1943. It was dropped from the Air Force inventory in June 1952. It was then remanufactured as a C-45G, S/N 51-11795 and was again delivered to the USAF on 19 May 1953. It was dropped from the inventory by authorized reclamation in April 1958.



## **Recommended Reading: Giant Cargo Planes**

From the large flying boats produced by Martin and Boeing in the 1930s to today’s aerodynamically sleek transports that can carry payloads up to 300,000 pounds, Giant Cargo Planes covers the evolution of the airlifters. Used for both commercial and military purposes, these aircraft are the workhorses of the sky, transporting goods and weapons worldwide. Detailed in the well-researched text by Nicholas Veronico and Jim Dunn and complemented by 80 color photographs, are such aircraft as the C-124 Globemaster II, C-141 Starlifter, C-5 Galaxy, KC-10 Extender, C-17 Globemaster III, An-124 Condor, An-224 Cossack and the Boeing MD-17.

This book is available from the museum’s gift shop and can be purchased for \$16.95 including shipping and handling, payable by personal check, VISA or MasterCard.



## *“Name the Plane”*

Again, I must apologize for the poor quality of the photo of the airplane that I asked you identify. I even had a hard time recognizing it and I was the one responsible for its selection. However, I was disappointed that only a few of you took a shot at it and two identified it as the P-12E.



The airplane depicted is the Boeing P-12E. The P-12E differed from the other P-12 versions as it had a monocoque (the outer skin carrying most of the stresses) fuselage, a pilot's headrest faired by a turtleback and a more powerful engine than its predecessors. A total of 135 were ordered for the Army Air Corps and most all remained in service until being replaced by the P-26A in 1935.

The two persons correctly identifying “Name the Plane” are Dr. Ed Greenwood of Dover, DE and Mr. J. E. McKillop of Edison, NJ. As but only two identified the airplane, I have decided that each will receive the book “Giant Cargo Planes”. Congratulations!

This time I ask you to identify the airplane depicted below including the manufacturer, mission, design and series (if applicable); i.e., Boeing B-17G. You should have an easier time recognizing it, as the photo quality is much better than in the previous issue.

It was brought to my attention that possibly the reason I didn't receive a more positive response is that you may be a bit leery in displaying your phone number and address on a post card. So, this time I ask that you send either a letter, e-mail, fax or post card identifying the airplane. You may contact me at any one of the addresses listed on the last page. **Please do not leave your entry by phone.** I will designate each correct response with a number ID from which I will randomly select one winner. Please include a return address. The winner will receive a book selection from the museum's gift shop. Good luck and please participate!! Ed.....

(Museum staff and volunteers are not eligible)



## Around The Bases: McGuire AFB, NJ

McGuire Air Force Base is one of the Air Mobility Commands largest and most strategically important facilities. It traces its origins back to 1926 as an Army liaison aircraft field — a dirt strip with a windsock built in a farmer's field adjacent to Camp Dix. First used by the 119th Observation Squadron, New Jersey National Guard in 1931, it has hosted official Air Corps, Air Forces and USAF units ever since.

Originally named for 2Lt Guy Rudd of the New Jersey National Guard, who died in an O-38 crash in 1938, the Army lengthened and improved the dirt runway for light aircraft in the fall of 1937. The Works Progress Administration (WPA) funds paid for the work done by the men of the Civilian Conservation Corps (CCC) at Camp Dix. As World War II approached, a major expansion was initiated and the field was renamed Camp Dix Airport and later Fort Dix Army Air Base (AAB). Between 1939 and 1945, the base hosted ground support aviation training, anti-submarine warfare operations, a major maintenance center, a departure point for aircraft being flown to Europe and finally serving as a reception center for casualties and units returning from combat after the war. During the war, it was also a test and research site for classified work on guided bombs, pilotless aircraft and ground control approach radar. The base was mothballed in the fall of 1945.

The Army transferred Fort Dix AAB to the Strategic Air Command (SAC) on 30 April 1947. With the United States Air Force becoming a separate service on 17 September 1947, the base was passed to USAF control. It was designated McGuire Air Force Base on 13 January 1948, named for Major Thomas B. McGuire, Jr., a Medal of Honor recipient from New Jersey who was killed in a P-38 crash in the Philippines. McGuire AFB was transferred from SAC to the Continental Air Command in 1949.

The Military Air Transport Service (MATS) took over in 1954. As an airlift base, it was initially the home of the 1611th Air Transport Wing, operating the C-118 Liftmaster and two squadrons of the U.S. Navy's R6D. The C-118/R6Ds were phased out with the introduction of the C-135 in 1961 and the C-130 in 1964. The 1611th ATW provided passenger and cargo services for Europe and Africa and played a key role in the 1956 evacuation of the Hungarian refugees and the peacekeeping efforts in the Congo in the early to mid 60s. In 1966, the 1611th ATW was deactivated and the 438th Military Airlift Wing, Military Airlift Command (MAC), stood up in its place. The Navy left McGuire in 1967 and the 438th converted to the C-141 in 1968 with worldwide airlift responsibilities including operations in Vietnam, Grenada, Panama and Kuwait during Operations Desert Shield/Storm.

