



# TARGET: GERMANY

The Army Air Forces' official story of the  
VIII Bomber Command's first year over Europe

## "LIFE" PRINTS CHAPTERS FROM AIR FORCES BOOK

In its first year over Europe, the Army Air Forces VIII Bomber Command proved it was capable of bringing American military might to the heart of Europe. To write the official story of this crucial year Lieut. General Ira Eaker, Eighth Air Force Command-

er, detached two of his officers. On Sept. 15 the manuscript of *Target: Germany* was flown to the U. S., where it will be published Dec. 7 by Simon and Schuster, in cooperation with LIFE. On following 14 pages are extracts from some of the book's chapters.



THROUGH THE BLUE SKY OF ENGLAND, MOTTLED WITH CUMULUS CLOUDS, FLIES A STRONG FORMATION OF U. S. FLYING FORTRESSES ON WAY TO BOMB THE GERMANS IN EUROPE.



"BOMBS AWAY," CALLS BOMBARDIER. TWO HEAVY BOMBS HURTLE TOWARD LOBENT

# TARGET: GERMANY

IT TELLS THE OFFICIAL STORY OF THE VIII  
BOMBER COMMAND'S FIRST YEAR OVER EUROPE

Target: Germany, here presented in condensed form, is the official Army Air Forces story of the VIII Bomber Command's first year over Europe. Comprising some of the most memorable reporting on World War II, it traces the VIE's history from the early, inadequate days in England to the destructive raids of July and August on Hamburg and Regensburg. Particularly interesting are the accounts of the courage and endurance of American airmen and the stories of how American bombers for the first time collided with the massed strength of the Luftwaffe over Lillie; and how the Liberators (B-24's) operated alongside the Fortresses out of England. Illustrated with Air Forces pictures, many of which have never been released before, it will be published Dec. 7 by Simon and Schuster (paperbound, \$1; clothbound, \$2). All royalties will go to the Army Air Forces Aid Society, as did LIFE's payment for the right to print these episodes.





WEIGHING NEARLY 10,000 LB., THE B-24 IS 34 FT. 1 IN. LONG, HAS A WING SPAN OF 35 FT. 10 IN., CARRIES AN AVERAGE OF 10,000 LB. IN BOMB LOAD, HAS A CRUISING SPEED OF 215 M.P.H.

## MISSION 95

It is 1645 hours, June 21, 1943. The daily Operations Conference at the headquarters of the VIII Bomber Command, somewhere in England, is about to end. In a square, high-ceilinged room buried beneath thirty feet of reinforced concrete, five men are seated at a table. This is the moment of decision.

The Commanding General stares at the wall map with its red-ribboned roads leading to and from the targets. He is weighing, judging, remembering his own trips across those cold seas and that unfriendly land. He turns to the Weather Officer.

"You say 6/10 cloud over target? Can you give me better conditions in other target areas?"

"No, sir, I'm afraid not."

"We'll go to the rubber plant at Hülls, then. Keep me posted on the weather."

The action has begun but, like that of any well-planned drama, is slow at first. Field Order 95 becomes a yard-long message on the teletype. Miles away, at the several Air Divisional Headquarters, the operational staffs study its cryptic story. Targets and aiming points, fighter support, aircraft required, routes out and back, bombing altitudes, zero hour, radio procedure—each point is analyzed and discussed, translated from plan to practice.

At 1330 Command calls. The weather is holding. It is 0105 of June 22, when the last detail is completed and the last annex written. Once more the teletype begins to clatter, this time speeding the Combat Order from the Air Divisions to the Combat Wings and their satellite Groups scattered over the windswept heart of England.

Group 500 is a typical station. A flat, grassy plain some two miles on a side, it is criss-crossed by concrete runways, encircled by a perimeter

track, and doctored, on its edges, with dispersal areas where the bombers are parked.

The station is dark and silent at 0500 on this June morning. A chill wind ruffles the grass, an old moon hangs low over a neighboring wood, and high in the clouded sky a nightfighter drones by on patrol. The plane guards wait watchfully within the monolithic shadows of the bombers. In the station headquarters building, behind the gasproof doors, the windowless offices which house the Message Center and the Operations Room are quiet, but brighter with light. In the Message Center a sergeant and a plc are talking shop, in Operations the Watch Officer is reading a book, and, down the hall, the Intelligence Duty Officer is writing a letter home.

### The machine in motion

The teletype at Group 500 begins its clatter at 0506 hours. At Group 501 it breaks the silence too, and at 653 and 187 and 404, at 203, 433, 366, and 714—at all the scattered airdromes spread abroad across this part of England. At each the scene is the same in its essentials; at each there is the same sequence of events. What Command has conceived, what Air Division has planned and scheduled, what Combat Wing has further detailed and directed, these Groups now transpire to action. The machine as a whole is now in motion.

