This C-5’s pilot apparently needed no help in finding the AMC Museum. The Dover bird was just seconds from touching down on runway 14/32 when it passed the Museum’s Route 9 directional sign June 15.

**Location, location, location**

You think finding the AMC Museum is easy? For those of us familiar with Dover and surrounding Kent County, locating our Museum is a snap: you just get off Route 1 south of Dover AFB and go onto Route 9. The Museum is on your left.

But it might be a little harder for folks coming from out of town.

Museum volunteer and computer whiz Terry Anderson recently took on the project of checking 12 popular websites purporting to direct people to specific locales. These sites included Bing Maps, Google Maps, MapQuest, Expedia.com, and a number of others.

What Terry found was interesting. A number of sites correctly located our Museum at 1301 Heritage Road, but surprisingly several did not. Some didn’t even list Heritage Road at all.

Where the location information was wrong, Terry contacted the various sites, pointing out the errors and asking they be corrected. The overwhelming majority complied.

As Museum Foundation President Don Sloan pointed out, Terry’s work is just another example of the “above and beyond” spirit shown by our Museum volunteers.

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In the world of aviation artwork, retired Lt. Col. Dave Godek is a legend.

A former B-52 navigator who later became an Air Force judge advocate, the Massachusetts native has five of his many paintings included in the official Air Force Art Collection.

The AMC Museum is offering one of Godek’s oil paintings, that of the B-24H _Fat Stuff_ II under attack by an Me-109, as part of a raffle benefiting the AMC Museum Foundation.

Tickets are $5 each for the 36-by-24-inch painting, and the winner, who need not be present to claim the prize, will be drawn at the Museum’s annual Mixer on Friday, Sept. 9. To purchase a ticket, call the Museum at 677-5939 or contact a Museum Foundation board member.

The painting is on display both at the Museum and at our website, www.amcmuseum.org.

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The June 13 loss of the B-17 Liberty Belle near Chicago was particularly painful to those of us who treasure the Flying Fortress. Fortunately, everyone aboard the aircraft survived the mishap.

Of the almost 13,000 Fortresses built, there are less than 60 remaining today, and we’re fortunate at the AMC Museum to have one of them.

From the looks on some of the students’ faces on some recent school field trips to the Museum, our B-17, Sleepy Time Gal, continues to fascinate the younger generation.

— Jeff Brown, editor
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.

**Viewpoints** in this publication are those of the contributing authors and do not necessarily reflect the opinions of the AMC Museum Foundation or of the Museum’s staff.

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**Contact** Editor Master Sgt. Jeff Brown, USAF (Ret.) via email at nrprz@dmv.com.

**Photos** are by Jeff Brown, except as noted.

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- **Collections Manager** Deborah Sellars
- **Archivist** Lt. Col. Harry E. Heist, USAF (Ret.)
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**From Museum Store Manager Jim Stewart:**

By the time you read this, the renovation and expansion of the AMC Museum store should be complete. Not only has the store been updated and expanded, but we’ve broadened our selection of hard-to-find merchandise for hard core aviation buffs and the armchair pilots alike.

The Museum store is a vital part of your Museum and a big point of interest for the approximately 70,000 people who visit us each year. Profits from the store help maintain our valuable collection of vintage aircraft, artifacts, books and other memorabilia and help us present new and more interesting events and programs for all visitors.

Although the work soon will be over, the Museum will continue to accept donations toward the renovations. Those interested in providing a financial gift on behalf of the Museum store should visit www.amcmuseum.org/new_store; donations are tax deductible and may be made online by using PayPal.

Contact store manager Jim Stewart by phone at 302-677-5992; by fax at 302-677-5949; or email at storemanageramcm@comcast.net. Members receive a 10% discount.

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**Air Mobility Command Museum**

**Mission Statement**

The mission of the Air Mobility Command Museum is twofold:

- To present the history and development of military airlift and tanker operations.
- In a goal closely aligned with the first, to portray the rich history of Dover Air Force Base and its predecessor, Dover Army Airfield.

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**The Hangar Digest is printed by Farley Printing Company, Dover, Del.**

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First I want to welcome a new member of our paid staff. Our volunteers are second to none but with an organization that is open for visitors six days and open for business seven days a week, we were just asking too much of everyone. Now we are getting a chance to keep the quality standards our visitors have grown to expect and give everyone a chance to plan instead of just react.

His name is Dave Straughen, and he has hit the ground running. Dave is a jet aircraft engine mechanic with past experience working at an Air Force field museum. He is a master woodworker (my words, not his) and he has a broad range of maintenance skills we already have utilized.

When base officials thought it was going to take several more months to get this position filled they agreed to loan us an active duty NCO to help keep our outside aircraft from deteriorating. So as a really advantageous result we also have Master Sgt. George Oehler here for the summer and together these two are rocking from plane to plane improving the birdproofing, securing loose panels and generally keeping our precious planes “airworthy.”

