Among Pioneers

R.C.'s Service in England



The 306th Bombardment Group (Heavy)



The 368th Bombardment Squadron

December 2001



Raymond Clyde Clifton 6 September 1923 - 17 April 1943

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In many ways this was one of the most satisfying research "assignments" I have ever undertaken. It gave me a grand opportunity to appreciate the great sacrifices that marked the actions of a small number of US airmen—some 1,600 in four heavy bombardment groups—who struggled in European skies in the winter of 1942 and 1943 in the name of freedom. Most of these men could not have appreciated the history they wrote as they fought daily for survival. Yet their fight was historical indeed as the young airmen of the Eighth Air Force sought to prove the viability of strategic bombing as a war-winning strategy. They suffered grievous losses, often for little military gain, but in so doing they also established the operational procedures and standards for bravery that were to prove crucial in the fight against one of the world's most evil powers. They were true pioneers.

I had always had a great respect for what R.C. did in this struggle if not a clear understanding for actual his role. Seeing his name, however, in *First Over Germany* on 30 November 1996 brought home the realness of his legacy. It is an experience I will not soon forget. I hope you, too, feel some of the same emotions.

Raymond C. Ennis Centreville, Virginia December 2001

A Note on Sources

The following summary of R.C.'s wartime service in England is based mainly on four published sources:

- The Mighty Eighth, A History of the Units, Men, and Machines of the US 8th Air Force by Roger A. Freeman. Widely recognized as one of the most complete histories of the Eighth Air Force, it was published in England in 1970. It has since been published in the United States and is readily available in any bookstore with a decent military history section. This was the primary source of general background information on R.C's last mission, although it does not mention by name any of the individuals aboard his aircraft.
- ♦ The Mighty Eighth War Manual also by Roger A. Freeman. Although not as complete as his first book, it is a good source of general reference information in handbook fashion on the Eighth Air Force. This was a primary source of information on Thurleigh RAF Station where R.C. was stationed while in England.
- First Over Germany by Russell A. Strong. A unit history of the 306th Bombardment Group (Heavy) by the unofficial historian of the 306th, I ran across this book at the Mighty 8th Air Force Museum in Savannah, Georgia. It provides a short description of the actual fate of R.C.'s aircraft and mentions him and the rest of the crew by name. This book is no longer in print although I recent found it on the Internet and understand that it will be under the Christmas Tree this year.
- The Combat Diary of the 368th Bomb Squadron. This is an informally published history of R.C.'s squadron. I ran across it also at the Mighty 8th Air Force Museum and have since purchased a copy of it from the 306th Bomb Group Association. It provides a rather detailed accounting of the various actions of the 368th Bombardment Squadron, one of four that made up the 306th. It, too, mentions R.C. by name, but only in describing his final mission.

The library services at the Mighty 8th Air Force Museum also were most helpful in my search. I was able to review its documents on three occasions, the last in September 2000. Many of the museum's documents have been put into a computer database accessible to visitors. Although I have pretty much completed my review of its cataloged documents, the museum has additional material that has not been organized. For example, at the close of one of my visits one of the librarians recalled that several days before she had come across some microfilm on the 306th Bombardment Group. She allowed me to use her desk while I viewed the material. In the short time I was able to scan the film I found a rather innocuous personnel document on R.C. listing the award of an Air Medal and three Oak-Leaf Clusters and recording his reporting date to the 306th as

3 April 1942 when he was assigned to Walter Smiley's crew. Written by hand across the face of this document was the notation, "KIA 17 Apr 43 Bremen (w. Smiley)." I hope to return to the museum at a later date when its personnel have been able to catalogue additional material.

Russell A. Strong, author of *First Over Germany*, has also provided a number of important documents for this history. Mr. Strong flew with the 306th although his tour of duty came long after R.C.'s last mission. Mr. Strong was able to provide written records and orders from official 306th wartime correspondence that, among other things, provide aircrew debriefs from most of R.C.'s missions as well as several eyewitness accounts of his loss. Not surprisingly, not all of these documents agree.

Despite the availability of a number of documents, several holes remain in my reconstruction. The single biggest unknown is the number of missions R.C. actually flew. This history documents 16 including two airborne aborts. It is based on 306th written records listing R.C.'s actual participation. There is reason to believe R.C. flew as many as 20 missions since he received the equivalent of four Air Medals. Air Medals were, and are awarded today, for every five combat missions flown. In discussing this with Mr. Strong, he stated that his collection of 306th written records for the early war period was incomplete and those that he did have were not always accurate. I suspect R.C. had additional missions, especially during the period 22 November 1942 to 13 January 1943 when Capt. Smiley's name was not included in any of the group's five missions flown during this period. If R.C. flew additional missions they most likely were with aircraft commanders other than Capt. Smiley. Since Mr. Strong's records are filed by the aircraft commander's name we most likely will not be able to recover any additional missions.

¹ It is interesting to note that of the 17 missions accredited to Capt. Smiley, R.C. was the flight engineer/top gunner for all but one of them.

The 368th Bombardment Squadron, 306th Bombardment Group

R.C. was assigned to the 368th Bombardment Squadron, one of four squadrons of the 306th Bombardment Group (Heavy). Nicknamed "The Reich Wreckers", the 306th was the Eighth Air Force's longest continuous serving bomb group.² The 306th was established at Salt Lake City Air Base (AB), Utah on 1 March 1942 and moved to Wendover AB, Utah, about 100 miles west of Salt Lake City, on 6 April.³ R.C. arrived at the unit three days before its transfer to Wendover and was immediately assigned to the crew of then Lt. Walter N. Smiley.

The 306th left Wendover for Westover, Massachusetts on 1 August 1942 where it flew a small number of antisubmarine patrols for the Navy out over the Atlantic. Lt. Walter Smiley's crew, including R.C., signed for B-17F serial number 41-9092, an aircraft assigned to the 301st Bombardment Group, for the flight to Westover. For the flight from Westover to England the crew was assigned B-17F 41-24466, the aircraft it would fly in combat during most of its time in England. The crew departed Westover for Thurleigh, Bedfordshire, England on 10 September and flying by way of Gander, Newfoundland and Prestwick, Scotland, arrived at Thurleigh on 13 September. The 306th flew its first combat mission, a mission flown by R.C., on 9 October 1942 and its last mission 19 April 1945. Combat achievements for the 306th included a total of 342 missions involving 9,614 individual sorties with 171 losses. Ordnance dropped totaled 22,574 tons. These totals were near the top for all Eighth Air Force units. Aircraft of the 306th were the first US aircraft to penetrate German airspace. This occurred on 27 January 1943 when the 306th attempted to hit U-boat pens at Wilhelmshaven. The written record is silent on whether R.C. flew this mission.

The 368th Bombardment Squadron, nicknamed "The Eager Beavers" had the distinction of being the first US air unit ever to drop 1,000 tons of ordnance in combat. Other squadrons belonging to the 306th were the 367th, the 369th, and the 423rd.