In the Intelligence Room of Group 500 the Duty Officer has pinned a large piece of transparent cello over the wall map and is tracing the routes out and back with a red grease pencil. The white length of the Combat Order is on the table. S-1, the Intelligence chief, studies it. *This is a rough one. Two attacks, one on the edge of the Ruhr. Happy Valley. The other one on our old friends at Antwerp. Group 500 to go along with the main thrust, which means a long ride and plenty of flak and fighters. Zero*

*hour class going out over the coast. Takeoff at 0700, briefing at 0400, and breakfast at 1200. It's now 1130. Better get set up for the Old Man.*

The Flak Officer comes in, rubbing a rough chin and regretting the last beer, three hours ago. He looks at the order, whistles, and goes to his files. S-4 has the target folder out now. A large-scale map of the area. A photograph, crystal clear, taken from a reconnaissance plane seven miles up. A row of smokestacks, casting attenuated shadows . . . gas tanks . . . cooling towers . . . transformer station . . . hutments . . . acres of buildings, dispersed and camouflaged . . . a railroad siding. From off left enters a running gash—a pipe line, to the expert's eye. Top, left to right, courses the Wesel-Datteln canal. Off right, across the tracks, a coal mine. Around the whole lies the checkerboard of Prussian farmland. A war plant cunningly (but not cunningly enough) dropped into the innocent countryside.

At 0145 the Old Man arrives at Intelligence. The Old Man is thirty-five. He likes to lead his boys on missions, and has, but a Group Commander's place is usually on the ground. Now, as he studies the routes on the map, he remembers his own trips—the boiling flak bursts, the attacks of the enemy fighters, the ice-like blue of the sky five miles aloft, and the unreality of the patterned earth below. Sucking a dry pipe, he stands for long minutes before the map. Then he sits down with the Combat Order and starts reading, slowly and with complete absorption. He might be memorizing the lines. And in a way, he is. For all through the long day so come phrases from this order will run slowly through his mind as from his earth-bound post in England, he follows Group 500's course in the pattern of Mission 95.

0500 hours on a chill June morning is no time to get up. Group 500 does get up—with howls and





Breakfast is often at 3:30 the morning of an Eighth Air Force raid on Europe. Clothes for such a raid depend on each man's whim and post requirements. Usually a gunner wears heavy over-

dunder, a bright blue, electrically-heated "sweat suit" made of flannel, O.D. trousers or fleece-lined leather pants and a sheepskin jacket. Temperature over Europe goes as low as 40 below.



Young but determined faces greet the "Old Man" (Group Commander) as he speaks to the crews in the briefing room. S-L, Plank and Weather officers also give their specialized information

at the briefing session. Below, as their B-29 approaches the French coast, two waist gunners man their machine guns. They are wearing goggles, masks, helmets and throat mikes.



coats, in deliberate silence, or with laughter. Each man faces the black morning in his own fashion, for each knows that Group 500 is going out. The weather has held. The combat crews—the pilots, the copilots, the navigators, the bombardiers, and the gunners—get into their flying outfits. First, the heavy underwear, then the bright-blue, electrically heated "sweat suit" of flannel, O. D. trousers or fleece-lined leather pants, and a sheepskin jacket. No two dress alike, each man catering to his whims and the requirements of his post. Heated gloves and boots in one hand, and Mae West and helmet in the other, they're ready for the truck to the mess hall.

By 0330 the barracks housing the combat and the maintenance crews are emptied and the mess halls filled. The station is awakening now, as the intimation of action spreads like an ever-widening ripple. Across the rolling plain of central England this gradual stirring is duplicated as each Group assigned to Mission 95. The tempo quickens; a note of urgency is for the first time apparent in the movement.

At 0405 the briefing room is ready, maps spread upon the wall and benches ranged along the concrete floor. The crews drift in, blinking at the light, and fill up the benches—officer pilots, navigators, and bombardiers to the fore and sergeant gunners at the rear. The square of transparent talc with its red course lines is pinned to the map. Group 500's crews look first at that. Then they look away and make small sounds of disapproval. *FW's, here we come. . . . Johnny boy, you're spoiling Europe today. . . . Oh, oh, who thought this one up! . . . What is it, anybody know!*

#### The Old Man speaks

When the Old Man turns and faces them there is a sudden hush. Through the blackout curtains there drifts, in the moment of silence, a sound that reaches every ear in the room. It is far away and muted. It is the sound of a Fortress engine at its dispersal point. The line crews are on the job. The combat men stiffen for a moment. Then they relax. They look up at the Old Man, who stands facing them gravely.

At Command, Weather is having a round-robin talk with the meteorological officers of the Air Divisions and the Combat Wings. The weather chart is developing as predicted. Front moving eastward across Irish Sea, bar planes will beat it back to base. Weather's final judgment: the attack is feasible. Mission 95 has conquered its first great enemy—weather.

The Old Man is talking: *I don't need to tell any of you what we did at Kiel on the last mission. The bombing was good—some of the best we've done. I can't say as much for the formation we flew. We bailed out that over at the trigone after the mission. I want you pilots and copilots to profit by that discussion today. Our target is the synthetic-rubber plant at Huls, near Rucklinghausen. A smaller force will be attacking the Ford and General Motors plants at Aachen, approximately half an hour before your Time Over Target. There will be an RAF fighter sweep over this part of the Dutch coast at 1135, an RAF diversion in here, and one of our own Groups will fly a diversion in this point in order to draw off enemy fighters from this area. I want all pilots . . .*

The pilot of *Turbid* is seated in the front row. A quiet young man of twenty-five in a leather jacket and O. D. trousers, with a white silk scarf draped about his neck. Two years ago he was an insurance adjuster, eight months (or was it eight years?) ago he said good-by to his wife and small son in Savannah. The pilot is a conservative flier. He is also a worrier, in a mild way. Now, as he listens to the Old Man, he is fretting about *Turbid's* No. 3 engine, which has been giving them



trouble. Hills is the seventeenth mission for Tarbaby and his crew.