Everywhere you turn there are projects big and small and all are making progress. The C-119 crew is working on interior markings and the addition of a few more pieces of interior equipment. If that sounds like the plane is almost finished – well, yes and no. None of our aircraft are ever finished. Whenever we find parts that are appropriate we add them and for those outside it is a never ending battle to preserve and conserve the original airframe itself. Recently I attended the Reading Air Show with foundation president Don Sloan. While there we found a half-inch stencil cutting machine that we’ve needed for years to recreate aircraft stencils. We have all the other sizes but the half-inch variety is the one size we need most often. The C-119 crew was happy we got the stencil cutter; they just wanted to know why we did not find it earlier. You just never know where we will find great things that make the Museum better.

The crew working on our CG-4A glider made a leap recently when the aft fuselage was mated with the forward fuselage and the vertical stabilizer was installed. Now it looks like a plane instead of the skeleton of a television tower. There still are many months of work to do before it is ready for public display but now we can see the light, so to speak.

The C-133 and C-124 were recently repainted. The contractor started last fall but a streak of bad weather prevented them from finishing before the temperatures dropped too low to continue. Both of these proud giants look better now that their metallic sheen has been refreshed and the U.S. Air Force markings have been reapplied.

The aircraft control tower is still moving along, just not as fast as we would have liked. The quality of the job is excellent; we just need to be patient. When it is finished it will be one of those things that make people say “wow” the first time they look out over the vista below (OK, maybe I like airplanes more than some people but it is really awesome.)

Stay tuned for more amazing progress, thanks to you, our supporters and our volunteers.

Last minute addition:
The Museum is in immediate need of a 1/2- or 3/4-ton pickup truck to replace our 1989 model that just died. We’ve been using a pickup donated by Steve Welde for years, but it’s simply gotten too expensive to maintain.
If you can donate a truck, please call Mike at 677-5939.
Cruisin’ with the Curator

Well folks, get your reading glasses on, have a glass of your favorite Chardonnay ready, sit back and enjoy the ride. Oh, I’m your designated driver for this article so the wine’s okay! I’m baack!

For those of you who hadn’t heard, fate dealt me a terrible hand and I found myself on the West Coast for the past winter months helping the folks at the Travis Air Force Base Heritage Center prep for a major inspection. Did I mention the sound you heard in January was the lawn mowers cutting grass there?

One change during my absence was the moving of our restoration facility from the main base to the old alert hanger in Building 1315. The base showed a need for a storage facility from the main base to the old block. The base fabrication branch sent a few airmen over to work on our C-133 rear doors. We had some damage incurred due to a failed actuator bracket. The shop personnel removed the old bracket and manufactured and installed a new one. It took them the better part of two weeks but it was well worth it.

So let’s talk planes for a minute. We have the possibility of increasing our fleet by three more aircraft before the end of this fiscal year. A number of C-5s will be retired and we’re second on the list for one, behind the National Museum of the Air Force. The plane that served as Air Force Two and is flying out of Scott AFB will be here soon. And to round out the inbounds, the JU-52 tri-motor airlifter on display at Wright-Patterson is most likely heading here also. We’ll keep you updated on the progress of each.

That should just about bring you up to date on what’s going on here. It’s good to be back, but wow, was the past winter a sunny, warm one for me.

Until next time, be safe be healthy and stop by from time to time to say hello.

Jim

September arrival planned for Museum’s latest VIP — Very Important Plane

Sometimes it’s not so bad being No. 2. Just ask Joe Biden or Dick Cheney.

As America’s second-ranking politician and being, as the saying goes, just one heartbeat away from the presidency, the vice president has just about as many entitlements as his boss.

An example of one of those perks is about to join the Air Mobility Command Museum’s flotilla of historic aircraft.

Sometime before the end of September, a specially modified McDonnell Douglas C-9 will be flown from Scott AFB, Ill., to arrive at Dover AFB. It will be the last flight of the aircraft, which carries the tail number 73-1682.

“It’s going to be a real attraction,” said Museum Director Mike Leister. “This airplane has charisma.”

Officially dubbed the VC-9C, No. 1682 served from 1968 to 2005 as part of the special missions fleet with the 89th Airlift Wing at Andrews AFB, Md. Along with two sister aircraft, it was used for vice presidential travel and for trips made by the first lady.

When used by the vice president, the aircraft went by the call sign of Air Force Two.

No. 1682’s last flight as part of the 89th was on Sept. 9, 2005, when it was used to support a White House team surveying damage following Hurricane Katrina. Two weeks later, it was reassigned to the U.S. Air Force Reserve’s 932nd Airlift Wing at Scott AFB, Ill.

“The Air Force was reducing the number of aircraft in the special missions fleet,” said 89th Airlift Wing public affairs spokesman Bob Spiers. “It was kind of time for them to go, but they were reliable aircraft so they went to the Reserves.”

Leister and his staff are notified whenever an Air Force aircraft is to be decommissioned.

