COMBAT AIR MUSEUM

* * * Plane Talk * * *

The Official Newsletter of the Combat Air Museum

Forbes Field Topeka, Kansas

August / September 2006 • Vol. 22, No. 5

The little known chapter of Weather Reconnaissance and its part in the Cold War

Charter Member Ralph Knehans was our speaker for the June Membership Luncheon. His topic dealt with a little known chapter of aircraft of the Cold War era and his involvement with it.

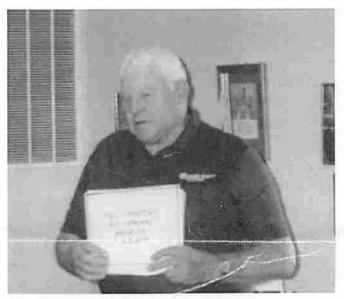
Ralph is retired US Air Force. He joined at the outbreak of the Korean War. After his basic training and schools he went to Japan, and in 1951 was with a Weather Reconnaissance outfit that flew the WB-29 Superfortress, examples of the famous World War II bomber converted for weather

reconnaissance. Before discussing his duty and missions with the WB-29s, Ralph gave a brief overview of the history of the All Weather Service.

In 1935, the Weather Service came under the United States Army Air Force (USAAF). By 1943 there was a Weather Command in the USAAF and in 1945 the US Navy Weather Service began operations.

The first weather flights were by B-25 bombers along the North Atlantic ferry routes. Weather ships and weather stations in Greenland and Iceland also gathered much of the Atlantic weather data, and the aircraft covered the Greenland-Iceland-United Kingdom gap. But due to its vastness, most weather reconnaissance operations took place in the Pacific Theater where jet streams and typhoons greatly affected military operations.

"Weather," continued on page 14



Member Ralph Knehans

Inside This Issue	
Four welcomed contributions	2
New skylights brighten things up	2
Chandler presents painting	3
Good-bye to Cammy	4
Two new exhibits feature Inter-War Year 1919 - 1939, and Vietnam	s, 6
New signs direct visitors to CAM	8
Air Force Jr. ROTC Cadets volunteer	10
Winged Foot Fun Run and Walk	11
Wings reattached to Messerschmitt	12
Clearing the drains	13
New crosses added to ambulance	16

Combat Air Museum

Forbes Field • Hangars 602 & 604
P.O. Box 19142
Topeka, KS 66619-0142
Telephone (785) 862-3303
FAX (785) 862-3304
www.combatairmuseum.org
Provided by
Rossini Management Systems, Inc.

Museum Curator
Danny San Romani
Office Manager
Lois Ecord

Email: combatairmuseum@aol.com

Board of Directors

- Wing Commander

Gene Howerter - Vice Wing Commander

Stu Entz - Secretary

Bob Crapser

Don Dawson

Darrel Dougan
Martin Moyer
Dick Trupp
Stephen Wanamaker

Newsletter Editing & Design

Toni Dixon
Dixon Communications
(785)235-1605

Museum Hours

Monday - Saturday 9 A.M. -4:30 P.M. Last Admission 3:30 P.M. Sunday Noon -4:30 P.M. Last Admission 3:30 P.M.

Plane Talk, the official newsletter of Combat Air Museum of Topeka, Kansas, is published bi-monthly.
Your questions and comments are welcomed.
Any information for Plane Talk should be submitted to CAM office.

Four welcomed contributions arrive in July

During July, the Museum received four welcomed contributions. J.B. Turner & Sons, the roofing contractor that installed our skylights in hangar 604 [see related article below], gave us a \$1000 rebate from that job. The Major General Fry Chapter of the Air Force Association donated \$350 for Aviation Class

Scholarships in support of the Aviation Education Classes. We received \$100 from WESTAR Energy Community Partners program for Bob Crapser's volunteer work at the Museum. Hill's Pet Nutrition Inc. contributed \$150 for the Vietnam Combat Marine exhibit. [See related article on page 6.]

Newskylights brighten things up

What a difference a few skylights make in the roof of a hangar. And what a heck of a big difference a dozen make. We reported in the last issue of *Plane Talk* that work was scheduled to begin on the installation of skylights in Hangar 604 during May. That work took place May 16-17.

Those of us who were present when the first polycarbonate panel was installed were absolutely surprised at how much light one opening allowed into the hangar. So much so, that we had to quickly revise our proposed layout of the remaining panels. Our original diagram would have had the panels bunched too closely, thereby reducing their effectiveness. With a revised plan in hand, we walked the floor with the contractor and identified the spots to place the remaining panels.

All the panels are in the rear half of the roof of 604. There is one row of four to the north of the workshop and a second row of eight across the entire length of the hangar to the east of the workshop. The clear polycarbonate panels provide lighted openings of 39 inches X 10-1/2 feet.

The skylights will mean nothing to new visitors to the Museum as they have no perspective of what the hangar lighting looked like before. But for our members, volunteers, and long time visitors, the difference should be readily apparent. Before, overcast days meant turning on ceiling lights in the rear half of the hangar. Today, unless the sky has a heavy overcast or dark storm clouds, the skylights allow enough light in so that ceiling lights can stay off.