The Old Man: . . . fighter support by twenty-three squadrons of RAF Spitfires and three of Typhoons will be furnished for your withdrawal. They will meet you here, which will be approximately thirty minutes after you leave the target. That means you will go in and bomb unopposed. Our P-51's are furnishing withdrawal cover for the Antwerp attack. Are there any questions?

Ball Turret is the youngest, the smallest, and, outwardly, the most intrepid member of Tarbaby's



A GROUND CREW ATTACHES FUEL TO BIG G-AL. BOMBERS

crew. Having been graduated from high school and worked a year with a well-drilling outfit, Ball Turret is Tarbaby's crack shot, with a claimed bag of five Nazi birds. He calls his twin fifties "Spot and Spot." Seated in the rear row, sunk in oversize flying clothes, he is now trying his best to go to sleep.

So it takes the stand, pointer in hand. The lights are lowered. A picture of the plant at Hills is flashed on the screen. This is the plant at Hills. It produces approximately twenty-nine per cent of Germany's synthetic rubber and eighteen per cent of its total rubber supply. With Germany at present in short of rubber that she's trying to bring it through in blockade runners from the Far East, I don't need to emphasize the importance of this target. The plant area is a square, approximately 3,500 feet on a side. Your approach will be on . . . . Your aiming point is here, on the gas plant. This is the butadiene plant and this . . .

The copilot of Tarbaby is twenty-one, big and blond, and was on his way to becoming a mining engineer when he started flying training fourteen months ago. He is boisterous, gregarious, and, privately, a little disappointed that there are no Dawn Patrols and champagne binges in this war he finds himself fighting.

. . . across their railway sidings, which will be on your right as you cross the target, you will see the Angere Vektoria coal mine, which serves the plant. This group will be bombing from 25,000 feet. After bombing you will continue to this point, where a turn is . . .

Tarbaby's bombardier is called "Deadeye" because he is. Small and fair, he looks deceptively cherubic in repose. His capacity for watery English beer is a legend in Group 500. Sitting in the third row, he is wearing a disreputable coverall which he insists brings him good luck. His two loves are Tarbaby and the Dodge, in that order. His eyes are closed now. He is memorizing, with infinite anticipation, the exact pattern of the gas plant at Hills, near Recklinghausen.

Weather has taken the stand. He has been up all night, and looks it. A vertical cross-section of the weather enroute to the target—a layer cake of clouds and meteorological symbols from ground level to 35,000 feet—is shown on the screen. Weather talks rapidly, as though he were telling an old, old story: At base you'll have 8/10 cloudiness above 25,000. Visibility two miles in haze. Traces of stratus-cumulus over the English coast going out.

This patches of alto-stratus up here at 12,000 with tops at 24,000 and towering to 25,000 over the North Sea. Freezing level 21,000 . . .

Radio is the one new man on Tarbaby's crew. The old Radio stopped a small piece of flak over Bremen and is now convalescing and writing jocular postcards back from an Air Force rest camp. This is the new Radio's first mission. He's twenty-three and has worked in the dispatching office of an airline on the West Coast back home. Right now he's frightened to death—and would admit it if anyone took the trouble to ask him. Weather finishes. Radio is wondering whether he ought to take his tin hat to the ship.

It is 0450 as the gunners pile aboard the jeeps and trucks for the dispersal points. The eastern sky is pale with dawn now, though the field still lies in darkness. In the main briefing room Flying Control has concluded the preparation for Mission 95 with the time-tick, during which the crews set their watches. Twenty seconds before 0447 . . . fifteen seconds . . . ten seconds . . . five seconds . . . four . . . three . . . two. The navigators have adjusted to an office and are laying out the routes on their maps. The bombardiers are in session with the Group Bombardier, studying the target pictures. The radio operators have collected the dimaies giving the call signals of the day—rice-paper sheets to be eaten in case of capture.

From the Control Tower the complete pattern of the runways and the perimeter tracks on Group



FORTRESSES ON RUNWAY PREPARE TO TAKE OFF AT DAWN

500's station can be seen. At 0630 the Operational Staff is gathered along the rail balcony outside the Control Room. The field lies quiet in the sun; an ambulance moves slowly across the turf which lines the runways. Flying Control, eying his watch, nods. A two-pronged red flare arches over the center of the field. The stillness is broken. From each scattered dispersal point there wells a spring of sound. Ragged at first, it builds and blends into a concerted roar. Still no movement is seen. The ambulances wait at the far end of a long runway. And then the first plane appears on the perimeter track at a distant corner of the field. It is followed by another. And another. They form into an elephantine line, nose to tail, and trundle slowly along, starting and stopping with awkward precision. The squeal of brakes punctuates the roar of the engines. Two lines converge at the head of the runway, the gaps are closed, and then all movement ceases. In Tarbaby, which is to lead the Group, Pilot rears a forenoon on the wheel and watches the second hand of his wrist watch. Two minutes and forty seconds to go.