McGuire has been home to the 21st Air Force, the Air Defense Command, a BOMARC missile site, the New Jersey Air National Guard and the 514th Air Mobility Wing of the Air Force Reserve. The New Jersey Air Guard's 108th Aerial Refueling Wing remains a major tenant today. The 514th AMW was equipped with the C-119 until 1968 when it became one of the first units in the Air Force Reserve Associate program operating the C-141 and more recently the KC-10.

In 1992, when the Military Airlift Command became the Air Mobility Command, an aerial refueling mission was added with the KC-10 tanker aircraft and crews from Barksdale AFB, Louisiana and Seymour Johnson AFB, North Carolina. On 1 October 1994, the 438th Airlift Wing was deactivated and replaced with the 305th Air Mobility Wing. Today, McGuire AFB plays a key part in the United States Air Force's peacekeeping and force projection mission.

Source: Pamphlet, *305th Air Mobility Wing 1951-2001, 50 Years Defending Freedom*, 305 AMW History Office.



305th Air Mobility Wing

### CHANGE OF ADDRESS

Don't miss out on receiving your copy of the Hangar Digest, other membership benefits and notification of special events that are hosted by your museum. So, if you are planning a move or have already settled in, please take the time to send an e-mail, post card, phone call or fax to any of the addresses or numbers listed on the last page of this newsletter to notify us of your new address. Ed.

## **Building 1301, Dover Air Force Base (Part One)**

Building 1301 is the home of the Air Mobility Command Museum. From 1944 to 1946 it housed the headquarters and engineering facility for the 4146th Army Air Force Base Unit. It was that unit that developed the first successful combat proven air-launched rocket systems used by the United States Armed Forces.

History does not record the individual who first conceived of the idea of using an aircraft as a rocket launcher; however, experiments were being conducted in the United States during the early part of World War II with that concept in mind. Initial American efforts at developing air-launched rockets and missiles were located at a number of civilian and military installations across the country. The principal testing facility was the Aberdeen Proving Ground in Maryland with some of the coordination for the development being done at Wright Field in Ohio.



Building 1301 (1944)

The first efforts to place rockets on aircraft were tried by the Army Ordnance Department. They used an experimental 4.5" rocket that was attached onto the wing of a P-40 aircraft at Wright Field. This aircraft was flown to Aberdeen for test firing. The blast encountered, upon the launch of the rocket, was greater than anticipated and modifications to the rocket and the launcher were required. The first successful ground firing of these rockets, from an airplane mount, was on July 6, 1942 and aerial firing test were conducted in the fall of 1942.

Testing of these rockets and launchers continued at Aberdeen during 1943. The original steel tube launchers were replaced with plastic tubes in the spring of that year. Other improvements were made before quantity production was begun in May. Early production models were not always reliable. One of the main problems was the premature separation of the rocket's warhead from its body. These problems remained with the rockets for some time after they were issued to combat units.

The preliminary results of the testing and development program demonstrated that the air-launched rocket could be an effective weapon against ground targets, especially those that were difficult for conventional bombers to reach. The ability of the rocket equipped fighter to move low over a target and release a rocket more directly at the target meant that a fighter aircraft could be a more versatile weapon during the earlier period of the war.

A series of meetings were held during the late fall of 1943 on the necessity to advance the Air Force's involvement in rocket development. By early 1944, the Army Air Force was ready to create a special unit for the continued development of air-launched rockets. The Ordnance Department asked the Army Air Force's Commanding General to create the unit at Dover Army Air Field. On April 1, 1944, the Army Air Force ordered the establishment of an accelerated rocket development program with the creation of a base unit and experimental rocket station at Dover. The unit was formerly activated on April 24, 1944 as the 732nd Army Air Force Base Unit under the jurisdiction of the Army Material Command. The unit designation was changed to the 4146th on August 31, 1944. The unit was to develop, fabricate, install and test all likely means of launching rocket propelled projectiles from aircraft.

Among the items that the 4146th was to study was the 4.5" launcher already in production. In addition, they were to study the possibility of manufacturing launchers for rockets up to 16" in diameter. The unit was also directed to develop launchers for bombers, multiple launching tubes and tubes having a flexible installation for firing both forward and rearward. The unit would also examine and test foreign rocket devices including those developed by the British, Russian, German and Japanese Air Forces. Additional missions included testing vertical bombs and German rocket propelled bombs. (To be continued in next issue.)

Source: U.S. Department of Interior, National Park Service. National Register of Historic Places NPS Form 10-900a (8-86), dtd. 5 July 1994

## **★ The Benefits of Membership ★**

**Becoming a Member of the Museum is easy and it not only benefits the Museum's programs and projects, it also benefits you!**

For an updated membership form,  
please visit:

<http://amcmuseum.org/support>



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The Hangar Digest is published quarterly and is dedicated to the preservation of our airlift and tanker heritage. All articles, unless otherwise noted, are written by the editor. All photographs are the property of the Air Mobility Command Museum unless otherwise designated.

I solicit your comments, articles and ideas for future issues. You may contact me by mail: Harry E. Heist c/o The Hangar Digest, P.O. Box 02050, Dover AFB, DE 19902-2050; FAX (302)677-5940; PH (302)677-5997 and email:

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