A couple of hard rains since completion of the installation produced a couple of leaking skylights, but the contractor promptly came back to repair the affected areas. If you have not yet come out to see the change, make plans to do so.





Top photo: Left to right, Tom Witty, George Chandler, Anderson Chandler, Gene Howerter. The Chandler case is to the left of Tom.

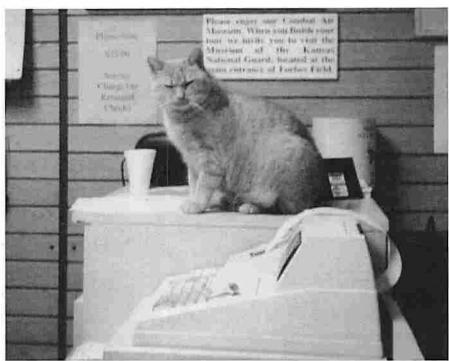
Above: George Chandler tells Tom Witty about the air battle over Empress Augusta Bay. Kansas native and P-38 fighter Ace George Chandler, of Pratt, Kansas, presented Combat Air Museum a signed art print of an aerial battle in which he took part during World War II. The donation took place on June 8. Accompanying Chandler was his brother Anderson Chandler, of Topeka, and Chuck Chandler, a cousin, of Wichita.

Titled "Two Zeros for Barbara Ann," the print shows Chandler shooting down two Japanese Zero fighters over US troop ships in Empress Augusta Bay, Bougainville Island, in the Solomon Islands chain. He presented the print to Gene Howerter and Tom Witty.

The print will be placed above an exhibit about George Chandler originally put together in 1998. This exhibit also includes a photo of Anderson Chandler as a flight engineer on a Boeing B-17 Flying Fortress bomber.

After the presentation, Chandler viewed another exhibit in CAM's gallery, one of World War II Japanese airmen. The exhibit has a number of authentic artifacts

associated with Japanese airmen and aircraft, including one flight suit for an army aviator and another for a naval aviator. The flight gear evoked a memory from Chandler of an aerial engagement between a Japanese pilot and him some 62 years ago. The two were flying at 32,000 feet, and Chandler remembered they spent some amount of time circling and maneuvering as one tried to gain an advantage over the other. One combination of maneuvers put Chandler slightly above his opponent, and as the Japanese plane crossed beneath him, he remembers looking down into the enemy's cockpit as the pilot looked up at him. The memory of looking at the other pilot's head, face, helmet and goggles remains clear to Chandler to this day.



Cammy [1994 - 2006]

Good-bye to Cammy the CAM cat with Attitude

Her presence was first reported in the March 1994 Plane Talk in a section called Short Burst that read, in part, "A kitten has adopted Combat Air Museum, and has endeared herself to staff and most visitors." She was then just a tabby kitten, who grew into a tabby cat and made Combat Air Museum her home for the next twelve years. Cammy (a.k.a. Cammie), long time mascot and four-legged ambassador of the Museum, was put to sleep June 19.

Ask Museum volunteers to describe Cammy, and you will get a list of adjectives, and probably a few opposing views. Ask visitors who came into contact with Cammy to give a similar description, and we may well get a different list of adjectives. We members and volunteers seemed to see a different side of her than most visitors. But if this writer could sum it all up in one word, it would be Attitude, and this cat had Attitude with a capital A. Garfield would be proud of her attitude. In fact, Gift Shop operators would bring in clippings from the comics' section of newspapers that seemed to fit Cammy episodes perfectly.

At one time or another Cammy drew blood from almost every volunteer who spent time around her. And she seemed just as happy to let these same volunteers hold her in their lap or pet her as she lay in the next chair over. But we very rarely saw or heard of her hooking a visitor. She was a well-behaved Museum ambassador to people who came to the Museum.

Cammy liked being around visitors, and visitors seemed to like being around her. She was an unexpected, added attraction. She would walk right up to a single visitor or a group of visitors and walk around with them. They would pet her, talk to her or pick her up and carry her. Often, visitors would come into the Gift Shop with Cammy draped over their shoulders, having carried her around the hangar for a while. The size of the crowds did not seem to bother her, either. She mixed easily with folks at USO shows and Swing dances.

Cammy also had her hiding spots when Munchkinsized people wanted to chase her around. One was an opening in the fuselage of the Jenny at its tail skid. Cammy would simply jump up, and she was gone from view inside the Jenny. Another spot was in the Blue Angel jet. She would climb the steps leading to the platform by the jet's canopy. At a certain step, she stepped offinto the left engine air intake and found a spot in there away from everyone. In her younger days, Cammy could jump up inside the Huey, and visitors often asked if we knew there was a cat sleeping in one of the front seats of the helicopter. She had hiding places behind exhibit cases and in the back of the Field Kitchen exhibit, too.