A tense immobility settles over the field. Time has taken over Mission 95. On this field, at Groups 501 and 653 and 187, at 103, 459, 366, and 714—at Groups spread across fifty miles of England—the long lines of idling planes now wait. In each Control Tower the operational staffs wait. On the grass patches along the hangar lines, the ground crews wait. At the mess kitchens the

cooks come to the door and look up expectantly at the empty sky. At Air Division the Operational Staff, eating breakfast, glance at their watches. At Command the Duty Officer sits watching the wall clock—waiting.

At 0700 Tarbaby begins to move, leaving behind it a small cloud of blue smoke. Slowly, at first. Then with gathering speed. Tail up, it passes the Control Tower. There is a motion at the waist window as like, a waist ganner, gives the V-sign to his ground crew. Almost imperceptibly the plane becomes air-borne. As it clears the field boundaries, the reverberating echoes of its engines rock the field. The second ship is under way. Then the third, and the fourth. Each thundering run is an epic of suspense—ended by the lifting of thirty tons of bombs, plane, and men from the earth. The first plane is sweeping a huge circle around the field. The second and third gradually edge into a position behind it, forming a triangular element of three. The element moves off, followed by another. Now the circle of the horizon is speckled with the patterns of the other Groups. The sky is filled with the sound and the stately, shifting movements of Fortresses as they find their places in formation and move off in ever-diminishing perspective. By 0730 they have gone. The Old Man remains staring at the sky where his planes had been. "I hope," he says finally, "all those boys come back."

At 0847 Mission 95, far out over the North Sea, has reached 24,000 feet in its slow climb and turned in toward the enemy coast. The temperature is 35 below zero and going down. Frost smears the windshield and the plexiglass nose. Cockpit windows have been opened to equalize the temperatures. Below, the metallic sea appears between patches of haze and fog. Through the high layer of drifting cirro-stratus the troposphere is dark and sinister blue. Guns are being tested with short bursts that crack startlingly through the engines' drone. Every man in the armada is at his post, scanning the bowl of space for enemy fighters. In the noses the navigators are watching for the first sign of the surf line on the Frisians, somewhere ahead. The formation has been spotted now by the German detection equipment. The unseen sentinels of the enemy's locator system, groping beyond the curve of the horizon, have touched



GROUND CREWMEN WATCH SKY FOR RETURNING PLANES

them and pinpointed this part of Mission 95 in space. Their course and height and speed are being plotted. From half a dozen fields the German fighters are taking off to meet the threat. Miles away to the southeast, the other section of Mission 95 has now left its target at Antwerp. A drifting pall of smoke covers the Ford and General Motors factories, while the Thunderbolts shepherd their charges home across the Channel.

Mission 95 crosses the islands which line Germany's Baltic coast at 0800. They are at bombing altitude now. The combat wings, each one a rough arrowhead of three Groups, are spaced down from



front to rear like a flight of steps. Though from the ground the muzzling thunder of the formation can be heard over miles of the island chain, the planes themselves are barely visible—a procession of tiny specks moving inexorably across the sky. To the left of the formation dark smudges of flak appear. From his gate in Tarbaly, Left Waist notes this with satisfaction. Mission 95 is out of range of that particular battery. The navigators are on the beam.

The islands lie behind and the Zuider Zee lies beneath when, at 0903, the first enemy fighters hit Mission 95. They come in high from the south, like a pack of gnats, cross over the procession at 3,000-yard range, and disappear in the glare of the sun. The guns on the Forts silently swing around, following their course. There is a moment of waiting. The fighters pick their objective—a Group near the tail of the procession. They swing around, peel off, and come hurtling down in line astern.

Warnings flood the intercommunication systems of two-crew planes. *How they come, high at nine o'clock . . . Roger . . . 150° at eleven o'clock. They're after that Group ahead . . . Focke-Wulfs—ten o'clock . . . Roger . . . Three thousand yards. Two thousand yards. One thousand yards. The guns of the Group attacked open up with a few short bursts. Smoking tracers fill the air around the leading fighter. The Focke-Wulf is firing now—the four 20-mm. cannon flashing orange from the wings, the two machine guns projecting bright tongues of flame from the fuselage. Six hundred yards. More of the Forts' flares are finding the range. The sky is criss-crossed with tracers. The fighter bores in. The puffs of his explosive 10-mm. ammunition are creeping up on the wing ship. A burst of machine-gun fire rakes the plane amidships, making crackling noises like a stick against a picket fence. Four hundred yards. The Focke-Wulf does a half-roll, exposing his armored underbelly to the defensive fire. He dives in for another two hundred yards, guns blazing. He dives, followed by the fire of the ball turrets, until he is lost to sight against the shimmering water below. The action of the attack, from the first to the last shot fired, has taken place in just four seconds. Another Focke-Wulf is coming in now. A third and fourth and fifth, a dozen, follow it. Meanwhile, the first is climbing, to re-form for a second attack.*

