303rd BG (H) Combat Mission No. 191

25 June 1944

Target: Airdrome at Toulouse/Francazal, France

Crew Dispatched: 13

Length of Mission: 10 hours, 20 minutes Bomb Load: 65 lb M47A1 Incendiary bombs

> Bombing Altitude: 25,500 ft Ammo Fired: 0 rounds

he airdrome at Toulouse, near the Spanish border, was the target for the 41st CBW on this long mission. The 303rd BG(H) furnished a weather ship.

To protect French property and lives, special bombing instruction were issued: "If the presence of smoke, haze, or clouds prevents an accurate sighting operation to be made on the target, bombs will not be dropped."

Thirteen 303rd BG(H) B-17s dropped 521 65-lb. M47A1 incendiary bombs from 25,500 feet with good results. Visibility was unlimited. Group Photo Interpreter 1Lt. Carlton M. **Smith** reported about 30 hits in the area of the administration buildings with other hits in a small woods concealing dispersal areas. Smoke cover prevented an estimate of the actual damage.



ORIGINAL BERNARD E. VERMEER CREW - 358th BS (crew assigned 358BS: 11 June 1944 - photo: 19 June 1944) (Back L-R) 2Lt Frank Bartholomy (B), 2Lt Michael L. Zarelli (N), 2Lt Bernard E. Vermeer (P), 2Lt James H. Byrnes (CP) (Front) Sgt James H. Ferris (BT), S/Sgt Willis E. Varvil (E), S/Sgt Robert F. Kennedy (TG), Sgt Robert L. Erickson (WG), S/Sgt Charles E. Moon (R), Sgt John C. Schley (WG)

No enemy aircraft were seen. Good friendly fighter support was furnished. Meager and fairly accurate flak was met near Caen and Toulouse. Each B-17 carried 288 units of chaff to be dropped for 12 minutes commencing one minute before the IP.

The crew of #42-38154 (*No Name*), 358BS, piloted by 2Lt. Bernard E. **Vermeer**, were forced to bail out over Minehead, England, when they ran out of fuel. The B-17 was headed toward the ocean when the pilot bailed out. All landed safely with no injuries. The new

members of the "Caterpillar Club" were: Lt. **Vermeer**, 2Lt. Clifford F. **Vaughn**, 2Lt. John P. **Connor**, S/Sgt. Willis E. **Varvil**, S/Sgt. Edward L. **Barteau**, S/Sgt. Charles E. **Moon**, Sgt. John G. **Schley**, Sgt. Robert F. **Kennedy** and Sgt. James H. **Ferris**. Three other aircraft landed away from the Base because of a fuel shortage.

Aircraft Formation at Assembly Point

Sirany
058

Langford

Reed

	960	405		
	<u>Carpenter</u> 206		<u>Latshaw</u> 086	
Carney 284	<u>Walker</u> 496	<u>Davis</u> 085		Miller 680
	<u>Bailie</u> 739		<u>Lee</u> 949	
Vermeer 154	<u>Stein</u> 006			

KEY TO ABBREVIATIONS

CREW POSITIONS CMP - Command Pilot	TOG - Togglier BT - Ball Turret Operator	VI - Voice Interpreter OBS - Observer	DOW - Died of wounds EVD - Evaded the enemy
P - Pilot	TT - Top Turret Operator	PAS - Passenger	INT - Interned in neu cntry
CP - Co-Pilot	TG - Tail Gunner	PHO - Photographer	REP - Repatriated
NAV - Navigator	NG - Nose Gunner		RES - Rescued
ANV - Ass't. Navigator	RG - Radio Gunner	RESULTS OF MISSION	ESC - Escaped
MNV - Mickey Navigator	WG - Waist Gunner	KIA - Killed in action	BO - Bailed out
ENG - Engineer	LWG - Left Waist Gunner	WIA - Wounded in action	DCH - Ditched
BOM - Bombardier	RWG - Right Waist Gunner	MIA - Missing in action	CR-L - Crashed on land
RO - Radio Operator	GUN - Gunner	POW - Prisoner of war	CR-S - Crashed at sea