There were also favorite spots in plain view. After the restored Skyhawk cockpit section was placed on exhibit in Hangar 602, its ejection seat became a favorite sleeping spot. More than one visitor thought twice about moving the cat out of that seat so they could sit in the cockpit.

Cammy could sometimes cause concern among Gift Shop volunteers when she occasionally disappeared for 10 days or two weeks at a time. Around Forbes Field there are other animals higher in the food chain, such as fox and coyote, that might have harmed her. Another concern was that she might have been absconded by a visitor or someone else traveling by. But she always came back, just showing up and usually looking for food. We heard from our Army National Guard neighbors just south of us that she would sometimes come down to their hangars and hang around for a while.

Jean and Bernie Wanner ensured Cammie was current with her shots and saw that she got to the vet at least once a year. She was ill when Bernie got the call on a Friday that she needed to see a vet. Her condition worsened over the weekend, and Bernie made the tough call to put her to sleep that following Monday. The Wanners have raised cats for years and have plots for their pets in the local Mount Hope Pet Cemetery. Bernie made the necessary arrangements and Cammie was buried there.

How will Cammie be remembered? That depends on how often our volunteers were around her. Those in the Gift Shop certainly had a closer relationship to her than volunteers in Hangar 604, but everyone who spent any time at all at the Museum will have some memories of this cat with the Attitude. They will remember Cammy stories to tell and compare ankle scars, and when it is all said and done, Cammy may well be remembered as a beloved member of Combat Air Museum.

+ + +

August Membership Luncheon

Randy Thies is our scheduled speaker for the August Membership Luncheon. He will be talk to us about his forensic work in Iraq last year involving items recovered from mass grave sites. The August luncheon is Monday, August 14 at 11:30 a.m. +

2006 Events Calendar

August

7-10 Aviation Education Class

September

30 - Winged Foot 5K Run/Walk

+

Visitors

+

During May the Museum had 1,031 visitors from 38 states

and

Australia

Canada

Ethiopia

Great Britain

Germany

Japan

Poland

During June we had

1,157 visitors from 34 states

and

Brazil

Canada

Denmark Germany

Great Britain

India

New Zealand

+ + +

Two new exhibits feature Inter-War Years, 1919-1939, and Vietnam





Two new exhibits have gone up in the Museum since our last issue. **Tom Witty** rebuilt the exhibit formerly titled *Between the Wars*. It is now titled *Inter-War Years* 1919-1939 and essentially has all new materials in the case. **Tad Pritchett** set up a Vietnam Combat Marine exhibit inside the CH-53A Sea Stallion.

The period between World War I and World War II saw tremendous gains in the advancement of aviation and aircraft across several areas. The *Inter-War Years* exhibit touches on the topics of Air Shows, Civil Aviation, Commercial Airlines, Army/Navy Speed Racing, Airmail, Aviation Heroes, and Military Aviation. Fifteen models are in the case, 11 of which Tom built for this exhibit. **Curator Danny San Romani** had most of these kits instorage, waiting for the day they could be put into an exhibit. That day came, and San Romani stacked the kits on Tom's worktable. Most of them were air racers of the time and carried very colorful paint schemes

that would be challenging to any model builder. Another model was the airship *Hindenburg*. Tom did a great job on all of them.

Copies of 17 period photos and four copies of period pamphlet covers and magazine pages augment the models, and three period artifacts are included in the exhibit. One artifact is a well-worn and tattered AirMail Medal of Honor ribbon. Tom's research into this medal revealed that only ten are known to have been awarded. We acquired our ribbon years ago through federal surplus property as excess items gleaned from the museum at Fort Leavenworth.

Tom identified each of the items in the exhibit with a label and/or descriptive paragraph. Come by and take a look at the progression of designs and speed during this golden era of aviation history.



Far Left: The completed Vietnam Combat Marine exhibit.

Center: The Inter-War Years case completed by Tom

Witty.

Above: Tad Pritchett and Dee Hulsing work on the

Vietnam Combat Marine exhibit.

The Vietnam Combat Marine exhibit set up by Tad comes from first hand knowledge and experience of the subject and time period. Tad was in Vietnam 1968-1969 with the 3rd Battalion, 3rd Marines, 3rd Marine Division. Marine CH-53 Sea Stallions were one of the means by which he and his troops were conveyed into the field and our CH-53 gave him the idea for the exhibit. With a handful of exceptions, the contents of the exhibit are authentic, and include North Vietnamese and Viet Cong items.

Curator Danny San Romani provided Tad the upper torso and head of a mannequin to build his Marine around. Danny also told Tad how Tom Witty had created mannequin forms from PVC pipe and fittings and padding. Armed with this information, the mannequin, and left over PVC "body parts", Tad put the Marine together at his house. In the meantime, **Bob Crapser** showed Danny where we had a single bench seat that was not in use in the Sea Stallion, and it looked like it would suit the exhibit perfectly.