At the conclusion of this first contact, Mission 95 is still driving on, outwardly unchanged. But in the Group attacked one plane has an engine out, with its propeller feathered, in another the engineer is working frantically to stop a leak in the oxygen system, and in a third a tail gunner lies

a tongue of land on the Zee's east shore. More flak appears. Puffs of oily black and brown smoke spread across the sky just ahead of the lead ship. The Forts drive through it. One ship wobbles, drops out of position, and then slowly regains its place. Tarbaly cuts through a speck flak burst rifling past like a dirty veil. The lead wing swings down and to the right—every plane in place—in a sweeping evasive movement. Tarbaly leads Group 500 in a climbing turn to the left. The gunners are firing steadily as the fighter attacks develop. Five thousand feet above the twisting, turning units of Mission 95 three twin-engined fighter bombers are jockeying for position as they prepare to bomb the formation. Another Fortress has gone down, its right wing trailing a bright sheet of flame. A burning fighter draws a line of smoke across the sky. The pattern of the German countryside is now beneath the action. The battle of Mission 95 is on.

The plant at Hül is visible through Tarbaly's nose. It is 0940. Mission 95 has run the gauntlet of half a dozen flak barrages and fought off constant fighter attacks for forty minutes. Deadeye is flying Tarbaly with his automatic-flight-controlled equipment. 0941. He scrubs at the frosted plexiglass with a piece of waste. White camellus cloud covers over the plant. One corner of the target is blanketed. More flak is coming up. The target is in the bomb sight's field of vision. Deadeye finds the aiming point and pushes a switch. The bomb-bay doors grind open. The indices are moving together. Deadeye checks the rows of red lights above the rack switches on the bomb indicator. He moves a knob. Tarbaly swings a little to the right. Bombardier to Radio: *Start camera. . . Radio to Bombardier. . . Roger. . . Camera started.*

The smoky splashes of the first Group's bombs are visible through the bomb sight. They spatter



THE RAID IS DESCRIBED TO INTELLIGENCE OFFICERS

the area. Deadeye grins and holds open the trigger on the sight. He makes a small adjustment. Then another. The cross-hairs are on the gas plant. The sight is at work, computing speed and drift and bomb fall. The indices are together. The red lights on the indicator panel fade. Tarbaly, freed suddenly of the bombs' weight, rises buoyantly. Deadeye says: *Bombs away. Let's get ourselves out of here.*

Behind Tarbaly the other bombardiers of the group, seeing the leader's bombs away, snap their switches. The loads fall, the clusters of 300- and 1,000-pounders, arching toward the earth in a slow curve. Navigator makes an entry on his log: "Bombed 0941. 15,000 feet." Throughout Tarbaly there runs a current of elation. Pilot snatches the control wheel with his fist. Copilot raps the instrument panel for luck. Top Turret-Engineer says to himself: *Now, No. 5, get us home.* Lower Turret and Rear Gunner are silent as they try to follow the fall of the bombs. The camera motor whirrs unheard, taking a picture every six seconds. Radio, a veteran now, announces: *Enemy*

*aircraft at four o'clock, high. Look like Messers.* It is 0944. The last of the Groups has cleared the target area. In just under four minutes more than 400 tons of high explosive have been dropped on the synthetic-rubber plant at Hül near Recklinghausen. As the last Combat Wing in line leaves the area a tower of smoke 7,000 feet high mushrooms over target.

By 1012 Mission 95 has left the target far behind and is over Dutch territory on the long trip home. An hour's persistent attack by flak and fighter has dealt severely with the formation. Fifteen bombers have fallen along the route, the holes they left being immediately plugged by the next plane in line. As they approach the rendezvous with the friendly fighters, the defensive fire power of Mis-



AFTER DOWNING GERMAN PLANE, GUNNER CLEANS GUNS

sion 95 has not noticeably weakened. But the strain imposed by altitude and the enemy is beginning to tell. In the lead Group all eyes are turned to the west for the first sign of the Spitfires. The formation is at 18,000 feet and dropping steadily as it heads for the Dutch coast.

In Tarbaly the mission, so far, has gone well. Copilot, taking advantage of a lull in the fighter attacks, has just completed a check of the plane. A piece of flak has torn a hole in the vertical stabilizer, a 20-mm. ricochet has holed the plexiglass in the nose and there is a line of machine-gun bullet-holes in the fuselage amidships. No. 3 engine is running rough, but not dangerously so. The only personnel casualties are Rear Gunner, who reports a frostbitten left hand suffered when clearing a gun stoppage, and Ball Turret, who claims he is dying of hunger and where are the sandwiches. As Copilot regains his seat, Pilot points upward through the windshield. A banner of vapor trails is sweeping in from the west. Pilot to crew: *Looks like friendly fighters coming in high at eleven o'clock. Repeat. Possible friendly fighters coming in at eleven. Watch your firing. Spits will be giving us close support. Typhoons in the lower box. . . Top Turret to Pilot: Enemy fighters coming in high at eleven o'clock. Focke-Wulfs at seven. Watch it, Left Waist. They're after us. As Pilot swings Tarbaly's nose sharply to the left there is a rending explosion and the ship quivers. The intercom spatters and then goes dead.*