The B-17F Flying Fortress

At the time of R.C.'s service the 306th was equipped with about 40 B-17F bombers: nine per squadron and several held at group level. The F model was the most modern combat version of the B-17 then in service. The B-17 began life as the Boeing Model 299. Boeing began developing the Model 299 on 18 June 1934 and the first aircraft took to the air a year and ten days later. The Model 299 was Boeing's entry in a three-way contest to meet an Army Air Corps requirement for a multi-engine aircraft that could carry 2,000

Although there were three older Bombardment Groups in the Eight Air Force, these were "chopped" to other numbered air forces on occasion to support such operations as the invasions of North Africa and Italy. Wendover's abandoned runway and taxiways were still visible on the edge of the salt flat when I was last in the city of Wendover in 1978.

pounds of bombs 2,000 nautical miles at a speed of 200 knots. The other entrants were the Douglas BD-1, a reengineered version of the civilian DC-3, and the Martin 146, an improved version of the B-10 then in operational service. Perhaps the largest difference between the Model 299 and the other aircraft was its four-engine design. The other manufactures had taken the safe route by using existing twin-engine designs.⁴ The Boeing design exceeded the Air Corps requirements in all respects and won the competition hands down despite of the fatal crash of the initial Model 299 prototype. 12,731 B-17s were built for the military between 1936 and April 1945. Boeing built 6,981. Douglas built another 3,000 aircraft and Lockheed Vega some 2,750. The B-17 on which R.C. flew his last mission was the 1101st airframe off the Boeing B-17 production line. A World War II B-17 cost about \$200,000.

Although the B-17F could carry a maximum bomb load of 9,600 pounds, operational conditions over Germany usually limited the load to about 4,000 pounds to allow for additional fuel. Under these conditions early-model B-17F had a cruise speed of about 225 knots at 25,000 feet altitude and a practical radius of action of about 400 nautical miles.⁵ Its endurance on such missions was about five hours.

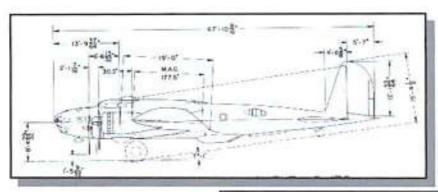
The combat aircrew of a war-time B-17 consisted of four commissioned officers and six non-commissioned officers (NCO). The commissioned aircrew included the pilot and copilot, the bombardier, and the navigator. The NCOs included the flight engineer (R.C.'s position) who assisted the pilots in maintaining proper engine settings and manned the upper gun turret, the radio operator, the ball or bottom turret gunner, two waist gunners, and the tail gunner.

The B-17F required a large crew because of its large number of self-defense guns. It carried up to 12 50-calibre (12.7-mm) machine guns, hence the name Flying Fortress. While the total was impressive, it was also misleading in two respects. First, the guns were light and could not duel with the armament of main German fighters, which included cannons as large as 40mm. Moreover, the armament locations left the B-17F vulnerable to head-on attacks, a tactic German fighters began to use with success in November 1942. The engineers of the Eighth Air Force attempted to correct this vulnerability by combat testing several field modifications, but these proved unsuccessful primarily because of Plexiglas cracking problems in the forward fuselage area of the B-17F. One of the aircraft so modified was 41-24466, which received two nose-mounted 50-caliber guns sometime in early 1943. These were operated by the bombardier and forced Smiley's crew to drop its weapons on the signal of the group lead bombardier.

⁴ Boeing has a reputation for taking great risks in new aircraft design. In 1947 it borrowed heavily from captured German technology to design the then revolutionary B-47 and literally bet the company's future existence on two occasions with the decisions to launch the 707 and 747 civil transports.

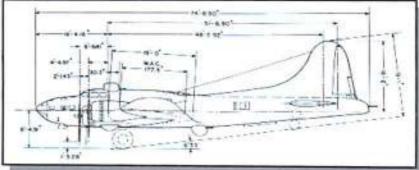
The range/payload performance of the B-17F approximated that of the modern F/A-18 Hornet. What is strikingly different, however, between the two aircraft is the potential killing power of each. On 6 March 1943 Eighth Air Force dispatched 80 B-17Fs to attack the power plant at the Lorient submarine pens. The force failed to hit the target, in part because of poor weather. It repeated this mission on 16 April, once again without success. In contrast, two F/A-18s carrying satellite-guided JDAM 2,000-lb munitions would have a near certainty of destroying this target in one mission even in the worst weather.

The Evolution of the B-17



Early Model B-17A,B,C,and D

The "Big Ass Birds" B-17E and F





The Nose-Mounted Bendix A-16 Gun Turret of the B-17G

The B-17 was produced in three major variants during its nine years of production with design changes driven primarily by the need to improve its defensive armament. The "early model" or A, B, C, and D variants featured few gun positions and a narrow vertical stabilizer. Only a few of these variants saw combat and most of those were with the RAF. The E and F variants had a wider rear fuselage to accommodate a new tail gun position and a broader vertical stabilizer for better stability to offset the increased turbulence generated by changes in other gun positions. It was known in some circles as the "big ass bird." The G model was basically a F model with a powered nose turret for added forward firepower. Of the 12,730 or so B-17s produced, about 120 were early models, 3,900 were Es and Fs, and 8,700 were G models

This was known as "toggling" and was a common practice later in the war when the Eighth Air Force began using its best bombardiers with the Norton bomb sight in lead aircraft and having them determine when the formation as a whole should release its bombs. The B-17F's armament weakness was never effectively eliminated forcing the United States to develop a follow-on the B-17F, the B-17G with its chin-mounted, twingun power turret, which began arriving in England in October 1943.

R.C. flew most of his missions in B-17F serial number 41-24466, one of the original aircraft assigned to the 306th. I could find no record of a nickname for this aircraft. Other aircraft R.C. flew in combat included 41-24560 (*Little Audrey*), 41-24514, 42-5218 (*Sky Wolf*), and 42-5251 (*Bodacious Critter*). All five aircraft were manufactured by Boeing in Washington state. *Bodacious Critter* was the aircraft on which R.C. was lost.⁶

Bodacious Critter had an interesting history. It began its operational service with the 306th on 1 January 1943 with the nickname Pride of the Kiarians. It was damaged during routine flight training on 1 March 1943 in a midair collision with another 306th B-17, 41-24476 (Adorable), and sent back for depot-level repair where it was photographed sporting its original nickname (Figure 2). It was then returned to the 306th on 9 April 1943 where it was renamed Bodacious Critter apparently by Smiley's crew. Smiley's crew had just lost 41-24466 when it was declared unfit for combat on 3 April and converted to a training aircraft on 11 April. This would have been consistent with Polly and Molly's recollection, told to me in about 1960, that R.C. had written in one of his last letters that his aircraft was a "tired Nellie." Smiley's crew was to fly its last two combat missions in Bodacious Critter.