“We look for planes that fit AMC’s airlift obligations or were stationed at Dover,” Leister said. “We’ve been offered some that are completely outside our charge, like the SR-71. But it didn’t fit our mission, so we turned it down.”

Leister said the plane’s spacious VIP cabin will be open for inspection by Museum visitors.

Originally conceived as a patient transport aircraft, the C-9 could fly at more than 650 mph and as high was 37,500 feet. Tail 73-1682 was one of three C-9s to be converted to VIP use, and the first VIP aircraft to have an upgraded communications system installed, which made it a prime candidate whenever the vice president needed air transportation.

VC-9C missions are crewed by USAF personnel: a pilot, copilot, flight engineer, comm systems operator and three flight attendants.

Vice presidents who would have used the plane include Walter Mondale, George H.W. Bush, Dan Quayle and Al Gore. It also was used by first ladies Nancy Reagan, Rosalynn Carter, Barbara Bush and Hillary Clinton.

It also is possible the VC-9C could have been used by presidents Carter, Reagan, Bush or Clinton when their primary aircraft was unavailable. Like all Air Force aircraft, whenever the VC-9C carried the commander in chief, it also would have been known as Air Force One.
Unusual acquisition has a uniquely human story behind it

Arnold Bernfeld almost missed World War II.
By early 1945, Adolph Hitler’s land forces were nearly spent, caught between American and British armies on the west and Soviet forces in the east. Hermann Goering’s once vaunted Luftwaffe was a ghost of its former self; bereft of qualified pilots and lacking fuel, it only could send up a handful of mostly experimental aircraft to oppose the mighty Eighth Air Force.

So, in March, when the New York native finally transferred to the Eighth’s 509th Bombardment Squadron, on the surface there seemed to be little reason for American fliers to continue putting their lives in jeopardy.

But despite the crumbling resistance, there still were valid targets for the Eighth’s bomber armada, so when Bernfeld, flying as bombardier on 2nd Lt. Robert Redmann’s crew, known as Redmann’s Royals, took to the air April 15, 1945, no one knew quite what to expect. Bernfeld and the rest of the Royals flew only three more missions before the crew was ordered to stand down after their April 18 mission.

Although his military career was relatively brief, Bernfeld had many memories to pass on to his family, but relatively few mementoes. That’s what makes a recent donation to the AMC Museum so special.

In December 2010, Bernfeld’s son, retired U.S. Army Col. William “Ziggy” Bernfeld delivered his father’s Class A uniform, flight helmet, and other keepsakes to Museum curator Debbie Sellars.

“It just seemed the right thing to do,” Bernfeld said of the donation, which augments the Museum’s collection of B-17 artifacts. The Smyrna resident had inherited the memorabilia after his father’s death in January 1992, but realized he didn’t really know what to do with it.

“We had this stuff in the house and it had been there forever,” he said. “It had no intrinsic value and you can’t sell it on eBay.” After being rebuffed by the Jewish War Veterans Museum in Washington, D.C., Bernfeld contacted Sellars, who was only too happy to accept the collection.

“I love the AMC Museum, and we’ve been there a number of times, so I asked if they’d be interested,” he said. “It would have been a shame to have left it in a closet forever.”

“For me, it was mostly because of the field jacket,” Sellars said. “That was the neat thing.”

The normally unremarkable olive drab field jacket is standard issue for airmen and soldiers, but what made this one so unique was the artwork that adorns its back, a lineup of a poker game’s royal flush and the names of everyone on Redmann’s crew. Usually, this type of artwork only embellished the back of flying jackets favored by aviators.

“You don’t see field jackets painted up like that,” she said. “Usually, you’d see the leather flying jackets. People didn’t usually paint up utilitarian items like field jackets.”

Born in Brooklyn, Arnold Bernfeld was just past his 22nd birthday when he enlisted as an aviation cadet in September 1944. He was washed out of pilot training — probably because of a bit of forbidden stunt flying under a Mississippi River bridge — and instead was trained as a navigator, bombardier and aircraft observer. Although he wanted to see action in Europe, his proficiency as an instructor kept him stateside until February 1945, when he finally was sent to a base in Polebrook, England.

Information from his personal files and Eighth Air Force records show Bernfeld’s first flight was in a B-17 nicknamed “Myassisdraggin,” part of a 1,280-plane fleet intended to force the surrender of a German garrison at Gironde, France. It was the first and only use of napalm by the Eighth during the war.

The following day, Redmann’s Royals took a different aircraft as part of a mission to destroy marshaling yards and bridges at Regensburg; that was followed April 17 by a raid on Dresden in which nine B-17s were lost. Their final mission on April 18 was to the marshalling yard at Traunstein, Germany.

In addition to his normal duties, Bernfeld flew as backup bombardier, ready to take over in case the lead plane was shot down or incapacitated.

With the German surrender May 7, 1945, came the task of flying repatriated prisoners of war back to their home bases, followed by a return to the United States, where Bernfeld was discharged on Nov. 28. Back in civilian clothes, life for the former lieutenant quickly returned to normal.