At Group 300's base—at Groups 501 and 653 and 187, at 201, 419, 366, and 724, and at all the other fields which have dispatched planes on Mission 95—the long wait is almost over. The time is 1150. Ground personnel has gathered in bunches along the hangar line. The Operations Staff lines the balcony of the Control Tower. On the roof, Flying Control is ready, with a short-range radio, to "talk" the planes in. At the end of the runway the ambulances wait, their engines running over quietly. Near the tower the squat clock tracks, waiting for accidents, chug noisily. Minutes pass. The sky remains empty. All eyes are turned to the east. Suddenly someone calls: "There's one. A single."

The bomber comes in low and fast. It circles and



RFA RESCUE LAUNCHED PICK UP ARMEN FROM WATER

dead at his post. A Focke-Wulf has gone down like a flaming arrow into the waters of the Zuider Zee and another, crippled, is fighting for altitude as it makes for land.

It is 0912 as the second group of attackers appears. The head of the bomber column is skirting



disappears below the tree line. Then its engines are heard coughing and it appears above the edge of the field, gliding for the runway. A red flare burns a bright arc through the air. The plane touches, bounces, and settles to earth. An ambulance is racing across the grass, for this flare is the sign of wounded aboard. Halfway down the runway the big ship slows abruptly, with a squeal of brakes. Wheeling slowly, it turns off the concrete and trundles across the turf. Before it comes to a stop the ambulance has circled to its position beside the door.

Group 500 comes up the sky slowly. Then it is overhead with a roar. The counting is repeated. *Three missing . . . No, one came back early. Well, that makes two . . . You counting this one out too? . . . Sure, that still makes two short . . . Maybe they landed some place else . . .*

Twenty minutes later the last plane to return is down. Refueling crews are already at work, maintenance men are clambering over their ships, measuring battle damage for patches, and the Engineering Officer has finished counting noses of the Forts out of action and those that can be readied to fight the following day. Group 500's dispersal areas are tenanted once again. All but two. The count is final. Two lost. At these two dispersal points the line crews of the missing ships wander aimlessly over the splashed concrete and scuffed turf where they have worked for so many weeks. There is little said. *Yeah, he was a good guy . . . Well, she made eighteen, anyway . . . A good ship. But she gave them bastards a race for their money . . . He was showing me a picture of his girl just this morning. Finally, like men lost in thought, they gather their tool-boxes and pile them into a waiting jeep.*

At the Briefing Room the combat crews are gathering. Coffee mugs and sandwiches in hand, they mill around. Little groups form, dissolve, and re-form. There is some talk and laughter, but not much. These are tired men. Their faces are drawn, their hair is matted and tangled, and in their eyes is a deep weariness. They shuffle about awkwardly in the heavy flying boots or sit with hunched shoulders, staring at the floor.

At the Hot News desk a pilot is giving his report. *We pin-pointed her at 3 East, 51 39 North. She must have been hit in the last attack, just as the Spitz met us. Stayed in formation awhile and then dropped out about the time we left the coast on the way back. My navigator says the two outboard engines were out at the time. Didn't see her ditch. The Spitz caught her on the way down, so I guess they got Air-Sea Rescue on the job by this time. Yeah, Tarhaly, that's her.*

The interrogation of the crews is under way—each crew at one of the big tables scattered around the room. Bombing altitude. Position in formation. Number of enemy fighters seen. Where did you hit flak—altitude, position, time? How was the bombing? Encounters: How did he come in? When did you start firing? Do you claim him as destroyed? Any flame? Did the pilot bail out? Did you see the ship crash? Any suggestion or comments on the operations?

By 1130 the interrogation of all the crews is completed. Hot News, with reports of plane crashes and convoys sighted, has been phoned to Air Division for immediate action. Intelligence has completed the Flash Report giving the story of the Group's part in Mission 95 in tabulated form.

The strike photos are delivered to Command by

parachute at 1601. The daily operations conference is about to begin. Weather has just submitted his forecast. The Front is moving over central England. Bases will be closed in. The Groups will have a day of rest. Meanwhile, the planning for the next attack will go on.

The Commanding General places the strike photos on the table before him. On the table, too, is the Flash Report from the Air Divisions.

"Here you are, gentlemen. The accomplishment—Holt well hit, with bombing concentrated in the target area. We'll have to wait for reconnaissance photographs and a complete damage assessment, but it looks to me as if we had dealt the plant a crippling blow. The cost—20 bombers lost, three men killed, 19 wounded, and 131 missing. Our claims total 46 enemy fighters destroyed, 15 probably destroyed, and 44 damaged. The British Air-Sea Rescue has just reported picking up eight men of a Fortress crew off the coast of Holland. Now, on this next attack . . ."

Mission 95 is completed.