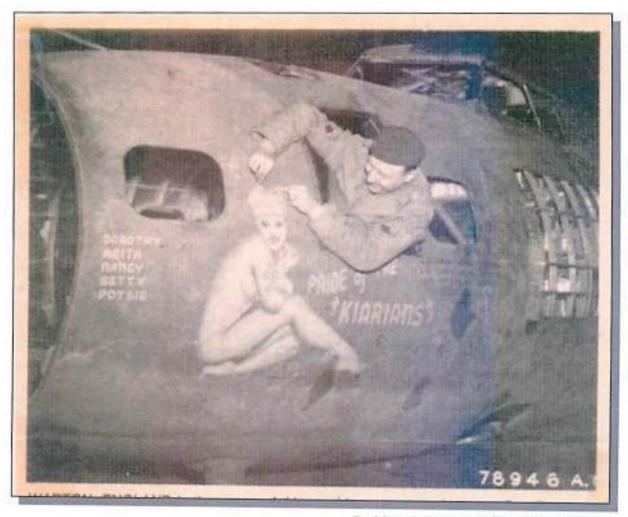
RAF Thurleigh

The 306th with its four squadrons was stationed for its entire English tour (September 1942 to December 1945) at RAF Station Thurleigh, six miles north of Bedford in Bedfordshire. From a photograph of the period, Thurleigh appears to have been a rather attractive base by wartime standards complete with brick buildings. This photograph, taken on the occasion of the transfer of Thurleigh from the RAF to the Eighth Air Force, shows 306th personnel at attention as the RAF ensign is lowered (Figure 3). Unfortunately it was taken from behind the US personnel making any identifications impossible. Although individual buildings survive today, the base no longer exists having been turned back into countryside around the small village of Whitwich Green. Apart from its rather permanent brick buildings, Thurleigh was a typical wartime English bomber base with one 6,000-foot runway and two 4,200-foot runways. It had accommodations for about 3,000 men.

⁶ The Eighth Air Force had at least two aircraft named *Bodacious Critter*. The other was a B-24 assigned to the 451st Bombardment Group. It was lost over Vienna, Austria on 26 June 1944.

B-17F-45-BO

Serial Number 42-5251

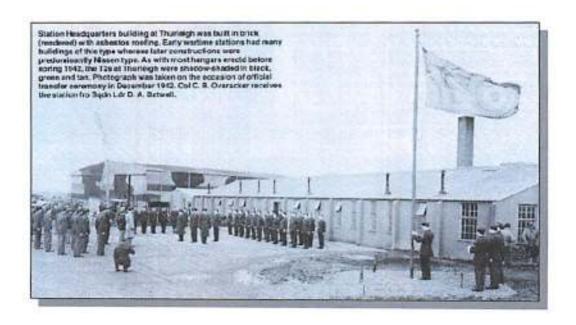


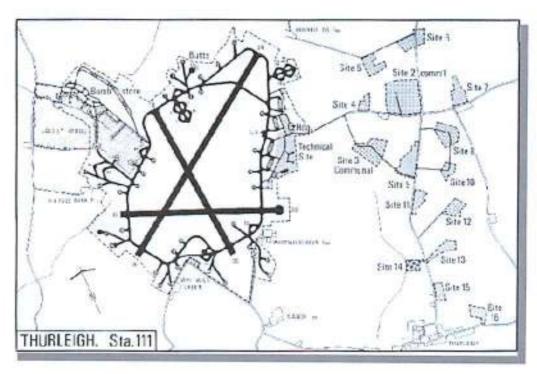
Smithsonian Air and Space Museum

Sgt. Person L. Wright of Gibson, Miss. repairs the *Pride of the Kiarians* at Eighth Air Force Depot, Warton, England on 23 March 1943. The 306th B-17F was damaged in a midair collision with another 306th B-17F, *Adorable* on 1 March 1943 during a routine training flight. *Pride* went to Warton; *Adorable* went to the scrap heap. *Pride* was returned to the 306th on 9 April 1943 and was renamed *Bodacious Critter* by the crew of Capt. Walter N. Smiley. She was lost on 17 April 1943 during her second combat mission with her new name.

RAF Thurleigh

1942





Roger A. Freeman, *The Mighty Eighth*, War Manual, Motorbooks International, 1984

R.C.'s First 15 Missions

306th wartime records document that R.C. flew at least 15 missions before his last mission over Bremen. All of the following missions were flown with Capt. Smiley's crew. It seems likely that R.C. flew additional missions since he earned five Air Medals. While the Eight Air Force tended to keep its crews together illnesses and other medical problems often grounded portions of several crews and forced schedulers to combine crews or bring in new crewmembers as temporary replacements. For example, Smiley's crew flew a mission against the French coast on 22 November 1942 without R.C. for reasons unknown. I suspect strongly that R.C. was included in crews led by other aircraft commanders as well. Unfortunately 306th records are organized in a manner that renders it almost impossible to identify these missions.

R.C. was assigned to Smiley's crew on his arrival with the 306th in April 1942. Walter N. Smiley was one of the original pilots assigned to the 306th at its founding in Salt Lake City. There are numerous references to him in the 368th Squadron diary indicating he was a popular officer in the unit. One of these included a description of an automobile wreck on the highway between Salt Lake City and Wendover in which he lost his car.⁷ At the time of his last mission Capt. Smiley was the 368th operations officer, an important position in a combat air unit.

9 October 1942 - Lille, Belgium (41-24466)

The target for R.C.'s first combat mission was the Fives-Lille Steel Works, a locomotive plant in Belgium. Eighth Air Force dispatched a record number of 108 bombers, a total that would not be surpassed until R.C.'s last mission six months later. The 306th, on its first mission, dispatched 24 aircraft of which three aborted. Enemy antiaircraft fire and fighter reactions were heavy and US bombing accuracy poor. Many of the reacting fighters were the yellow-nosed FW-190s based at Abbeville/Drucat Airfield in occupied France. This would mark the first of a number of encounters between the 306th and the "Abbeville boys" as they became known among Eighth Air Force crews Most of the bombs hit a civilian area outside the plant killing a number of Belgians. Two B-17Fs, including one from the 306th, and one B-24 were lost. Capt. Smiley's aircraft was found on return to base to have been holed in 20 places by German antiaircraft fire.

⁷ The 100-mile highway between Wendover and Salt Lake City undoubtedly was popular with the men of the 306th since it represented access to the only real touch of civilization within hundreds of miles of the base.

8 November 1942 - Returned to Fives-Lille Steel Works (41-24466)

Eighth Air Force returned to Fives-Lille. 41-24466 suffered two gun problems and returned with its bombs. Eight to 10 enemy aircraft attacked the force but without results. Ineffective AAA fire was observed in the target area.

9 November 1942 - St. Nazaire, France (41-24466)

The target was the infamous submarine pens outside the coastal city. These were heavy concrete structures with 12-foot thick roofs, that would prove to be invulnerable to all but the heaviest British blockbuster bombs. R.C.'s group was ordered to bomb from an altitude of 7,500 feet rather than the normal 23,000- to 27,000-foot altitude in an attempt to stay under German radar while penetrating over the English Channel. It lost three aircraft in the experiment, which was not attempted again by the Eighth Air Force in massed B-17 operations. The 306th left the target in such disarray that it put down at the first allied base it found, Portreath in southern England, where badly shaken aircrews drank off their tension with a party in the base mess. The British hosts, according to Roger A. Freeman, writing in *The Mighty Eighth*, were not amused.