“He just put his uniform away, went to college and raised a family,” the younger Bernfeld said of his father.

Bernfeld married Sonya Azorsky in June 1946 and earned an accounting degree from St. John’s University the following year. The couple raised two sons in Port Chester, N.Y., while Bernfeld worked as a public accountant and owner of his own accounting firm. He served as a Boy Scout leader, was a third-degree Mason, a member of the volunteer ambulance corps, and worked with many other organizations, to include the United Way and the YMCA. He also was Port Chester’s municipal treasurer from 1968 until 1985.

All this time, Bernfeld kept much of his wartime memorabilia stored away, although he occasionally wore the painted field jacket while gardening.

Although he was proud of his wartime service, Bernfeld did not dwell on it. He preferred guiding the leaders of the future through the Scouts than on reliving the past, his son said.

It was not until years later Bernfeld was aware he’d been awarded a Good Conduct Medal and Air Medal for his wartime service.

“It was something he thought about, but he didn’t regret it,” Col. Bernfeld said. “In his life, he did well in his community and he did well for himself. That’s what was important for him.”
This year’s AMC Museum Foundation Annual Mixer will be held starting at 5 p.m. Friday, Sept. 9. As in the past, our plan is to not have much “program,” but lots of “mixing.” We’ll have information available on some of our latest acquisitions and restorations. You can test your flying skills in one of our flight simulators, enjoy our hors d’oeuvres and visit the newly-renovated Museum Store where you can take advantage of your member discount. We’ll also have personalized tours of some of our prominent display aircraft. One of the more popular evening items continues to be the Dover Air Force Base Update, presented by one or both of Dover’s wing commanders. The Mixer is free for Squadron Commander and above-level members—one of your perks. We’re requesting a $10 donation from everyone else to help cover the costs of the food. Bring your friends and neighbors, since, as always, lots of you will go home with one of the many, many door prizes. We’ll have a drawing for this year’s raffle of a great-looking Dave Godek original painting of a B-24, “Fat Stuff” II. In addition, we’ll be releasing the fifth giclée in our Aviation Art Series, our limited edition of aviation paintings, exclusive to the AMC Museum Foundation. This release is an exciting hot-off-the-press painting by our good friend (and neighbor) Paul Rendell. It depicts a Dover C-17 Globemaster III, “slipping the surly bonds of Earth” as it departs the Dover Air Patch. You can learn more about the painting and Paul below. As always, it helps us plan if you can call ahead at 302-677-5939 to let us know you’re coming.

Paul E. Rendell is a professional freelance artist well-known for the artistry in his aviation paintings and is making his third contribution to our Aviation Art Series. Paul considers himself first and foremost a story teller who feels a good painting starts with a vision of a moment in time which, supported by the truth, seeks an emotional response. With aviation paintings featured at museums and shows across the country, Paul’s work has won awards at the Experimental Aircraft Association Aviation Center Museum in Oshkosh, Wis. and the Simuflite “Horizons of Flight” exhibition in Dallas, Texas. He’s a past president of the American Society of Aviation Artists and a member of the United States Air Force Art Program. Paul’s early training at the Detroit Institute of Arts, his 30 years of experience in art studios and his work as a freelance artist have enabled him to excel in combining technical knowledge with artistic quality. In addition, he knows what he’s painting about—an additional outlet for his energy is his zest for flying in his Thorp T-18, providing both relaxation and firsthand experience for his popular aviation paintings. You can learn more about Paul at http://paulrendel.com/page.php/source/about and stay tuned to www.amcmuseum.org to monitor the progress of the painting.

I’m fortunate to own a 1941 Boeing PT-17, aka the “Stearman.” Over the past few years, I’ve had the honor of flying several World War II veteran pilots who took their primary training in a Stearman during the war years. One of the more memorable flights I had was in September 2010 with a 90-something Women Airforce Service Pilot. Elaine Harmon learned to fly as the war started, but she didn’t have enough flying hours to qualify until summer 1944. She qualified—in the Stearman, of course—and was able to log some B-17 time before the military dropped the WASP requirement so it could keep the men who were returning from the war in cockpits. There’s some pretty good information on the WASP at www.wingsacrossamerica.us/wasp/faq.htm. Elaine’s daughter, Terry, accompanied her to Massey Aerodrome on a beautiful late summer afternoon. Incidentally, Terry was a “Doughnut Dollie” in Vietnam—visit www.crescentwing.com/donutdollie/faq.html or www.donutdolly.com for some more info on those great ladies and their contributions to our Vietnam veterans.
I think both ladies enjoyed their tour of an old “grassroots” airport, especially with all the restoration projects going on. Neither Elaine nor Terry, like most folks, had ever seen the innards of little airplanes. But then came the flight in the Stearman. It was a gorgeous day, blue skies, no wind – everything was in place for a super flight – and we had one. I could see Elaine constantly smiling in the mirror on the upper wing. As usual, she was having a blast, but also as usual, I was having the time of my life, flying with a lady who learned to fly military planes in a Stearman. As we were returning to the field, she kind of caught me by surprise when she asked “Can we do a loop?” “Are you sure?” was my response, trying to not sound surprised – but she was over 90! “Yep,” she answered, “I’m sure.” Well, there you have it – little choice for me, eh? And then there were more smiles all around. After we landed, we took some more “pilot” pictures, I asked her to sign my log book and autograph the baggage door of the plane.