358th Bombardment Squadron Crew Lists

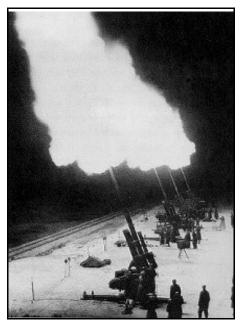
B-17G #42-38154 (No Name) CR-L			E	3-17G #44-6086 <i>My Blonde Baby</i>
Р	Vermeer, Bernard E., 2Lt	ВО	Р	Latshaw, William E., 2Lt
CP	Vaughn, Clifford F.,	ВО	CP	Kirkland, Robert A., F/O
NAV	Connor, John P., 2Lt	BO	NAV	Ivy, Wallis S., 2Lt
BOM	Barteau, Edward L., S/Sgt	ВО	BOM	Doan, Curtis E., 2Lt
ENG		BO	ENG	Pickens, Donald E., S/Sgt
	Varvil, Willis E., S/Sgt		RO	Tidwell, Andrew W., S/Sgt
BT	Schley, John G., S/Sgt	BO		
RO	Moon, Charles E., S/Sgt	ВО	TG	Hedrick, Warren L., Sgt
TG	Kennedy, Robert F., S/Sgt	ВО	BT	Ginn, William E., Sgt
RWG	Ferris, James H., Sgt	ВО	LWG	Miller, Horace J., Sgt
	B-17G #42-97085 (No Nan	ne)		B-17G #44-6006 (No Name)
Р	Davis, William C., 1Lt		Р	Stein, Lawrence J., 2Lt
CP	Graham, Edward, Jr., 2Lt		CP	Whittall, Ernest A., 2Lt
NAV	Cooper, Saul A., F/O		NAV	Larkworthy, Bernard J., 2Lt
BOM	Alderson, Raleigh L., 2Lt		BOM	Carloss, Earl W., 2Lt
ENG	Johnson, Walker K., S/Sgt		ENG	Card, Harry R, S/Sgt
RO	Sandler, David L., S/Sgt		WG	Grissom, Manley E., Sgt
BT	Clarke, Kenneth, Sgt		RO	Meyer, Fred R., S/Sgt
TG	Hiland, Robert L., Sgt		BT	Truesdell, William P., Sgt
WG	Rogers, Joseph S., Sgt		TG	Williams, Clarence J., Sgt
WG	Rogers, Joseph S., Sgr		10	Williams, Glarence J., Sgr
	B-17G #42-97949 (No Nan	ne)	_	B-17G #42-102680 (No Name)
P	Lee, Gareth G., 2Lt	ne)	P	Miller, Campbell, 2Lt
CP	•	ne)	CP	Miller, Campbell, 2Lt McConnell, John, 2Lt
	Lee, Gareth G., 2Lt	ne)		Miller, Campbell, 2Lt
CP	Lee, Gareth G., 2Lt Bowman, William E., F/O	me)	CP	Miller, Campbell, 2Lt McConnell, John, 2Lt
CP NAV	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt		CP NAV	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt
CP NAV BOM	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S		CP NAV BOM	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt
CP NAV BOM ENG WG	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt		CP NAV BOM ENG	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt
CP NAV BOM ENG WG RO	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt		CP NAV BOM ENG TG	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt
CP NAV BOM ENG WG RO TG	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt		CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt		CP NAV BOM ENG TG RO	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt
CP NAV BOM ENG WG RO TG BT	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT P CP NAV BOM	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt Barkin, Herbert L., 2Lt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT P CP NAV BOM ENG	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt Barkin, Herbert L., 2Lt Ham, William J., S/Sgt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT P CP NAV BOM ENG BT	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt Barkin, Herbert L., 2Lt Ham, William J., S/Sgt Martinez, Gregorio, Sgt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT P CP NAV BOM ENG	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt Barkin, Herbert L., 2Lt Ham, William J., S/Sgt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT P CP NAV BOM ENG BT	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt Barkin, Herbert L., 2Lt Ham, William J., S/Sgt Martinez, Gregorio, Sgt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt
CP NAV BOM ENG WG RO TG BT P CP NAV BOM ENG BT RO	Lee, Gareth G., 2Lt Bowman, William E., F/O Sweig, Morris, 2Lt Townsend, Charles D., 2Lt Leimgruebler, Victor H., S/S Olive, Martin, Sgt Adkinson, James E., S/Sgt Newman, Gerald D., Sgt Grundon, Joseph D., Sgt Grundon, Joseph D., Sgt 17G #42-31739 Pugnacious Bailie, Homer P., 2Lt Riseden, Jack W., 2Lt Waterland, Edward L., 2Lt Barkin, Herbert L., 2Lt Ham, William J., S/Sgt Martinez, Gregorio, Sgt Sawyer, Robert B., S/Sgt	Sgt	CP NAV BOM ENG TG RO BT	Miller, Campbell, 2Lt McConnell, John, 2Lt Atwood, Thomas M., 2Lt Bennett, Robert W., 2Lt Johnson, Jack M., S/Sgt Schneider, Lawrence J., Sgt Rego, Charles J., S/Sgt Messerich, Jerome R., Sgt