17 November 1942 - Back to St. Nazaire (41-24466)

The 368th bombed long and claimed no hits on target. An unidentified gunner on 41-24466 claimed hits on an FW-190. R.C.'s B-17 returned with a small number of holes in one wing and in the tail. While leaving the target area 41-24466 descended to low altitude to provide fire support for a damaged wingman, one of several to do so. The crew claimed to be able to see French civilians waving to and cheering the aircraft.

13 January 1943 - Back to Fives-Lille Steel Works (41-24466)

The 306th dispatched 15 aircraft. Three aborted because of mechanical problems. The rest apparently achieved good bomb patterns as the Eighth Air Force would not have to revisit this target. Antiaircraft fire was characterized as light, but the 306th lost two aircraft to what returning crews believed to be enemy action. Intelligence was to learn later that the two aircraft collided over Belgium.

4 February 1943 - Emden, Germany (41-24466)

The briefed target for this raid was the rail marshaling yard in Hamm in the Ruhr Valley of Germany. Weather caused most of the group to divert to Emden, Germany where

aircraft bombed a number of targets with little result. The Luftwaffe attempted, for the first time, to bomb Eighth Air Force bombers with Heinkel bombers flying above the bomber formations and dropping small fragmentation weapons. Other German reactions included 15 to 20 FW-190s and ME-109s and 10 to 12 twin-engine JU-88s and ME-110s. Antiaircraft bombing was ineffective although five bombers were downed by fighters and a sixth was lost when it collided with a pursuing FW-190. Most of this action occurred after bomb release as the bombers withdrew over the North Sea. 306th gunners were given credit for five German fighters.

16 February 1943 - Back to the Sub Pens at St. Nazaire (41-24466)

St. Nazaire was now known to the Eighth Air Force crews as "Flak City." It would be one of a half dozen German cities so christened. Flak reactions during this mission were described as "intense and accurate" and lasted about five minutes in the target area. Although there were no loses, six B-17s were heavily damaged including 41-24466. Its most serious hit was on number 1 main fuel tank, which fortunately did not detonate. Other damage was noted to the left-hand stabilizer, the left outboard wing, the left inboard wing, and number two engine cowling.

Forty to 50 fighters also reacted and apparently shot down three B-17s from other groups. Several bomber crews, including 41-24466's, expressed exasperation with the RAF by noting that the planned Spitfire fighter support never appeared.

The specific target for this mission, the U-boat basin locks, escaped serious damage although a number of other facilities were hit.

27 February 1943 - Brest, France (41-24514)

In the second attack against the U-boat facilities near this city, participating bombers returned without loss, primarily because of a fighter escort by RAF Spitfires. The crew of 41-24514 reported seeing only one FW-190 and it was too far from the bomber formations to threaten them. The Germans were able to force a portion of the bombers (from other bomb groups) to return to base without dropping their bombs by using a bogus radio recall signal, the first attempt of its kind. All 17 306th bombers reached the target although one was unable to release bombs because of an equipment failure.

6 March 1943 - Return to U-boat Pens at Lorient, France (42-5218-Sky Wolf)

306th dispatched 21 aircraft along with bombers from three other groups to attack the power plant at the submarine base. All 306th aircraft dropped their bombs. Two 306th aircraft were lost to flak. Bombing was ineffective. The 306th commander, Lt. Col. Claude Putnam blamed this in part on the up-wind bombing run selected for this mission

by mission planners. This resulted in a 30-minute bombing run during which accurate flak resulted in the lose of the two 306th aircraft. Fighter reactions, consisting of 12 to 14 FW-190s and an ME-109, were termed "feeble" by returning crews.

12 March 1943 - Rouen, France (41-24466)

Nineteen 306th aircraft joined 59 bombers from other groups in an attack against the Sotteville rail marshaling yard. Good weather, the absence of flak, and a fighter escort of about 100 RAF Spitfires allowed many hits on the target. One spectacular secondary explosion was noted; it appeared to be an ammunition train that blew up in the yard. All aircraft returned safely.

13 March 1943 - Amiens, France (41-24466)

Twenty 306th aircraft joined 60 bombers from other groups in what started out as an attack on the Amiens Longeau railroad marshaling yards. Terrible weather resulted in about half the force diverting to other targets. Those that hit Longeau did so with little effect. 41-24466, separated from the rest of the force, bombed an unidentified target near Poix, France with undetermined results. In spite of the disrupted formations all bombers returned safely.

22 March 1943 - Wilhelmshaven, Germany (41-24466)

Nineteen 306th aircraft were dispatched to the Bauhafen Naval Base in Wilhelmshaven to bomb the pocket battleship *Admiral Sheer*. Visibility in the target area was good but the 306th was unable to score hits on the primary target. Germany reactions included 25 to 30 fighters and intense and accurate flak. The fighters attempted to break up the formation with determined head-on attacks, but the 306th formations were largely unaffected and suffered no loses. 41-24466's top turret, R.C.'s normal battle position, failed early in the flight.

4 April 1943 - Paris, France (41-24466)

The Renault Motor Works were hit by 97 B-17s including 30 from the 306th. The 306th did not lose any aircraft although three from other groups went down. RAF Spitfires provided escort almost all the way to the target area. After they retired approximately 50 FW-190s worked over the bombers for about 50 minutes. The target was left a smoking wreck with damage taking about six months to repair according to Germany records.

The debriefing sheet from 41-24466's crew noted that the aircraft had suffered a flak hit on the number three engine cowling and that the aircraft was no longer fit for combat operations.

British Air Chief Marshal Sir Philip Joubert, commenting on the raid that day, told the BBC, "It almost looks as though the Fortress-type of bomber has defeated the contemporary fighter." Almost, but not quite.

5 April 1943 - Antwerp, The Netherlands (41-24560-Little Audrey)

Little Audrey was one of 20 306th aircraft to take off for what was to prove to be a difficult mission against the Erla Industrial Works. Little Audrey, an aircraft normal assigned to the 369th Bombardment Squadron, was flown by Capt. Smiley's 368th crew because of the grounding the previous day of 41-24466. Little Audrey turned back at the English coast about 90 minutes after takeoff with engine supercharger trouble. It was one of three 306th aircraft to abort the mission. During the fighter reactions to the rest of the group, 306th air crews were scattered and accidentally dropped a number of bombs on the Belgian border town of Mortsel where some 900 Belgian civilians were killed. The 306th, which had gone through the month of March with only two loses, lost four B-17's this day, all to head on attacks by FW-190s. Also on this mission, T/Sgt. Michael Roscovitch of the 306th became the first Eighth Air Force crew member to complete a combat tour of 25 missions. The unfortunate Roscovitch was to die a short time later in an aircraft accident in Scotland on his way back to the United States.