Afterward, she took me aside and confided she’d had a “medical issue” in the not-too-distant past and shortly afterward, she had a chance to get a T-6 flight. Before the flight, the pilot asked her if she wanted to do any aerobatics. She told me that she “thought about it and said no.” And then she set her jaw, looked me in the eye and said “And I’ve regretted that ever since!” Now I ask you, does life get any better than that?

My next passenger was her daughter, Terry. Although she seemed a little surprised at the offer, it soon became obvious she was of the same stock as her mother. As we were taxiing out for take-off, I asked her if she wanted to do a loop, too (only half-kidding). “Hey,” she said, smiling in the mirror. “My mom did! I have to.” Ahh, life is good!

And as a footnote to that adventure, Massey Aerodrome had their annual Chili Fly-in this past April and Elaine and Terry were able to make it over for a visit. It was my hope to introduce Elaine to my old buddy retired U.S. Air Force Maj. Bob Bean. I bought my Stearman from Bob a few months before I retired in 2006. I had met him on base about a year earlier and we became fast friends. Like most of the World War II veterans I’ve met over the past several years, Bob is quite a character. After the Stearman was restored, my first copilot was Maj. Bean, and he’s been a frequent flyer since.

With Terry’s help, we were able to get the nonagenarians together in front of the Stearman where I made the appropriate introductions – almost immediately a small crowd of amateur photographers began snapping away at the event. I won’t divulge all of their conversation, but one memorable moment came shortly after Bob had relayed some information about some of his B-24 missions in the Pacific. A wide-eyed Elaine asked, “Were you ever shot down?” As straight-faced as they come and without missing a beat, Bob sighed and responded with “Only in a bar ...”

Thank a veteran today! Fly safe!
When it comes to building airplanes, you don’t need a multi-billion dollar government contract and the expertise of dozens of engineers. Sometimes all you need is a trip to your local hobby shop.

Like many of its cousins, the Air Mobility Command Museum features an impressive array of aircraft models, some built by staff, others donated by those who simply love to glue plastic together. Most are models of real aircraft in the Museum’s collection; others represent airplanes from air forces all over the world. Models allow builders to create a world in miniature because having the real article might be impractical due to size or cost, said AMC Museum Director Mike Leister. Photographs, while they are an invaluable resource, simply cannot convey the three-dimensional experience one can have when looking at a well built model.

“Photographs, they’re just not nearly as good when comparing relative sizes, which is something you can do with models,” he said.

**Models develop with civilization**

Models have been around for thousands of years. One of the earliest known miniatures, that of a Nile river barge, was found in the tomb of the pharaoh Tutankhamen. Wooden models have helped engineers construct some of the world’s greatest buildings, all without the use of computers. Cardboard and cellulose acetate models helped soldiers tell the difference between Allied and Axis aircraft in World War II, and Apollo astronauts even used commercially available plastic models of their spacecraft to practice lunar orbit docking maneuvers.

Today’s model kit industry got its start before World War II with companies producing aircraft kits made mostly of balsa wood with some cellulose parts. With the refinement of polystyrene production after the war, companies such as Revell, Monogram, AMT and Aurora began producing plastic toys, with Revell introducing its first car kit in 1951. Plastic models of aircraft and ships on which war veterans had served quickly filled toy store shelves. British companies, including Airfix and Frog, plus the Heller SA company from France introduced their kits in the United States, followed by Japanese firms, including Tamiya and Hasegawa. Today, models from Eastern Europe and Korea also may be found in American hobby stores.

Most models come in kit form, molded from styrene plastic. Due to the cost of producing a model kit, which can run upward of $250,000, these kits mostly come from the larger companies and feature popular subjects. Over the past 20 years however, kits of a more obscure nature have become available. Known as “garage kits” because the subjects are produced on a small scale, perhaps only a few dozen at a time, these models generally are made from a resin compound. The term garage kit also can include additional “aftermarket” parts that add more detail to a standard kit or allow a model builder to convert a model into a different version of a ship, aircraft or automobile.

Most recently, the industry has seen the inclusion of aftermarket parts made of extremely thin photo-etched brass, which allows the modeler to include properly scaled items such as gun sights to aircraft or deck railings to ships.

The Air Mobility Command Museum has had model aircraft in its collection since its beginnings in 1985, including some examples dating to World War II. Now numbering approximately 500 models, most are in storage because there simply is not enough space to display them all.