From the beginning, plans for this exhibit included placing an enclosure around it. Danny contacted Mr. Lyle Havercamp of Cope Plastics of Topeka, told him what we wanted to do, and asked if he could come out to offer his suggestions when the mannequin arrived. This he did. With the mannequin complete, Tad brought it out to the Museum to see how it fit on the bench seat. We found that being a concoction of parts, the mannequin was best transported in a wheel chair.

The initial fitting proved that the bench seat would work but certain adjustments were needed on the mannequin. Lyle gave his recommendations on the type and thickness of Plexiglas for the enclosure and said he would provide cardboard sections to us to cut out templates.

Tad took the mannequin home for more work; Lyle got the cardboard to the Museum; and Danny and Zak Amos worked on the templates. Over time, everything came together, and the Plexiglas panels were delivered for installation of the enclosure. Tad was ready with the mannequin, which had now acquired the name Gomer, after Gomer Pyle, USMC. Gomer came out one more time for a test fitting to the bench seat, and Tad brought Dee Hulsing with him to help out. Danny, Zak, Tad and Dee put Gomer into all of his pack gear and ammunition and weapons belts and then got him into the bench seat. It was good to go. Arrangements were made to put the exhibit together the following Sunday, and Gomer was wheeled into the Library for safekeeping.

The following Sunday Tad and Dee came to the Museum with all the remaining artifacts for the exhibit, and the work began. Ten hours later, the Vietnam Combat Marine exhibit was done. It really came out well. Tad and Dee have been back one more time to add a few more items Tad found, and we have done some additional work to the enclosure. **Don Dawson** helped Danny repair one panel, and the pair installed a Lexan panel behind the top of the case. Don installed some brackets to the enclosure that secure it against the fuselage of the helicopter.

Gene Howerter has been in contact with Tad to set up a dedication of the exhibit. This is tentatively scheduled to coincide with the August 14 Membership Luncheon.





New signs direct visitors to Combat Air Museum

New signs directing people to Combat Air Museum became more plentiful during June and July.

Museum volunteers erected a second highway sign to the Museum in June. This sign is located north of Topeka near Hoyt, Kansas along the southbound lanes of US Highway 75. Dick Trupp worked with Bill Clawson to get permission from Duane and Marlene Putnam, owners of Putnam Quarter Horses, to put the sign up on their land. Dick and Bill explained what the sign would look like, including a drawing, and the Putnam's gave their permission. One thing the Museum had to do, though, was place a windsock on their Putnam Quarter Horses sign like the one planned to go on our sign. This we gladly did.

After getting the land use permission, Dick contacted Kansas Department of Transportation (KDOT) and went through the necessary steps to get their authorization to put up the sign. That, too, was acquired, and work began at the Museum

on building the framework and supports for the sign. A local business, B & B Sign Company, fabricated the sign.

At different times, a number of our volunteers were involved with building and/or erecting the framework, then attaching the sign. Besides Dick and Bill, **Don Dawson**, **Dale Allen**, **Martin Moyer**, **Amos Page**, **Zak Amos**, **Don Mathers**, **Gene Howerter**, and **Stu Entz** were involved with the project. After the erection of the sign's frame, **Bill Clawson** cooked up a bean lunch for the workers. After B & B finished the sign, Martin, Amos, Dale and Zak put it on the frame.

Materials were brought in from our iron pile during the first week of July to begin fabrication of the framework for a third sign. This was supposed to go on the south side of Gary Ormsby Drive between exit 77 off US Highway 75 and the intersection of Gary Ormsby with Topeka Boulevard. Don Dawson had welded legs of the frame, and **Dale Allen** had power brushed and painted them.

Then, on July 11, as volunteers exited the south end of Forbes Field and drove west on Gary Ormsby Drive, they noticed that some brand new signs were up along the road. Do any of our local readers remember the Topeka Wayfinding Signs? If you do not, that is quite all right. It has been 18 months since the last time anyone heard anything about them. Well, like M&M candy and Santa Claus, they really do exist. Over the span of two days, several of these Wayfinding signs have gone up in this area, directing visitors to Heartland Park raceway, Combat Air Museum, Forbes Field, the Museum of the Kansas National Guard, or on to Topeka proper for other attractions. The Wayfinding signs are on an old style, black lamppost. The signboards are black with a light green outline of the state capitol building in the background with "Topeka" in white at the bottom. Listed attractions and directional arrows are in black on a square yellow background.

On July 12, Martin and Zak scouted north, south, and west of the Museum to see where and how many signs were up. They found six directing travelers to the Museum from different approaches. Closer into town, there are three more on Topeka Boulevard for drivers heading south.

With the discovery of the new Wayfinding signs, work has currently stopped on building the third framework. A Wayfinding sign was put up almost within spitting distance of where we planned to put this sign, so we will hold off until we find another location for it.