359th Bombardment Squadron Crew Lists

B-17G #42-102960 (No Name)		B-17G #42-31405 Wallaroo MK II	
Р	Reed, John W., 2Lt	Р	Langford, Allen W., 2Lt
CP	Altman, Maurice C, 2Lt	CP	Zimmerman, Paul E., F/O
NAV	O'Neill, Owen H., 2Lt	NAV	Andreasen, Rolf W., 1Lt
TOG	Meier, Wayne E., S/Sgt	TOG	Tartaglia, Raymond, Sgt
ENG	Colley, Smith K., S/Sgt	ENG	Munn, Edwin C., S/Sgt
WG	Hinson, Archie H., Sgt	WG	O'Leary, Daniel R., Sgt
RO	Rose, William A., Cpl	RO	Whisman, Chester C., S/Sgt
BT	Wernet, Charles, Pvt	BT	Gray, William W., Sgt
TG	Butler, Ashley A., S/Sgt	TG	Mulstein, John E., Jr., Sgt
B-	-17G #42-102496 Special Delivery	B-	-17G #42-107206 Old Black Magic
P	Walker, Lewis M., 1Lt	P	Carpenter, Arthur G., 1Lt
CP	Doyle, Joseph J., 2Lt	CP	Whitaker, Joseph C., 2Lt
NAV	Smith, Gordon F., 2Lt	NAV	Reid, George E., F/O
BOM	Beers, Donald B., 2Lt	BOM	Day, Dean K., 2Lt
ENG	Sublett, James W., Sgt	ENG	Pordham, Jack F., S/Sgt
RO	Lunday, Albert J., S/Sgt	RO	Bortolotti, Barney J., S/Sgt
BT	Hundley, Walter L., Sgt	BT	Welch, John R., S/Sgt
TG	Reckert, Arthur C., Sgt	TG	Nichols, Dalbee, Sgt
WG	Mathis, Henry C., Sgt	WG	Vanlandingham, John C., Sgt
В	-17G #42-97284 Ain't Misbehavin		B-17G #42-97058 Scorchy II
P	Carney, Walter J., 2Lt	P	Sirany, George R., 1Lt
CP	Hickey, James A., 2Lt	CP	Eisenhart, William E., 1Lt
NAV	Taylor, Albert R., 2Lt	NAV	Hogan, Paul G., 1Lt
TOG	Perkins, Homer F., Pvt	BOM	Nance, George H., 1Lt
ENG	Turner, Harold L., S/Sgt	ENG	See, Cecil J., S/Sgt
RO	Foster, Albert A., S/Sgt	RO	Van Horn, Everett E., S/Sgt
ВТ	Held, Armin C., S/Sgt	ВТ	Bale, Gordon E., S/Sgt
TG	Howe, Clarence E., Sgt	TG	McPherson, Frank V., S/Sgt
WG	Encinas, William, Sgt	WG	Umberger, Robert C., S/Sgt

FLAK! (Fliegerabwehrkanonen)

from the book "25 Milk Runs" by Ricahrd R. "Dick" Johnson



German 88 MM Cannons

During this stage of the war, Germany had deployed nearly twenty thousand anti-aircraft guns throughout Germany and occupied countries. The deployment of these guns for anti-aircraft use instead of against tanks and other ground forces made a great hardship on the German army. Many flak guns were manned by older men and young boys and even women and volunteers so that ablebodied men could be trained for other needs.

Defending the airfield near Reims at this time was a six-gun battery of 88 MM flak guns. These guns had a range of about ten miles and threw a three and a half inch diameter grenade with a muzzle velocity of about 720 meters per second. This translates to about 2400 feet per second, almost two and a half times the speed of sound. This velocity bled off quickly as it fought gravity and air friction, so that if fired straight up it would run out of steam at about forty thousand feet

and fall back to earth. The German personnel operating these guns could fire each gun every three or four seconds. The wooden boxes for shipping these shells held three rounds, each of which was over eighteen inches long.

It required six to ten buildings and over 120 soldiers to operate a six-gun flak battery. The aiming crew had various duties, including deflection, declination, azimuth and range, which showed as a triangle, rhombus, square, trapezoid and a circle on the rangefinder, or Entfernungsnesser, which was a four meter wide optical device. When these symbols all came together on the viewfinder, which when focused on the invading bombers gave the final aim, the command to start firing was given by radio. The normal magnification of this rangefinder was 12 power. It could be raised to 24 power and 36 power to fill the viewfinder with the image of a single plane. The Entfernungsnesser, or E-1, rangefinder operator was the only man in the cannon crew that had to go to school for his trade, all the others being trained on site.