One early kit is a World War II aircraft recognition model of a German Dornier 17Z-2, made of black pre-cut cardboard parts. Soldiers could punch out the parts and slide the pieces together to form a three-dimensional silhouette of the famed “Flying Pencil.” Although not a detailed model in the modern sense, these cardboard creations provided airmen and ground observers with a way to tell the difference between friendly and unfriendly aircraft.

Another aircraft recognition model, made of the cellulose acetate

*AMCM volunteer Kevin Wysopal refurbished carved mahogany models to recreate a January 1929 experiment in aerial refueling.*

*Created over a nine-month period, Ed Caldwell’s 1979 diorama of the restoration of the Shoo Shoo Shoo Baby at Dover AFB features myriad tiny details, including a piece of the actual aircraft. The restored B-17 now is on display at the Air Force Museum.*
that predates polystyrene, is on display in the “Under Delmarva Skies” exhibit, featuring the story of people who watched the skies for enemy aircraft over Delmarva during World War II.

Dioramas: Freezing moments in time

Dioramas give builders the chance to not only display an aircraft, tank or ship, but also to show off the kits in scaled-down versions of roads, buildings and even parts of towns and villages.

The largest diorama at the Museum is one depicting the restoration of the Shoo Shoo Shoo Baby, a B-17F was restored from a rusted, battered hulk to flying machine over the course of 10 years. Much of the work was done by Air Force reservists at Dover AFB.

The 3-by-4-foot model of the restoration work was completed in May 1979 by then-Staff Sgt. Edward G. Caldwell Jr.

Now retired from the Air Force and an instructor at the National Aviation Academy in Clearwater, Fla., Caldwell worked on the diorama almost every day for more than eight months.

He got the idea after helping with the restoration work by recreating the engraving on the B-17’s instrument panel.

“I really wanted to make a contribution to this thing,” Caldwell said. “And I did it just because I felt like doing it.”

The diorama recreates the interior and exterior of Hangar 789, where the Shoo Shoo Shoo Baby was restored. Caldwell froze the restoration effort in time as it appeared on Sept. 1, 1978. Men are seen working on the plane as well as at desks. Different parts of the disassembled aircraft are strewn across the hangar floor, while scale automobiles, much like those actually driven by the workers, sit outside. He took photos of almost every inch of the real hangar, including office interiors, which are barely visible in the completed scene.

“The figures don’t represent actual people, but wherever they were in the pictures, they were doing, a person is there,” he said.

The disassembled Shoo Shoo Shoo Baby is a 1/48 scale B-17 Monogram kit, still available in stores today. Caldwell assembled part of the model, then sawed it into pieces. He included structural members not part of the original kit, using different grades of wire to recreate hoses, pipes and electrical lines. One wing sits partially restored next to the fuselage and contains at least 600 tiny pieces of wire and plastic that mimic the interior wing structure.

There’s even a piece of the original Shoo Shoo Shoo Baby in the diorama, a snippet of curtain draped over part of the bombardier’s compartment.

The hangar walls were created using standard art board, but highlighted with strips of basswood to recreate structural support beams. The corrugated walls are tin, hammered out from a self-created mold. Most notable is the hangar’s gray color. The dreary, tired-looking paint doesn’t just match the original – it is actual paint from the original hangar.

“I went out there and scraped up the paint where it was coming off the aluminum,” Caldwell said. “I almost got arrested doing it.”

Using a mortar and pestle, Caldwell ground the paint chips into a fine powder, added carbon tetrachloride to liquefy it and then applied the restored paint to the hangar walls.

The completed diorama went to the Air Force Museum at Wright-Patterson AFB, Ohio, where it was on display for a decade, then was returned to Dover after the AMC Museum was founded. Today it sits next to the Museum’s own B-17, Sleepy Time Gal.

A great way to tell the mission

Caldwell also is credited with constructing the Dover Air Force Base C-5 Galaxy aircraft that is part of a diorama display situated next to the Museum’s TF-39 engine in the center of the display floor. Built in 1988, the model is painted in a contemporary Euro-1 paint scheme and features a complete interior, including the crew’s cockpit access ladder. Dover airmen are shown doing maintenance work on the plane and loading a tractor trailer into its cavernous cargo bay.

In addition to the Shoo Shoo Shoo Baby and C-5 dioramas, the AMC Museum also features a number of other models available for visitors to examine.

Tech. Sgt. Robert L. Spaulding contributed a resin kit showing a B-17 waist gunner at his station preparing to fire at an oncoming fighter. The gunner is heavily bundled up in his electrically-heated suit, needed to battle the 50-degree-below-zero cold, and wears an oxygen mask and headphones for the plane’s intercom. The model includes photoetched parts for the 50-caliber machine gun and copper wire and PVC pipe to recreate the aircraft’s oxygen and electrical systems.

Another diorama shows the AMC Museum’s Hangar 1301 in its World War II configuration as a secret rocket research center, along with various types of test aircraft parked nearby.

Museum volunteer Kevin Wysopal recreated the original Sleepy Time Gal B-17, showing the aircraft without the green camouflage in which the Museum’s Flying Fortress is dressed. Wysopal wanted to present the Gal in a different light.