The highway and Wayfinding signs should bring some personal satisfaction to Dick Trupp. He has been working for improved signage for the Museum for over six years and continues to work with KDOT and the Kansas Turnpike Association to make further improvements. Dick represented CAM at the **Topeka Tourism Alliance** when the Alliance worked to get Wayfinding signs for the city. It seemed like this was never going to happen for anyone other than attractions in the downtown area, but they are certainly up and around our area, now. The next step is to get KDOT to match their attractions signs along US Highway 75 south of Topeka with the new Wayfinding signs.



August/September Calendar of Events

August

Monday-Thursday, August 7-10 Aviation Education Class

> Jean Wanner Education Conference Center 9 a.m. – 12 p.m.

Monday, August 14 Membership Luncheon

Jean Wanner Education Conference Center 11:30 a.m.

Our guest speaker will be Randy Thies, talking about his forensic Work in Iraq last year

September

Saturday, September 30

Winged Foot 5K Fun Run and Walk Start and Finish at Hangar 602 Race starts 8 a.m. Volunteers arrive 7 a.m.

There is no Membership Luncheon in September. The next luncheon is Monday, October 9.

+ +

Far Left: An example of a new Wayfinding Sign that includes CAM Left: The new sign erected by volunteers on US Highway 75 near Hoyt, Kansas



Air Force Junior ROTC Cadets are summer volunteers

Air Force Junior ROTC Cadets from Highland Park High School

With the help of a group of Air Force Junior ROTC Cadets from Highland Park High School, the T-33 jet trainer is getting a makeover this summer. The Cadets have been cleaning, polishing, and waxing the aircraft.

This is the second summer that Master Sergeant Larry Loreman has brought Cadets from Highland Park out to work one morning a week at the Museum during their summer break from school. Last year, they cleaned the engines along the south wall of Hangar 602, then moved to Hangar 604 where they washed all the planes in that hangar. Usually, a group of eight or nine Cadets came with MSgt Loreman.

This year four Cadets from last summer came back —always a good sign. The "veterans" soon showed the new, incoming freshmen what they had done the previous year. This year, **Danny San Romani** wanted to concentrate on one or two specific projects. His first choice was sanding and repainting the Nike-Ajax missile outside of Hangar 602. As he showed the Cadets what needed to be done, MSgt Loreman asked, "What about her?" "Her" was, and is a momma dove setting on a nest built inside the missile rail. Although a group of ten people were gathered around, the bird did not budge, so, on to Plan B, and San Romani actually had a Plan B.

This plan was the makeover of the T-33. A lot of work by volunteers had been done late last summer and fall to spruce up the plane, but the lack of a coat of wax meant that visitors and volunteers who touched the plane

left prints and caused areas to tarnish up again. But the worst of the tarnish buildup was gone, making this summer's project easier to accomplish.

Once the project was laid out, the Cadets split into two groups. They washed and dried the aircraft, then began polishing the undersides of the wings. San Romani had them use two grades of polishing compounds and carnauba wax. Using rags and elbow grease, the Cadets went over a chosen area with the first polishing compound, wiped it off, then went over the same area with a finer grade polish. When this was wiped off, the wax was applied and buffed with rags. Electric buffers were used for the final shine. Working on the undersides of the wings is not very comfortable, even for shorter people, but the Cadets went right to the task. The fact that they came back for more the following week was good to see. This summer work is not mandatory for them.

The efforts were readily seen, especially on the undersides of the wings. The Cadets could see immediately that they were making a difference in the luster of the T-33's skin and there were no complaints about the manual labor involved. MSgt Loreman and San Romani work alongside the Cadets. The Master Sergeant has an excellent rapport with his charges, and they work well together.

Are we going to get a smooth, mirror finish out of this work? No, that is not going to happen with this airplane. But we are definitely getting a reflective finish, and the plane looks better after each work session.

Before coming to the Museum, the T-33 spent a

Winged Foot 5 kilometer Fun Run and Walk

Saturday, September 30

CAM's second annual **Winged Foot 5 kilometer Fun Run and Walk** is slated for Saturday, September 30. We will need volunteers to handle fees and registration, pass out water to the runners and walkers, and be course monitors where the course makes its turns. Depending on how their fall schedule develops, the Highland Park High School Air Force Jr. ROTC Cadets may be out to help again.

Last year proved to be a fun and successful event, and Museum members participated in, as well as helped run the race. So, mark your calendars and come out to help, compete, or cheer on the participants. The racecourse is all on Forbes Field. The run/walk starts at 8 a.m. Volunteers should be at the Museum by 7 a.m. +

number of years in a city park in Viborg, South Dakota. There, it suffered considerably at the hands of vandals and episodes of severe weather with hail. The plane's canopy was gone and the cockpit gutted when CAM acquired the aircraft. Names, images, and obscenities were scratched and carved into the skin all over the aircraft. After it arrived in Topeka, Gene Howerter spent many hours filling in the larger dents and holes in the skin. He got a surplus canopy, ejection seats, and other equipment and items for the cockpit interior. He also repainted the markings on the aircraft and had it looking quite good. But the aircraft went outside, and after a period of years, the paint and finish suffered from the Kansas weather. Fortunately, it did not suffer further from vandals. Readers

should understand this was never a "pristine" aircraft when CAM acquired it, and cans of polish and wax are not going to undo what years of neglect in South Dakota did to the aircraft's appearance. But our volunteers' efforts have certainly improved its looks, as is the current work being done by the Cadets.