*Halt: Indications are that this plant is at present inoperative. A high proportion of the bombs dropped fell within the target and considerable damage is seen throughout the plant. The full extent of the damage to several buildings cannot be completely assessed from photographs. Many of the most important plants and buildings have been damaged, including the ARC, CONVERTERS Plant, the BUTYLENE GLYCOL Plant, the ALDOL Plant, the ACRYLONITRILE Plant, the BUTADIENE Plant, the ACETALDEHYDE Plant, the POLYMERISATION Building, and the GAS COMPRESSION AND FRACTIONATION Building. . .*

—FROM AN OFFICIAL REPORT—

CONTINUED ON NEXT PAGE



THICK, BLACK SMOKE FROM A RUBBER FACTORY AT HÜLL, GERMANY DRIFTS UP THROUGH CLOUDS AFTER THE CHEMISCHE WERKE PLANT THERE HAS BEEN HIT BY U. S. BOMBERS



## FROM FIVE MILES UP

*Target: Germany* is the story of an experiment. That the experiment is concerned with destroying the economic fabric of another nation is to be regretted. That it may be a large factor in saving our own way of life should not be forgotten. For aerial bombing is now beginning to return dividends which surpass the expectations of its staunchest adherents. Bombs alone do not win battles—but bombs behind the fighting fronts may rob armies of their vital supplies and make war so terrible that civilian populations will refuse to support the armed forces in the field.

During the past eight months scientific bombing has changed the face of war. For the physical attrition of warfare is no longer limited to the fighting forces. Heretofore the home front has remained relatively secure; armies fought, civil populations weeded and waited. This conflict's early air attacks were the first portents of a changing order. In its slashes at Warsaw, Rotterdam, Plymouth, Coventry, and London, large-scale bombing showed its claws. The Germans had conceived a terrifying weapon. Fortunately, they had neither the imagination nor the physical resources to capitalize on their revolutionary conception.

On the night of March 5-6, 1943, bombing came of age. On that date the RAF began the systematic, patterned devastation of the twelve cities of the German Ruhr. The ruins of the Ruhr, Cologne, and Hamburg, and the American inflicted damage at the Hils rubber plant, at the Heroya aluminum unit in Norway, and the Blohm & Voss shipyard at Kiel, have now clothed a German vision with reality. To borrow from Macbeth, it is the Nazis' own "Bloody instructions which, being taught, return to plague the inventor." The Ruhr, heart of Germany's heavy industry, has been crippled. In the first climactic four-day-and-night Hamburg Blitz (the Germans even had a word for it), well over 1,200 British and American aircraft dropped more than 7,000 tons of high explosive and incendiaries on a city the size of Detroit. To quote an official report: "There is nothing in the world to which this concentrated devastation of Hamburg can be compared, for an inferno of this scale in a town of this size has never been experienced, hardly even imagined, before."

Here, then, we have terror and devastation carried to the core of a warning nation. The implications of such destruction of public morale

and economy are not yet clear. It may be that, in forging so terrible a weapon, the United Nations have found the way to break any nation's will to fight. That would mean not only victory in this conflict but also the answer to any threats of war in the foreseeable future.

## ACT 1. SCENE 1

At mid-afternoon on a gray day in February, 1941, a Douglas airliner from Lisbon landed at a west-of-England town. The seven officers who stepped out of the plane that day carried with them a directive signed by Lieutenant General H. H. Arnold, Chief of the Army Air Forces, and dated January 31, fifty-five days after Pearl Harbor. The directive named Brigadier General Ira C. Eaker, Bomber Commander in England and ordered him, among other things, to "make the necessary preparation to insure competent and aggressive command and direction of our bomber units in England."

It was a big job that they faced and their means of accomplishing it, at least at the beginning, were small. But, by the first of August two heavy-bombardment groups had arrived and were in a state of intensive training. By that date, furthermore, certain target priorities had been established. The C. G. quoted from the directive as follows: "First the factories, sheds, docks, and ports in which the enemy builds his submarines and from which he launches his submarine efforts. Next, his aircraft factories and other key munitions-manufacturing establishments. Third, his lines of communication. A subsidiary purpose of our early bombing operations will be to determine our capacity to destroy point targets by daylight accuracy bombing and our ability to beat off fighter opposition and to evade antiaircraft opposition."

The first test came on August 17. It was a critical day for the VIII Bomber Command, not because of the size of the effort—only twelve Fortresses were involved—but because so much was at stake.

At 1516 the first Fortress took off. Eleven others followed, the C. G. of the VIII Bomber Command riding in *Yankee Doodle*, lead ship of the second flight of six. The twelve Fortresses were carrying about twenty-one tons of bombs destined for the railroad marshaling yards at Rouen.

For the next three hours anxious ground crews, fellow airmen bitterly disappointed at being left

behind, and high-ranking Air Force officers waited about as calmly as expectant fathers in the anteroom of a maternity ward. Shortly before 1900 hours watchers on the control tower spotted a cluster of specks to the west of the airfield. Eagerly they counted—for a tense moment there seemed to be only eleven. There was a sigh of relief as the twelfth appeared. Minutes later the big ships swept in to the runway, their names highlighted by the level rays of the sun: *Baby Doll*, *Peggy D*, *Big Jeff*, *Barber Shop*, *Yankee Doodle*, *Berlin Sinner*, *Johnny Reb*, *Birmingham Blitzenkrieg*, and the rest. Pilots and mechanics swarmed out to meet the crews. Quickly the word was passed around: All bombs dropped on or near the target, no casualties; good protection from escorting Spitfires; slight flak damage to one B-17; a few brief exchanges of fire with enemy fighters; mission successful.