“I get the feeling occasionally that not everything we have tells the complete story of the stuff on display,” he said. “We couldn’t go the route of stripping the [actual] aircraft down to make it look like it really did.

“I wanted to make the aircraft look like it did during its combat days.”

In a scene closer to home, Skip Ford recreated a shot from a World War II photo of a modified B-26 Marauder on the tarmac at Dover, awaiting another mission towing targets for P-47 pilot trainees. Assigned to the little known 13th Tow Target Squadron, the B-26s provided valuable, real time training for airmen who soon would be seeing combat in Europe.

Because there are less than 10 B-26 aircraft believed to remain in the world, Leister notes the Marauder diorama provides a good example of why models can be such a valuable resource to the public.

“Models have played an important part in the Museum since the beginning,” Leister said. “When we started out, we had few aircraft and few artifacts, so we used models.

“Having these models is a great way to tell the airlift mission.”

The Museum’s cardboard recognition model identifies the German Dornier 17Z-2 of World War II.

Robert Spaulding’s B-17 gunner is an example of a detailed resin model kit.
New book showcases Dover AFB’s rich history through pictures

Photos document base’s growth from county airport to world’s premier strategic airlift center

Who’d have thought a military base both the state of Delaware and Kent County didn’t want would grow into the largest airlift center on the East Coast and one of the premier employers in the First State?

That’s the basic story of Dover Air Force Base, a tale that’s now been set down in print through the use of dozens of archival photos taken throughout the base’s existence.

The book, “Images of Aviation: Dover Air Force Base,” was written by retired Delaware Air National Guard Brig. Gen. Kennard R. Wiggins Jr., now of Elkton, Md., with the help of his friend and neighbor, Van Templeton. A great majority of the photos were provided through the office of Air Mobility Command Museum archivist Harry Heist, who Wiggins calls a “human encyclopedia” of knowledge about the base.

The 128-page volume, which AMC Museum Director Mike Leister called “a wonderful capsule history for people studying the history of Dover AFB,” was released by Arcadia Publishing in May.

Told mostly in captions accompanying one or two black and white photos per page, Wiggins traces the origins of the base beginning with a 1939 federal effort to provide funding to states for municipal airports. Responding to the looming specter of war, the government envisioned the civil air terminals as the foundation of military airfields should they be needed.

The generals in the War Department didn’t have to wait for long. Just days after Pearl Harbor, the first military units started arriving at what was known as the Dover Municipal Airfield. Within months the base was home to hundreds of airmen engaged in anti-submarine operations, the training of fighter pilots and a secret facility — now the AMC Museum’s Hangar 1301 — for aerial rocket development and testing.

Put in caretaker status after the war, the base was reactivated in 1951 and staffed with fighter aircraft to defend the nation’s capital. The Korean War led to Dover’s assignment as a strategic airlift base, the role for which it has become best known.

The son of a World War II B-24 gunner, Wiggins, 64, and his family often passed by the base while driving down Route 13 in the 1950s. The sight of the giant C-124 and C-133 aircraft on Dover’s runways spurred him to enlist in the Dover Air Guard as an aircraft mechanic and later to earn a commission. He retired as a brigadier general in October 2004.

Wiggins, who already had penned two other books for Arcadia on the histories of the Delaware National Guard and Air Guard, took up his new assignment in early 2010. The idea sprang from his volunteer work at the Museum.

“Van and I would go down there and work on the C-124 when they were restoring it,” he said. “We enjoyed doing that, so when we started the book project, he volunteered to come help out.”

Driving down from Elkton almost every weekend for a year, Wiggins and Templeton chose approximately 1,500 photos from the Museum’s collection, eventually culling those down to a final 200. He combined those photos with information from other sources, to include Delaware aviation pioneer George Frebert’s classic “Delaware Aviation History,” to produce the book.

Some of the earliest photos show Army tents pitched on land once owned by the Paradee family, with long-gone barns and farm buildings scattered throughout. Shots from World War II show then-state-of-the-art aircraft on hardened runways with soldiers and airmen tramping through ankle-deep mud. War-era paper buildings and wooden sidewalks eventually gave way during a 1950s building boom reflected by photos of new housing going up and construction of the base hospital.

Throughout there are photos of the people of Dover AFB, flying and maintaining the cargo planes and fighter jets, airmen gathering at the base mail room, wives posing for photos as Red Cross volunteers and celebrities including then-Sen. John F. Kennedy, astronaut Gus Grissom and future state Sen. Margo Ewing when she was Miss Delaware 1969.

Wiggins also discovered a number of little known facts about the base, all documented in rare photos. One is of the giant Convair XC-99, a 183-foot long behemoth powered by six piston engines, which briefly was stationed at Dover for testing in 1955.

Another is the story of a CH-3 “Jolly Green Giant” helicopter, assigned to the 1042nd Test Squadron, which apparently was more than it appeared to be.