One side effect produced by the polishing and waxing is that it highlights the old scratches and carvings of names and obscenities in the aircraft's skin. San Romani and **Zak Amos** have worked a few Saturday mornings sanding, polishing and buffing out the worst of these. The plane has graffiti and scratches scattered from end to end, and it will just take time to remove or at least reduce it.

As of this writing, the Cadets have three more Thursday mornings at the Museum before getting ready for the new school year. The tail section and some areas



of the fuselage underside remain to be polished and waxed. When this is completed, some of the markings will be masked off and repainted. What the Cadets are not able to finish, we hope to get done with our own volunteers during the fall. The "veterans" from last year asked that the last session this summer be spent washing "Kilroy," so, we will.

We greatly appreciate the efforts of these Cadets and MSgt Loreman and hope that this summer partner-ship continues. It has benefited both the Museum and the Air Force Jr. ROTC program.

And what about momma Dove? Since our initial encounter, San Romani checks the nest a couple of times a week. There have been two separate egg hatchings so far this summer, producing two new Doves each time. We may just have to work around the nest to get the missile repainted.



Wings reattached to the movie mock-up of the Messerschmitt Bf-109G

For the first time in over a decade, the wings to our movie mock-up of the Messerschmitt Bf-109G were reattached to the fuselage. Using the muscles of a group of Air Force Jr. ROTC cadets from Highland Park High School, Martin Moyer, Dale Allen, Zak Amos and Danny San Romani got the wings positioned and attached on a Thursday morning in June. Things went pretty smoothly for the first three bolts in the right wing, but the fourth bolt was a bear. Eventually, with slow movements of the wing, the holes lined up and the bolt seated in place.

For the left wing, we decided to put the "hard" bolt in first, then the remaining three. This tact worked fine for the first bolt. The "hard" bolt went in easily. The remaining three gave us fits. Once again, the Cadet muscle slowly moved the wing in whatever direction the bolt handlers required, and eventually, the left wing was also attached.

The space for working with the bolts was rather limited in size. It was about 47 inches wide by 32 inches long, 42-1/2 inches high on the forward end and 32 inches high at the rearend. Yet two adults and two young people were in that area setting pin punches, lining up bolts, or attaching washers and nuts. Dale, Martin, Zak, and one of the Cadets managed to work in this small area to get the hardware in place.

Dave Houser continues working on the mock-up. He has applied German markings to the wings and fuselage and worked on the overall paint scheme. He had to repair a couple of small areas of wing damage, the result of being moved on sawhorses. Dave and Zak placed an upper torso and head of a male mannequin in the cockpit. They built a small platform to raise and support the mannequin at an appropriate height for a pilot, and the mannequin will eventually be outfitted in flight gear.

A recent discovery has Dave going back over fuselage areas he repaired before the wings were put back on. As the plane sata couple of weeks with its new, winged configuration, the fuselage forward of the cockpit changed shape some and opened up previously repaired seams. It is a set back, and hopefully a minor one, but it has also prompted us to consider adding a step in the restoration process.

After the mock-up restoration is complete, and if the girders in Hangar 602 will support the weight, the Bf-109 will be hung in that hangar. Seeing that the addition of the wings has caused a different set to the fuselage, discussions are now taking place about hanging the competed mock-up several inches off the floor for a period of time to see what kind of new set takes place in its structure. Then we will make any necessary repairs or adjustments before hanging it 15-20 feet off the floor.

In the meantime, Dave will make his repairs and move on to the next steps in the restoration. Dick Trupp and Darrin Roberts will be working on the paint scheme to make the mock-up appear as one of Luftwaffe Ace Eric Hartmann's Messerschmitts.

Clearing the drains becomes a big, hot summer project

The DAM Crew (**Dale Allen**, **Amos Page**, and **Martin Moyer**) has another project in the works. Only now they may have to change their name to DAM+One or DAMZ. Volunteer member **Zak Amos** has spent much of his summer vacation working at the Museum. He was either taken under the Crew's wing or just fell in with bad company, we are not sure which, yet, but he has definitely been putting in the hours with Dale, Amos and Martin. Zak also comes out on Saturday mornings to work with Curator **Danny San Romani**, something he has been doing for over three years, now.

The current project involves the door rail drains in Hangar 604. There are 18 drains in the rails for the hangar doors. They all empty into one main pipe that drains about 30 feet south of the hangar. Or used to drain, to be correct. At some time past, the end of the drainpipe was covered with fill, and this eventually affected the ability of water to drain through the system. During periods of heavy rains, the drains back up.