16 April 1943 - Back to Lorient, France (42-5251-Bodacious Critter)

Today's target was the power station at the U-boat facility, the same target attacked on 6 March. Four of the 20 306th aircraft dispatched aborted because of equipment problems. Three other group aircraft jettisoned their bombs over the water while under heavy fighter attack. An eighth group aircraft was unable to attack because of malfunctioning bomb bay doors. Twelve group aircraft, including *Bodacious Critter*, attacked the target although the bombing results was poor because of a navigation error by the lead group. Unidentified 306th gunners were given credit for downing three German fighters.

R.C.'s Last Mission

The Prelude

The 306th approached the mission of 17 April 1943 in a state of turmoil. Although it had suffered only two losses during its nine March missions, the loss of four aircraft on the 5 April mission against Antwerp had been a grim reminder of the combat losses the unit

had suffered between October 1942 and February 1943. Even before the Antwerp mission the 306th had lost 20 of its original 35 crews and a number of replacement crews. This prompted the group flight surgeon, Maj. Thurman Shuller, to write in early March a letter to the new group commander, Lt. Col. Claude Putman, stating his concern over the deteriorating mental state of the group's aircrews. He wrote of the declining morale of crews and their conviction that they could not survive the combat ordeal. The group commander then endorsed the letter and sent it off to Headquarters Eighth Air Force.

Russell Strong in his history of the 306th opines that this letter may have been much of the impetus behind a March ruling by the Commander, Eighth Air Force, Gen. Ira Eaker, that aircrews would be rotated back to the United States after completing 25 combat missions. Obviously the ruling had a positive impact on the crews, but probably left many of them wondering if it had any practical meaning given the loss rates they were suffering. It would be another month before the first individual crewmember, the ill-fated Roscovitch, completed a combat tour and another three months before a complete crew, that of the *Memphis Belle*, completed a tour.

It was also clear that the 306th had command problems. The group's first commander, Col. Charles Overacker, was replaced on 3 January 1943, becoming the first of the original four B-17 group commanders to be replaced. The 306th had been in England less than four months when he was replaced. Gen. Eaker replaced him with one of his senior staff officers, Col. Frank Armstrong, who according to Roger A. Freeman writing in The Mighty Eighth had been sent by Eaker to "shape up the battle-sore" group. According to Stephen McFarland and Wesley Newton, authors of To Command the Sky, Overacker returned to Washington and in March complained to Air Staff officers that crews arriving in England were improperly trained and could not be brought up to standard in that country because of its notoriously bad weather and the lack of proper gunnery and bombing ranges. Gen. Eaker, informed of these complaints, commented that Overacker lacked the "stamina for the hardships of war" and "was mentally broken by the experience." Overacker, as best I can tell, then faded into history. Col. Armstrong stayed with the group for 44 days before being recalled to Eighth Air Force Headquarters to take on a new staff assignment. He was replaced by Col. Putman. It was the service of Col. Armstrong and the problems faced by the 306th that would inspire, in large part, the classic movie on the Eighth Air Force, Twelve O'clock High. The unit in that fictitious account was the 918th Bombardment Group (Heavy) or 306 multiplied by three.

The Mission

The mission day on 17 April 1943 began at 5:30 AM. Aircrews had been alerted the previous night that there would be a mission the following day and command pilots were told they would carry maximum fuel loads. Most of the crews also knew that it would be a big one since men were being called back from leave, according to one author, to crew

⁸ High losses were to continue to plague the 306th. By May, when the four B-17 groups of the Eighth Air Force had lost all together 100 B-17s, 45 of them came from one group, the 306th.

as many aircraft as possible. Crews began breakfast 30 minutes later. The mission briefing began at 7:00 AM and lasted for about an hour. During the briefing, aircrews were told by the group commander that they were to fly a maximum effort mission against the Folke-Wulf Flugzeugbau (aircraft factory) just south of Bremen, Germany. The group commander was then followed by the group operations officer who briefed the formations to be used, formation leaders, radio frequencies, and flight routes. Then came the intelligence officer who showed a picture of the target and told the crews of the 450 antiaircraft guns that could be brought to bear against the bomber force. The final briefer was the weatherman. Weather on 17 April for Bremen was a rarity for Germany, clear with unlimited ceiling. Then, as Lt. Mort Fega of the 305th described it, the crews were issued "a Mars Bar and directed to the chaplain of our choice."

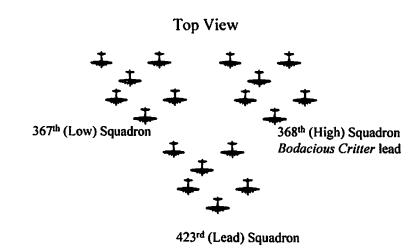
Crews undoubtedly met this announcement with mixed emotions. While they most likely did not relish the prospects of attacking what would be a heavily defended target, it did give them a chance to strike back at their most feared opponent, the FW-190, which was manufactured at the facility.

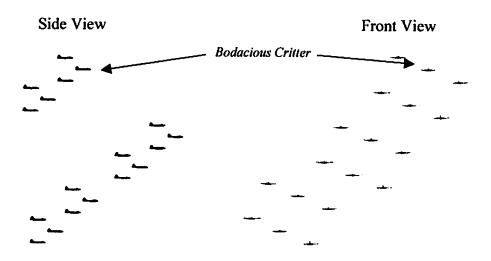
Crews then drew flying gear, in those early days fleece-lined suits, and navigation charts and assemble at their aircraft at 8:45 AM. By 9:00 AM crews had entered their aircraft, installed the guns and hooked into the aircraft intercom system. At this point, the aircrews began starting engines and warming them up with taxi start time set for 9:15 AM. The first aircraft began its takeoff roll at 9:45; Capt. Smiley's aircraft took off two minutes later. All 306th aircraft were airborne by 10:05. All 26 aircraft immediately began to climb out for the 306th group assembly area, a block of sky about four miles wide and ten miles long approximately five miles east of Oxford. Here in a process that took about 30 minutes, the group would form into its combat formation.

The formation used that day consisted of a new compacted formation developed earlier in the month by Gen. Haywood Hansell and Col. Curtis LeMay (Figure 4). In this formation each bomb group was to array its aircraft in a box about 1150 feet wide, 900 feet high, and 650 feet deep. In each box would be 18 or so aircraft. This would give each of the formations about 200 guns with which to form an interlocking pattern of self-defense fire. The 306th operations plan called for the 423rd Squadron to lead the group. The 367th was the low squadron, and the 368th the high squadron. R.C.'s aircraft, piloted by Capt. Smiley, was lead for the 368th.

The men of the 368th probably were thankful, if in a silent way, for their formation position. It had the advantage of protection against head on attacks by the leading 423rd below them and another group formation that would fly above it once the final formation was assembled. The unlucky squadron was the 367th because of its low position, a position crews nicknamed the "Coffin Corner" and "Purple Heart Corner." Squadrons assigned to this position were rotated from mission to mission because of the vulnerability of the location.