Eighteen year old Helmut Schade was a member of this Battery on several of our trips across that region of France. He tell of the deep trenches that ran from the barracks to the guns and to a bunker nearby, at Soissons, France earlier in the war. All of their trips were through these trenches in order to avoid American fighter strafing. At the first telephone notice of approaching aircraft, usually seventy-five or more miles away, the men dropped everything and raced through the trenches to man their guns. Each of the six guns were on four legs with necessary pivots to turn them in any direction by hand cranks. The guns could be deflected from the vertical for use against aircraft, to horizontal ground level for use against tanks. All the ammunition was stored in racks alongside each gun. During an attack, the "Farm boys" as Helmut called them, because of their strength, pulled the large casings from the rack and handed them to the second man who plunged the grenade end into a box which set the distance that the grenade would travel before exploding. The pointed end of the grenade had two small flat spots opposite each other

which served as a grasp for the range box to turn the fuse to set the distance that the grenade would travel before exploding. This man then handed the shell to the last man who slammed the shell into the breech of the gun and yanked the lanyard at command from the final aimer. All six guns fired in unison. If the grenade hit a plane, it would not explode on impact, but would explode only after traveling the distance set into the fuse. It if missed, it usually exploded at almost the exact altitude of the target.

The final aimer with the rangefinder kept the sights pointed at the left wing root of the lead plane and the nearly two mile lead was automatically calculated so that the grenade would arrive at a spot in the sky that the target should occupy when it arrived. All the guns operated in unison as the information was fed to each gun through a large umbilical from the rangefinder's position. The guns were aimed in parallel to spread the pattern a little, the guns being fifty feet or so apart. A slow turn in either direction by the target aircraft was enough to throw off the aim of the flak gunners. This is why it was particularly bad during the bomb run. The German gunners would be tracking a straight line, and if the target aircraft disappeared behind a cloud, the line of aiming was continued as if the target could be seen. If the target aircraft re-appeared, adjustments would be made at that time. Even under the most ideal conditions, the target would only be in range for three minutes. When the bomb bay doors were opened on a clear day, it was easily seen by the gunners at the flak battery.

These same flak guns were also used against tanks, but Helmut said that the shells used against aircraft were practically useless against a Sherman tank since they had no penetrating power against thick steel. The anti-tank ammunition had an armor piercing core surrounded by a lead case so that if the hit was at an angle, the lead, being soft, would bunch up on impact and hold the core from glancing off.

Early in the war when the German gunners saw the bombs drop from approaching planes, they made a mad dash from the gun and hopped over a low wall into the bunker. They soon realized that the bombs took up to 45 seconds to reach the ground, and so they extended the firing time after bombs away until eventually they didn't go to the bunkers at all, but kept on firing until the target planes were out of range. Helmut mentions that the falling bombs didn't sound like the whistling they make in the movies. Rather they sounded like a surreal strumming, or warbling, like a large swarm of hummingbirds approaching.

On this particular day, our bombs missed part of the airfield at Juvincourt and almost hit the flak battery, which would have been a lucky accident for us, but not so lucky for Helmut and the others. The last bombs in our pattern hit the ground a bare three hundred feet short of the guns. Helmut said the road of the explosion was a mighty thud, that felt like a minor earthquake. He said he was surprised that the noise was not nearly as loud as the 88mm cannon would make. And no one wore ear protection!

Helmut says that radar was practically useless as far as hitting a plane was concerned. On overcast days, the Americans dropped "Chaff" which was strips of tin foil cut to the exact length of the German radar signal. He said that one had to have a vivid imagination to make out the pattern of a plane with all the "snow" on the radar screen. On overcast days they relied more on barrage flak which filled the sky with bursts of shrapnel at or above our altitude. They also used sound detection devices very early in the war, but soon abandoned them, as they did not give them the advantage that visual sighting provided.

The same was true of the American precision bombing which was done best in clear weather. Many of our missions used radar and loran for bombing through clouds, but mostly large targets were the only things hit during these missions. It did serve to notify the Germans that we were willing to waste a lot of bombs and gasoline if we could get a good hit once in a while. Which we often did.

The flak battery was protected from strafing American planes by several units of 20 millimeter cannon, each having multiple barrels. I asked Helmut if they were ever strafed, and he said "many times." I said that I bet the flak boys hunkered down behind their armored shields during a strafing pass.