“I’m told it really was an evacuation vehicle for the national command authority in the event of a nuclear war,” Wiggins said. “It was there, but no one could talk about it.”

In reviewing the book, Leister encouraged people, particularly those with a yen for local history, to pick up a copy.

“A lot of people who have lived their whole lives in Dover or Kent County will learn a lot about things that happened here they never knew about,” he said.

Wiggins gathered much more information than the format of the Images of Aviation format would allow, so he has taken advantage of the Internet, publishing a much more detailed history and additional photos on his website, www.militaryheritage.org/DoverAFB.html.

“Images of Aviation: Dover Air Force Base” is available at local bookstores, to include Atlantic Books in Dover and online at Amazon.com. It retails for $21.99.

Wiggins also will be on hand to sign copies of the book from 11 a.m. to 2 p.m., Saturday, July 16, at the AMC Museum. Museum members will receive a 10% discount off the price of the book.
We just finished another outstanding annual AMC Museum Foundation Golf Tournament. Board secretary Phil White has done yet another terrific job of managing the tourney. Any of you who’ve been on a committee for a similar function certainly understand the amount of time and effort that goes into making it a success. Phil and his committee of Rich Harper, Ed Perkowski and past board members Mike Quarnaccio, Art Erickson and Dick Bundy made the plan come together.

I’d be remiss if I didn’t also thank Ms. Bettie Campbell, an absolute frenzy of activity. After providing a team and sponsorship from her employer, Bettie procured several more sponsorships and door prizes. Please take note of the list of donors and sponsors for this year’s event. On behalf of the Foundation, I thank them and if you see the person, or use the business, please be sure to give them a “thank you” on behalf of your AMC Museum!

-- Don Sloan, President, AMC Museum Foundation Board

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From left, Andrew Brande, Warren Bush and Aaron Kind confer with 436th Airlift Wing Command Chief Master Sgt. John Evalle after being resupplied with snacks and drinks from volunteer Bettie Campbell. The 436th provided terrific support to this year’s AMC Museum Foundation Golf Tournament.

436th AW commander Col. Mark Camerer looks on as 436th Ops Group Commander Col. Dave Hafer prepares to sink a putt.

Dick Bundy and Art Ericson watch Mike Quarnaccio swing as the former AMCM board members enjoy the fruits of their labors. Their efforts, combined with those of current members Phil White, Ed Perkowski and Rich Harper again made the tournament a success.

Photos by Don Sloan
Iris Brown of Harrington shows off her unusual collection of almost 200 soil samples taken from all over the world during the Museum’s annual Collector’s Day event, held March 26. Brown either gathered the samples herself or got them from people who knew of her curious hobby.

Members of the Bucks County, Pa., HOGS, or Harley Owners Group, commemorate their trip in front of the Museum. The group came down expressly to see the restoration work on the Museum’s C-121 Constellation, primarily because it once had been used as a restaurant in Bucks County.

Peggy and Ken Bright of Tabernacle, N.J. parked their retro-themed PT Cruiser in the shadow of the Museum’s C-7 Caribou. Although the Cruiser was designed to have a retro feel, the Brights added 1940s-inspired accessories such as wide whitewall tires, running board, fender skirts, an exterior spare tire, chrome bumpers and one-of-a-kind headlights.

Delaware Air National Guard member Curt Kimmel of New Castle shows off his Air Force-themed 2001 Limited Edition PT Cruiser next to the Museum’s C-131D May 21. The car even features a working waterfall in the rear hatch area.

Dozens of PT Cruisers and their owners gathered on the Museum’s display tarmac May 21 during the annual Lone Wolf Cruiser show.
Vincent Turner, a student at Northern High School, Calvert County, Md., sketches the Museum’s B-17, Sleepy Time Gal. Vincent has been coming to the Museum since 2007. “I think it’s pretty cool,” he said. “I’ve been to a lot of other museums, but I like this one.” Vincent adds he pretty much draws anything that strikes his interest.

Bob Sederquest of Harrington and grandson Aaron Brown visited the Museum May 31 to snap a few photos, including one of the Museum’s C-47, The Turf and Sport Special.

Evan Smalley and Sean Connor, both of Dover, show off some of their collected World War II uniforms and equipment while standing in The Turf and Sport Special.

Robert and Amy Miller of Felton, left, and nephew Kayden Boylan of Camden visited May 14, where they met Peggy Biddle of Milford and her grandson, Gage Nordberg, 3.

Mike Crimian and Lori Lindell made their first visit after weather affected the day’s NASCAR race at Dover Downs.

Bill Van Ness explains the workings of the Museum’s B-17 to kindergarten students from Providence Creek Academy, Smyrna.
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Questions?
Email us at: membershipamcm@comcast.net.

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Local students get the chance to learn about aircraft and aeronautics at the Museum’s annual summer camp, which goes on through August. Slots still are available, and the camp includes an optional flight over Dover AFB and Kent County. For more information, go to www.amcmuseum.com.