Compact Group Formation (April 1943)





The compact group formation developed by Gen. Hansall Haywood and Col. Curtis LeMay in April 1943 and first used over Bremen on 17 April 1943. The formation was designed to array 18 or so B-17s in a box of airspace approximately 1,150 feet wide, 900 feet high, and 650 feet deep where they would be able to provide overlapping and supporting fires. Capt. Smiley's crew in *Bodacious Critter* was lead crew for the high squadron on 17 April.

Once the groups had assembled in their individual areas they then proceeded to the strike assembly point. In this location the individual groups assembled into a two-echelon formation of all four B-17 groups (Figure 5). The first echelon, the 101^{st} Combat Wing, was led by the 91^{st} Bomb Group with the 306^{th} below and a composite group of 91^{st} and 306^{th} aircraft above. The second echelon, the 102^{nd} Combat Wing consisting of the 303^{rd} and the 305^{th} Bombardment Groups, followed several minutes behind in a similar arrangement.

The strike force departed the assembly area at 10:30 AM leaving it sufficient time to cover the nearly 400-mile flight route to Bremen by the assigned time over target of 1:00 PM. The route that day took the strike force northeast from East Anglia out over the North Sea on a course that paralleled the Dutch Frisian Islands (Figure 6). The mission against Bremen represented about as deep as the B-17Fs of the day could fly. After clearing the Dutch islands the force turned right and penetrated German airspace over Emden, Germany and flew directly to Bremen. All together, 115 B-17s took off with only nine aborts including two from the 306th, a low abort rate for operations in early 1943. This meant that 106 B-17s would penetrate German airspace making the raid the largest Eighth Air Force attack to date.

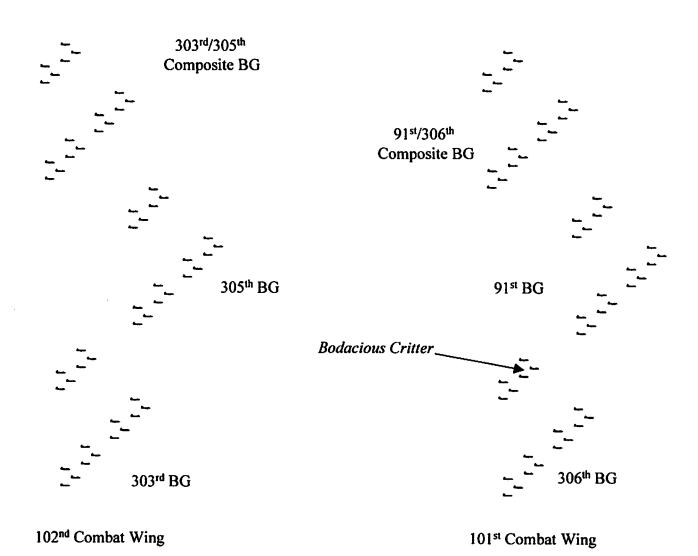
Despite an uneventful assembly, the group had the misfortune to be spotted by a German patrol aircraft off the Frisian Islands. This aircraft radioed the contact to its controller who then alerted German Air Defense controllers. This gave German air defense command personnel an additional hour more than they normally would have had. Gen. Hansell, 101st Combat Wing commander, claimed in his after action report on the raid that German fighters crews were instructed to "go into the attack regardless of everything" and to pursue the bombers until the fighters had exhausted all their ammunition.

After the bombers made their turn and entered German airspace, their crews spotted the first of what would total about 150 single-engine fighters, mostly FW-190s with a few ME-109s, but with a few twin-engine ME-110 fighters and JU-88 bombers modified as night interceptors. All reacting aircraft were armed with heavy cannon armament, 20-mm or larger. The FW-190s and ME-109s conducted slashing attacks against the bomber formations while the less nimble ME-110s and JU-88s conducted either stand-off attacks at a range of 1,000 meters with 40-mm cannons or attacks against individual B-17s that had fallen out of formation because of damage.

The first fighters spotted, about 45 FW-190s, initially flew parallel with the B-17s but about 2,000 yards to their left outside the range of defensive fire. The fighters than accelerated and turned in front of the bombers at about 1,500 yards out and 200 to 300 feet above the bombers to set up a classic above, head-on or "12-O'clock high" attack. The fighters than dove on the bombers opening fire at about 600 yards and continued through the formation spraying bombers with fire as they went. This attack was timed to strike as the bombers were most vulnerable, just as they were changing their formation to

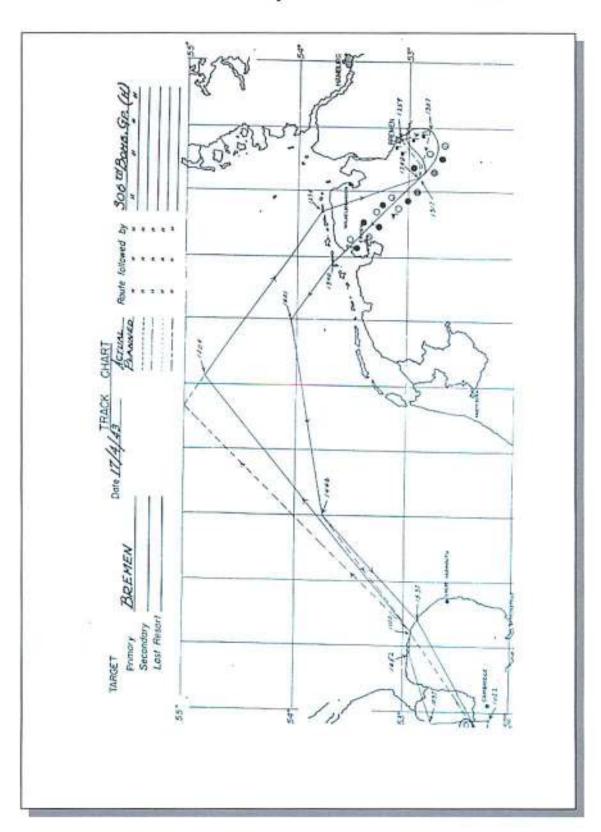
Combat Formation

(Bremen--April 1943)



Strike forces for the 17 April 1943 raid on Bremen. Forces were arrayed in two echelons (the 101st and 102nd Combat Wings) with the first echelon approximately two minutes in front of the second. Eighth Air Force authorities were to conclude that the heavy losses suffered by the first echelon were due in large part to its inability to maintain a tight formation in the face of the determined attacks by German FW-190s. The first echelon lost all 16 bombers downed during the raid.

A Facsimile of the Attack Route Map from the 306th's Final Report on the Bremen Raid



begin their bombing runs. The fighters, in line with their instructions, pressed home this attack in spite of a heavy German flak barrage that endangered both friend and foe alike.