We went to Metropolitan Topeka Airport Authority(MTAA), our landlord, and found a blueprint showing 604's drainage system. MTAA let us borrow the print to make copies. Armed with the blueprint, the DAMZ Crew set off in search of the main drain line. After digging a small trench on the south side of Hangar 604, they found the main line, about four feet down. They measured 30 feet out from the end of the hangar and dug again to find the end of the pipe. Martin had not gone far when his shovel struck something solid, but it was not the pipe. He hit a piece of concrete, and it was not a small piece easily dug around. Martin got a strap, and Amos brought out the forklift. Soon, a section of concrete about 24 inches X 32 inches X 8 inches thick was on the surface. With that out of the way, Martin continued digging for the pipe and found it, again about four feet down. Initially, he got a small flow of rather nasty looking water out of the pipe, otherwise the drain was packed full of sediment.

The drain is an eight-inch diameter pipe. Now knowing that, Martin could move ahead with his plan to improve the system. His plan is to extend the drain line to the south, and then west, by adding on new pipe



The first stage to get Hangar 604's door drains working again.

sections and fittings that will allow the water to drain into an existing drainage ditch. The new pipe will include a clean-out plug. In order to lay new pipe, we needed to have a trench dug through the remaining fill area. We went back to MTAA, explained what we were doing and why, and asked for their help in doing the backhoe work to dig the trench. MTAA personnel came down to look at the work site, checked the grade, and dug the trench.

As of this writing, Martin and Zak installed a sixinch insert inside the drainpipe with concrete and attached a T fitting to the insert for a clean-out plug. The Crew then began working on the sediment removal, using a power washer. This has proved to be labor intensive, as there are years of sediment and sludge in the pipe, some of it almost the consistency of concrete. The Crew also began cleaning out the individual floor drains in the hangarrails, starting from the southend. They have

See "Drains", continued on page 15

"Weather", continued from page 1

When B-29 bombers flew their first raids against Japan from Pacific islands, aircrews were baffled by the weather conditions over their targets. Planes approaching from the west experienced speeds over the ground of over 400 and nearly 500 miles per hour. At these speeds, bombardiers had little time to identify their targets and set up the bombing solutions in their Norden bombsights. Planes approaching from the east suffered the opposite affects. Indicated speeds over the ground were nearly at a standstill. This made for good bomb run computations, but it also meant Japanese antiaircraft gun crews had ample time to set up their gunnery solutions. Planes also experienced rapid sideways drift, which threw off their final approaches to targets. For the first time, aviators were experiencing flight in what became known as the jet stream, a river of air that was long, wide and deep, and could move at over 200 miles per hour. It was unpredictable and capable of shifting direction abruptly.

These early missions were flown at altitudes up to 30,000 feet. Bombs dropped from 6 miles high over Japan might pass through as many as five layers of wind moving in different directions and speeds, greatly affecting the fall of the bombs. These

conditions made precision bombing nearly hopeless. To try and solve these problems, three B-29s began flying every night over Japan. Their only mission was to report on the weather.

The importance of US Navy weather planes in the Pacific came into play after a typhoon struck the US Third Fleet in December 1944. Three destroyers capsized and sank with the loss of nearly all hands. Nine other ships, including cruisers and aircraft carriers, suffered severe damage and crew casualties, and 19 more suffered lesser damage. The Navy Weather Service began flying missions to find and report conditions that could spawn typhoons and other severe weather and tracked the path of typhoons in order to diverta fleet or task force out of harm's way. Weather reconnaissance also proved necessary for both services in Alaska,

especially along the Aleutian Chain where more aircraft were lost to weather than to combat.

Ralph also talked a bit about the engineering aspects and problems of the B-29. He stated the B-29 was a real maintenance headache and said this was because the aircraft was not designed for maintenance. Sometimes a simple job of removing a nut and washer from a bolt became a major task because the design made it so difficult to get to the fastener. And there were many such nuts, washers, and bolts to contend with.

WB-29s were rushed to Japan after the world learned the Soviet Union had exploded its first atomic bomb. This occurred in August 1949. On September 3, 1949, a routine WB-29 weather flight from Yokota, Japan to Eielson Air Force Base, Alaska captured an abnormal amount of radiation in its filters. Other WB-29s chased and flew through the cloud across Canada and to the United Kingdom. Their filters also showed inordinate amounts of radiation particles in the air. The conclusion was that these had to come from an atomic bomb, and that bomb had to have exploded in Russia.

Later that month, President Harry Truman announced the event to the public.

The WB-29s sent to Japan were tasked to fly over and along the Soviet coast to gather air samples. Air samples were gathered in a specially made box mounted to the top of the rear fuse-

lage, where the upper, rear gun turret used to be. The sampler was commonly called a "bug catcher." Ralph had one photo of a WB-29 with the sampler and another of a WB-50, and that is exactly what the sampler looked like – a box stuck on top of the airplane. There did not seem to be anything aerodynamic about its shape at all.

Ralph was assigned to the 56th Maintenance of the 56th Weather Reconnaissance Squadron (WRS). He also mentioned the 56th Strategic Reconnaissance Squadron Weather. The 56th had 15 WB-29s in Japan. "Doc's Dog" was the name of one WB-29 Ralph flew in. He was with the 56th for two and one-half years.