"What shield?" he said. "There was no shield in front of these guns to protect the gunners. They were expected to keep firing as the fighter plane approached. If they hunkered down during the approach of a fighter, they were giving away their best shot to get the fighter."

"Did you lose any of those gunners?" I asked.

"Yes," he said, "we lost a number of men, but they shot down several fighters in the course of the war."

"Now for the big question," I said. "Did your battery ever shoot down a B-17?"

"Well, we damaged several," he said rather evasively. "One time we hit a B-17 and set his number two engine ablaze and the fire reached back past the end of the tail. We all started jumping up and down, celebrating our good marksmanship. We were certain that we had shot him down. However, in a little while the fire went out and then the smoke stopped and the B-17 never left the formation. As they disappeared into the distance, our celebration turned into glum disappointment. I couldn't believe it! The guy never even got out of formation."

"But," I insisted, "did you guys ever shoot down a B-17?"

"We did manage to shoot down a couple of B-24s during the course of the war." He said, still being evasive, "They were much easier to shoot down than a B-17. Once we were firing at a B-24 group when suddenly a bunch of parachutes started coming out of one of them. The airplane seemed to be intact and on auto-pilot and it flew on for more than fifty kilometers before it finally crashed. We never did know why they left it."

Helmut had been conscripted into the German Army as a seventeen year old boy and was in the army by the time he was eighteen years old. He was born on May 18, 1926. One night in 1943 a British Blockbuster bomb fell across the street from his home in Dusseldorf, destroying ten houses and filling the street with at least ten feet of debris. The mother of one of his friends was killed when she had refused to go to the bomb shelter. Others were killed, but Helmut doesn't know how many. In the winter of 1943 and spring of 1944 when Helmut went into the German army, they sent him into the Taunas Mountains to train as a cannoneer. They were so short of supplies that they didn't even have coats to protect them from the brutal cold.

Helmut's mother died when he was a young child, and his father was killed in a Dusseldorf night attack by British bombers in 1944. His father was a paramedic at the

time, having been refused for army duty because of an unhealing sore on his heel caused by poison gas in the first world war.

When the war ended Helmut came to America to see his future wife whom he had met earlier in Germany. Virginia came to the United States in 1949 as a refugee from Estonia where she was classified as a political refugee, or "Displaced Person." Being a German citizen, Helmut didn't qualify as a D.P., but had to go through the regular channels to become a U.S. citizen. There was a five year waiting period before one could take a citizenship test, part of which was demonstrating an ability to speak, read and write the English language. Virginia made her citizenship exactly five years after coming to America.

Helmut came to America in 1952 and had a tougher time, taking over five years. He said that the lady at the Immigration and Naturalization Service was very nice and that he might have had a much tougher time if not for her kindness and understanding. Helmut opened a furniture finishing business in Georgetown in the District of Columbia, until he retired to a waterfront home near Solomons, Maryland. This is how I got to know Helmut and Virginia, since my wife, Marjorie and I also have a place nearby.

After I got to know Helmut better, I again asked him the same question.

"Helmut, did your crew ever shoot down a B-17?"

"Well, yes," he replied, "they were hard to shoot down but we did manage to shoot down a couple of them. One that we shot down came all to pieces with engines still turning, making the eeriest noises, and several parachutes came out. I'm glad that it wasn't the one you were flying."

"Not nearly as glad as I am," I replied, "but I think it must have been your battery that shot down a friend of mine, Lt. Wardowski, on June 28, 1944. He and his navigator, Lt. Birnbaum from my barracks were killed along with their tail gunner, Sgt. Wagner. It's strange how we could be sworn enemies at one time and then develop a friendship at another time."

"It's a different time and place," he said. "We were both doing our job, and your job was to break things, while mine was to try to stop you from breaking things in my area."

Bombers that were shot down often fell into areas that caused more damage than the actual bombing. There was always a great deal of fire during a crash.

On October 14, 1943, a B-17 was set ablaze near the small German village of Adendorf and most of the crew bailed out. The plane continued to fly on until it crashed into the enclosure of a large castle called Burg Adendorf. The castle built in a square was undamaged by the bomber, but two crew members died in the crash. The B-17 wreckage filled the entire enclosure and burned for some time, exploding 50 caliber bullets, but not the six 1,000-pound bombs that it carried. No one on the ground was injured.

The small Principality of Liechtenstein was not so lucky. A bomber was shot down over Austria and drifted into the neutral Liechtenstein, landing squarely on the Royal Palace, completely destroying this architectural prize. Liechtenstein, about the size of Washington, DC, was under the control of Switzerland.