Bombers from both the 91st and the 306th dropped good bomb patterns, but at a heavy price. Of the 531 1,000-pound bombs dropped, enough hit the target area to destroy half the factory according to German records, but 16 bombers, ten from the 306th and six from the 91st, went down. All but one of the stricken bombers was hit in the initial FW-190 attack. The 102nd Combat Wing suffered no losses and inflicted little damage having bombed wide. The loss-rate for the mission, nearly 16 percent, was the highest suffered by the Eighth Air Force to this point in the war and would be exceeded during only a hand full of missions during the remaining two years of bombing operations over Germany.

The Eighth Air Force after action report on the attack made the following observations about the loses suffered by the 101st Combat Wing:

"It cannot be categorically asserted that formation quality was the sole or principal cause of losses of the 101st Combat Wing, although it was almost certainly a contributing, and perhaps major cause. Various other factors must be considered. Thus, it has been the evident policy of the enemy on all recent raids to concentrate on the leading element in order to break up our bombing run. This was strongly evident in the present case by the fact that enemy fighters, although present in force for a considerable time, withheld their attacks until we had passed the initial point and our bomb bay doors were down. Then, too, our bombing run carried us into one of the heaviest flak concentrations ever assembled."

This report went on to state that General Frederick Anderson, who was the commander of the 4th Bombardment Wing and along with the 102nd Combat Wing to observe the mission, opined that the 101st Combat Wing would have faired better had it not been scattered.

The 368th combat diary described the raid this way:

"17 April - Bremen - Today we were given certainly the most vital target to date and the toughest, the Focke Wulf plant itself. To hit this target, and hit it hard, as we unquestionably did, the 368th made its greatest sacrifice of the war. Sharing the lead with the 91st Group, our group took the brunt of a desperate fighter attack and severe flak. Of our six-plane formation, Lt. Maxwell Judas and his crew alone succeeded in getting back to base. Capt. Smiley, and Lts. Fred Gillogly, Theodore Jankowski, Glenn Lally and Robert Miller were all forced down over Germany. Our formation broke up just after the bombs went down, and "Judy" found himself alone with only two engines operating, and incidentally, a main wing spar shot through, the top turret out and the bomb doors stuck down. . . . [Among] the missing crews are:

Capt. Walter N. Smiley
2LT Avery L. Ewan
S/S
1Lt. Wilbur N. Breunig
S/S
1Lt. Martin M. Strauss
T/Sgt. Donald B. Hepler
S/S

T/Sgt. Raymond C. Clifton S/Sgt. Roderick C. Clark S/Sgt. William R. Payne S/Sgt. Lawrence J. Sliff S/Sgt. Roy E. Staiff"

The official version of how *Bodacious Critter* was lost was described in Missing Air Crew Report (MACR) 15518, which states, "This aircraft is believed to have turned back toward the enemy coast at 54 deg 10 min N—06 deg 40 min E, and is believed to have crashed into the sea." MACR 15518 most likely is based on post-mission debriefing of the sole surviving 368th aircrew, that of Lt. Maxwell Judas. Handwritten notes of this debriefing (Figure 7) state,

"14:05 Lt. (sic) Smiley—turned back toward coast of Germany 54⁰ 10'N-6⁰ 46'E—possibly 4 chutes out before Smiley must have hit water (1 B-17 blew up on hitting water was this Smiley?—it sank immediately) This aircraft at 1000' then—apparently Smiley"

Russell E. Strong in his book on the 306th accepts this version when he wrote that Capt. Smiley's aircraft made it to the target to drop his bombs after being hit in the first FW-190 attack. The aircraft then turned back toward the North Sea some 60 miles away. After flying out over the water Capt. Smiley apparently decided that the aircraft would not make it back to England and attempted to return to the German coast only to crash at sea with no survivors.

This version, however, raises two questions. First, it fails to account for the possibility there were four survivors from the aircraft. While it is possible that the four chutes reported by Judas's crew were for crewmembers who failed to survive the jump, a more likely explanation is that this crew saw another aircraft in distress. It is relevant that nearly all remaining B-17s lost that day had at least one survivor and many had multiple survivors. This version also raises the question of why the crew was unable to bail out of the aircraft given the 20 minutes or so it flew under control after the FW-190 attack. A possible explanation is that the aircraft commander initially thought his aircraft was sufficiently flight worthy to return to England only to change his mind once over the North Sea. Once over water, the crew might have chosen not to bail out in favor of a ditching at sea because of the low probability of being picked up before cold North Sea water and the resulting hypothermia took its toll. The aircraft, then, either exploded as it neared the surface of the water or suffered a non-survivable crash on ditching.

But, there is some support for a different version. Robert Seelos, a good friend of Smiley's who also flew with the 368th, told me by email that he had heard that Smiley's aircraft was severely damaged in the initial FW-190 attack and that all crewmembers in the front of the aircraft (including R.C.) most certainly parished in this initial attack. The

A Facsimile of the Declassified Debriefing Sheet from the Crew of Lt. Maxwell Judas

2277.000
DECLASSPIED FER EXECUTIVE GENER 12356, Section 3.3, AND 745005
302
1 das aprilité. de la terregu
HOT NEWS HEPCHT
Group:A/C NoLateS
467 L+ Lally down over Target I-liered to 10,000 ft. down - 3 chuter
followed to recent to down - 3 chuton
No 3 was on fine - in control when last.
14:05
2 Lt. Smiley - turned back toward Coast of
Jermany 54° 10'N-6°46E perioly 4
cheetes out before Smiley must have hit
water (1 B-17 blew up on hilling water
This a/c sat 1000' then - apparently Suiley.
Time:
Check List of "Hot News" Items
 Friendly aircraft own in sea, or a serious distress anywhere. Enemy warships, etc.
3. Enemy troop movements, etc. 4. Dinghies or life rufts.
. Check List of Items to be Covered on "Not News"
1. Location of object reported:
 Position of plane at time of observation; Time of observation;
4. Height at time of observation. 5. If energy ships or troop - rements:
Speed.
Course or direction, Remarks.

aircraft then immediately went into a terminal dive from which it did not recover. Seelos, who had been shot down and captured during the 5 April mission against Antwerp, wrote that he had been told this by a fellow 368th pilot when they were reunited in a German POW camp in the summer of 1943. This individual had been shot down on 17 April as well and had witnessed Smiley's crash.

This version, if it were accurate, would suggest that Smiley's aircraft crashed on land or possibly the Weser River and not in the North Sea as we all had been led to believe. While this version seems more consistent with the facts as reported by American observers it is not supported by German records that normally recorded the serial numbers of aircraft found on German territory.

In sum, we probably will never know the real story.9

The Aftermath of the Mission

Russell Strong recorded the return of the 306th this way:

"As the toll exacted of the 306th became evident, the waiting officers and enlisted men at Thurleigh were stunned. With four crews lost on 5 April and now another ten on 17 April, morale on the base was devastated. . . . It was the loss of old familiar faces which caused the deep, aching feeling.

"The group tonight is stunned, but not broken," wrote 306th flight surgeon Maj. Shuller. "We used to reel and rock with the loss of three aircraft in a raid, but we didn't believe it possible to lose ten aircraft in one mission."