When they flew, the 56th WB-29s had the code name Buzzard King. Buzzard was used for weather reconnaissance flights coming out of Japan, and the 512th and 56th Weather Reconnaissance Squadrons flew "Buzzard" missions. Flights typically lasted 14 to 15 hours. Missions were flown to gather weather data for strike missions over Korea, to gather typhoon data, to gather atomic dust from radiation clouds, and for training. Ralph had a map of various flight routes flown from Yokota.

Ralph said the typhoon flights could be rough, as they would fly into the eye of the storm to gather data and predict the path of the storm. They used "dropsondes," a radiosonde (radio transmitter) dropped by parachute. The instruments recorded pressure, water vapor, humidity, and temperature. These were deployed every hour. Ralph showed us a sketch and radar image of Typhoon Marge, a storm that ranged from off Okinawa up to the Korean Peninsula.

The atomic dust gathering missions were equally or even more dangerous. In order to collect the air samples, the WB-29 had to fly through clouds carrying radioactive debris from nuclear explosions. Ralph said all crewmen had to wear personal radiation dosimeters that were read after each radiation-gathering mission. He said that sometimes they had to wash the aircraft two or three times after a mission to decontaminate it. He also learned at a reunion some years later that two crews from the 56th had died from radiation poisoning.

Ralph said one 56th WRS WB-29 was shot down. It was an earlier plane that still carried its armament. Later WB-29s had their turrets removed. This aircraft went down over North Korea. One crewman took three months to escape to safety, but other crewmen who were captured were executed.

Ralph transferred out of the 56th WRS in 1954. He later returned to a hot part of the Cold War when he did a tour of duty in Vietnam with C-130 aircraft.

The WB-29s soldiered on into the mid-1950s when they were replaced by WB-50s, a somewhat look-alike to the B-29 also built by Boeing Airplane Company. As a WB-29 had detected the first Soviet atomic bomb in 1949, another detected the first Soviet hydrogen bomb in August 1953.

The last WB-50 retired from the Air Weather Service in 1965, replaced by the much-anticipated Lockheed C-130 Hercules. The AWS has been flying the Hercules ever since, upgrading to newer versions as they come out. Today, the 53rd Weather Reconnaissance Squadron "Hurricane Hunters" flies the WC-130J Hercules out of Keesler AFB, Biloxi, Mississippi. And there is a sole WC-135W Stratolifter, code name

CONSTANT PHOENIX assigned to the 46th Reconnaissance Squadron, 55th Wing, Offutt AFB, Nebraska, to conduct atmospheric sampling following nuclear weapons tests.

New Supporters

The Bevitt Family
Bruce, Nancy, & Anthony
The Coash Family
Duane, Tamera, Don, & Darin
The Howard Family
Jeff, Susan, Rheba, Greg, Martin, & Gus
Jim Lundak

"Drains", continued from page 13

done six of the 18. There is a small flow of water out of the main pipe, now, but Martin says there is a lot of sludge that our power washer will not move because of the flow and volume of water required. We may be going back to MTAA to see if they can use a firehose from a pumper truck to help flush out the system.

The opening for 604's hangar doors is a football field long, so there is a lot of drain work to go. The blueprint shows a clean-out plug a couple of feet outside the north end of the hangar. This end of the drain line was covered over by a layer of asphalt sometime in the past, so it will be another digging expedition. Luckily, the blueprint gives us an idea where to begin.

Hitting a stretch of weather where the temperatures and heat indexes are 100 degrees and more, the work has to be paced. Some of it is in the direct morning sun, reflected off the exterior white of the hangar doors, so things heat up fast in those areas. We will report on the progress of this project in the next issue.

COMBAT AIR MUSEUM

New red crosses for the 1941 Dodge ambulance

Work progresses on the 1941 Dodge ambulance, some of it not noticeable and some of it very evident. **Don Dawson** replaced the radiator and water pump, and refurbished a dome light in the patient compartment. He replaced the original door handles with ones that have key locks and installed side view mirrors on the driver and passenger sides. The DODGE nameplates were gone from both sides of the hood, and new ones are now installed.

The most evident changes are the large red crosses on white backgrounds that Don painted on each side and the rear of the ambulance.



The red crosses easily tell visitors what this vehicle was.

Visitors now have no doubt what the vehicle's function was. Don still has a large red cross to paint on the ambulance roof and other markings on its side and front. There is still mechanical and electrical work to do, too. After the radiator and water pump replacement, Don ran the ambulance up and down the flight line with no problems.

Unfortunately, we have lost the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services of **Beattie Dickson** for a while Beattie had worked with Don on the ambulance and probable of the services o

home. We all wish minra specus and nearing recovery. 7



Combat Air Museum P.O. Box 19142 Topeka, KS 66619-0142 Non-Profit Org.
USPOSTAGE
PAID
Topeka. KS 66603
Permit#181