Gen. Hansell, First Combat Wing commander, assessed the results of the attack and told the 306th commander to stand down until the savage hurts could mend. Although Col. Putman reported the group ready once more for combat two days later, it was not to fly combat again until 1 May.

Concluding Observations

In a final irony concerning the mission, Allied intelligence was to find out later that the German Aviation Ministry, because of the threat of bombing attacks against coastal facilities, had moved fighter production from the Bremen plant some six months before

⁹ There is one final potential uncertainty about the circumstances of R.C.'s last mission. Roger A. Freeman and David Osborne in their book, *The B-17 Flying Fortress Story*, claim that Capt. Smiley's crew was flying B-17F 42-3034 on the Bremen mission of 17 April. While this book is well researched and highly regarded in military historical circles, it runs counter to four other documentary sources, including several squadron assignment lists from the day of the mission. I have chosen 42-5251 as the correct aircraft, choosing to accept these documents given their immediacy to the events in question.

the 17 April attack. In sum, while the attack had wrought serious damage to an important war facility, it had done little to disrupt the production of FW-190s.

In some ways, this final insult seemed to be a fitting end to the great experiment that marked the Eighth Air Force's first eight months of operations over Europe. Since its first B-17 mission on 17 August 1942, the Eighth had launch about 40 missions involving some 3,500 individual B-17 sorties at the cost of about 100 bombers and 1,000 crewmen. While an overall 2.8 percent loss rate had not been prohibitive, most of these operations had been mounted against European coastal targets where German defenses were at a decided disadvantage. Operations against German targets, such as the raid of 17 April, had proven consistently to be more costly.

Moreover, the Eighth had not been able to inflict any meaningful damage on the German war machine. The submarine pins had proved to be too hard to be vulnerable to the 500-and 1,000-lb bombs then in the inventory and softer targets often escaped damage when Eighth Air Force crews were unable to deliver accurate attacks in the face of determined German defenses and terrible European weather.

The American high command was discouraged, in large part, because its expectations had been inflated by overly optimistic assessments on the part of Army Air Corps strategists. These strategists, located in the 1930s at the Air Corps Tactical School at Maxwell Airfield, Alabama, had come to two conclusions, almost mantras, about the potential of strategic bombing:

- Accurate daylight bombing had the ability to disrupt a developed civilization with a relatively small number of sorties.
- ♦ Heavily-armed bombers like the B-17 and the B-24 could successfully penetrate any conceivable air defense and do so without a fighter escort.

The height of enthusiasm over what a force of strategic bombers might be capable of was reached just prior to the US entry into World War II when Gen. Claire Chennault assured President Roosevelt that were he given a sustainable force of 150 bombers and 100 fighters, he would be able to assure the defeat of Japan in six months. While there are those who would claim that the optimism of the strategists was based more on their desire to see an independent air force than on any sensible calculus, the result was the same. Eight months of operations had proven that strategic bombing was not the panacea its supporters had predicted.

But if the mission of 17 April marked a low point for the Eighth Air Force, it also marked a point of departure. ¹⁰ Up until that date the Eighth had had to use every available

¹⁰ The Eighth Air Force's real low point was to come during "bomber week" in October 1943 when a disastrous mission to the ball bearing factories at Schweinfort would result in the loss of 60 bombers (about 20 percent of the force) and the virtual suspension of bomber operations over Germany for several months as US air planners contemplated the challenge of insuring that US operations were viable.

bomber of all four of its B-17 groups to assemble a force of 100 aircraft. Yet by mid-May, less than a month later, five additional B-17 groups would arrive from the States and by June the Eighth would be able to mount attacks involving 200 or more bombers with some ease. This would increase to 300 bomber raids as the new group kept on coming.

Moreover, the newly arrived B-17 Fs had been equipped with "Tokyo tanks" giving them the ability to reach about 100 miles further into Germany. These would be joined in the autumn of 1943 by B-17Gs with their additional forward armament and the installation on selected aircraft of British-developed *Oboe* and *Gee* electronic bomb/navigation systems to help lead crews deal with the weather problem. But the decisive development would be the arrival of the P-51D Mustang in early 1944 that would be able to escort the B-17s wherever they were dispatched. This last development was especially important in that it first, ensured the survival of future bomber crews and second, gave the US a powerful weapon to take on and destroy the Luftwaffe directly. Luftwaffe fighter forces were forced to react to the growing numbers of B-17s (and B-24s) which could attack throughout Germany and when they did, superior American fighter pilots, flying superior aircraft, chewed them up. In other words, R.C. flew his last mission as the Eighth was about to become a truly potent bombing force.

In spite of the importance of these technical developments, a new approach to the air war by Allied planners probably had a bigger impact. This approach resulted in the issuance of the Pointblank directive by the Combined Chiefs of Staff in June 1943. This directive, with the backing of Roosevelt and Churchill, essentially told US and British bomber commanders that while they could continue to attack the German war fighting potential, they also had to assure that the German Air Force was destroyed in the process. This was followed in March 1944 with a decision that Eisenhower, as supreme commander of the invasion of Europe, would essentially control US and British bomber forces during the 90 days leading up to the invasion and for the first 60 days after D-Day. Although British and US bomber commanders never really gave up on the potential decisiveness of strategic bombing, they proved more than willing to use their forces in more traditional combat missions. In fact, Arthur Harris, commander of British Bomber Command, was to write in 1947, "The comparatively brief period when strategic bomber forces of both the RAF and the USAAF were placed under the control of Eisenhower . . . was absolutely the only time during the whole of my command when I was able to proceed with a campaign without being harassed by confused and conflicting directives."

The result was a more direct support role for the bomber force during which Allied bomber forces played a key role in obtaining air superiority over Normandy's beaches and essentially destroying any German capability to reinforce German Army forces in the Normandy area. The success of this battle was demonstrated in dramatic fashion on 6 June 1944 when less than a dozen German aircraft were able to reach the D-Day beaches. In the year after R.C.'s death the Eighth Air Force played a critical role in making possible an invasion that did not have to cope with enemy air power. This was a

condition that pretty much marked the nature of Allied ground operations throughout the rest of the war.

In looking back on R.C.'s service in England there is a natural tendency to think sadly about what might have been. He lost the opportunity to observe what truly was an American miracle—the recovery from depression, the development of a living standard that typified the American Dream, and the reconstruction of Europe—as well as to live out life's most precious personal experiences. And yet this sadness is offset to a degree by the realization that much of what R.C. and others like him did played a fundamental role in one of the most important endeavors of the 20th Century, the utter destruction of Nazi Germany. For while the Eighth Air Force had not yet achieved its potential, its first aircrews were to establish the procedures and standard of personal valor that would eventually bear the fruit of victory. As Roger Freeman wrote in his history of the Eighth Air Force, those first crews of "the 91st, 303rd, 305th, and 306th would always have a unique claim to pride of place—they were the pioneers."

RAF Thurleigh

Today



(Stephen Welch uk.airfields@virgin.net)