## TWELVE FEET OF CONCRETE

The kindergarten missions continued through August with what now seems a pathetically small token force of aircraft. By September more Forts were coming into action, and on Sept. 6, 30 of them were over Meaux. However, it was not until Oct. 9, when 108 heavy bombers hit Lille, that an American force was employed on a large scale. On this raid, to the confusion of the skeptics who were unfamiliar with Fortress and Liberator firepower, 15 German planes were knocked down for certain, 38 more "probably destroyed" and 44 damaged.

Twelve days after the air battle at Lille the bombers attacked Keroman, a small fishing port on the French coast not far from Lorient. The Germans had turned it into one of the most important U-boat bases in Europe. With typical Teutonic fondness for massive construction they had built a series of U-boat shelters that were—according to the proud announcements of German propaganda agencies—completely bombproof.

From four miles up, these shelters resembled cardboard shoeboxes. From the ground they looked like enormous square-jawed railroad tunnels. They squatted on dry land with ramps leading down to the water. Entering U-boats were hauled up in cradles and shunted into any one of twelve individual pens. There, protected from direct bomb hits by an eleven-and-a-half-foot overhead layer of reinforced concrete, sheltered from blast by side walls more than eight feet thick, the raider was made ready for its next foray against the shipping lanes.

The first attack on the sub pens at Lorient was followed by another against similar installations at Brest. Bombing results were so uncertain that two days later, when the bombers went to Saint Nazaire, a radical experiment was tried. Instead of going in at the customary 20,000 plus feet, the lead Group went over at 10,000 and the last Group flew at 8,000 feet. One squadron was as low as 7,000. The result was that practically every ship in both Groups was hit by antiaircraft fire.

The problem that overshadowed all others was bombing accuracy. The bombers were hitting the sub-pen installations, there was no doubt of that. Letters of praise from the RAF and from the British Admiralty attested to the destruction at the bases, with the consequent lengthening of the U-boats' turn-around time. Morale of the U-boat crews was undoubtedly shaken. But the Americans weren't satisfied.

For one thing, experience was proving that the destructive power of a single bomb, or even a few bombs, was not so devastating as had been expected. What was needed within the target area was a saturation of bombs whose cumulative effect would be so great that repairing the damage



GERMAN U-BOAT SHELTERS ARE BUILT OF TWELVE FEET OF REINFORCED CONCRETE, PROTECTING SUBS FROM BOMB HITS

CONTINUED ON PAGE 263





SMOKE CURLS UP FROM SERIES OF AMERICAN BOMBS DROPPED ON CONCRETE SUB PENS AT ST. NAZAIRE. SUCH RAIDS HELPED DESTROY THE U-BOAT THREAT TO ALLIED SHIPPING





MOST OF HAMBURG WAS DESTROYED BY R. A. F. AND U. S. BOMBERS IN SHATTERING JULY ATTACKS. ROOFS ARE OFF, WALLS TOTTER AND SUN SHINES THROUGH WRECKED BUILDINGS

would hardly be worth the Germans' time or effort. During the early months of 1943 this sort of concentration was to be realized, not once but many times. In the last half of 1942 the American bombardiers were still wrestling with the problem.

The first indication that a solution might be reached came on January 3 when sixty-eight Fortresses and Liberators attacked Saint Nazaire for the sixth time. It was a diamond-clear winter day with visibility unlimited over the target. In a further effort to insure precision bombing an unusually long bombing run was ordered. The run was made into the wind, and since the wind above 20,000 feet was a 115-mile-per-hour gale, the bombers' speed was reduced by more than half. For almost ten minutes they flew practically straight and level, sitting up there, as one pilot put it, "like fish in a barrel."

As a result, the flak was particularly deadly. The Germans put up what amounted to a box barrage at the point of bomb release, and the formations had to plow through it. At least two bombers—probably three—were shot down by flak. Enemy fighters, fourteen of which were destroyed, accounted for four more bombers. It was a tough day; the loss of seven bombers was the worst suffered to date.

On that day, for the first time, the formations abandoned individual bombing and adopted the practice of dropping their bombs at the instant the squadron leader released his load. The full implications were not realized at the time, although bombing results were good. But the first long step had been taken toward a new technique

of bombing that within a few weeks was to produce a concentration of bombs on a target the like of which had never been seen—at Rotterdam, or Coventry, or anywhere else.

## PARLOUS DAYS

While the planes and combat crews of the VIII Bomber Command were testing their strength and weakness over the submarine pens, the drab English winter was settling down on the bomber sta-



THE SECRET TARGET FILE AT BOMBER HEADQUARTERS

tions from which the big ships flew. By rights there should have been a constant morale problem that winter. There was not. The reasons why there should have been add up to a fairly complete picture of bomber-station life at that stage of the game.

The two worst intangibles that the fliers had

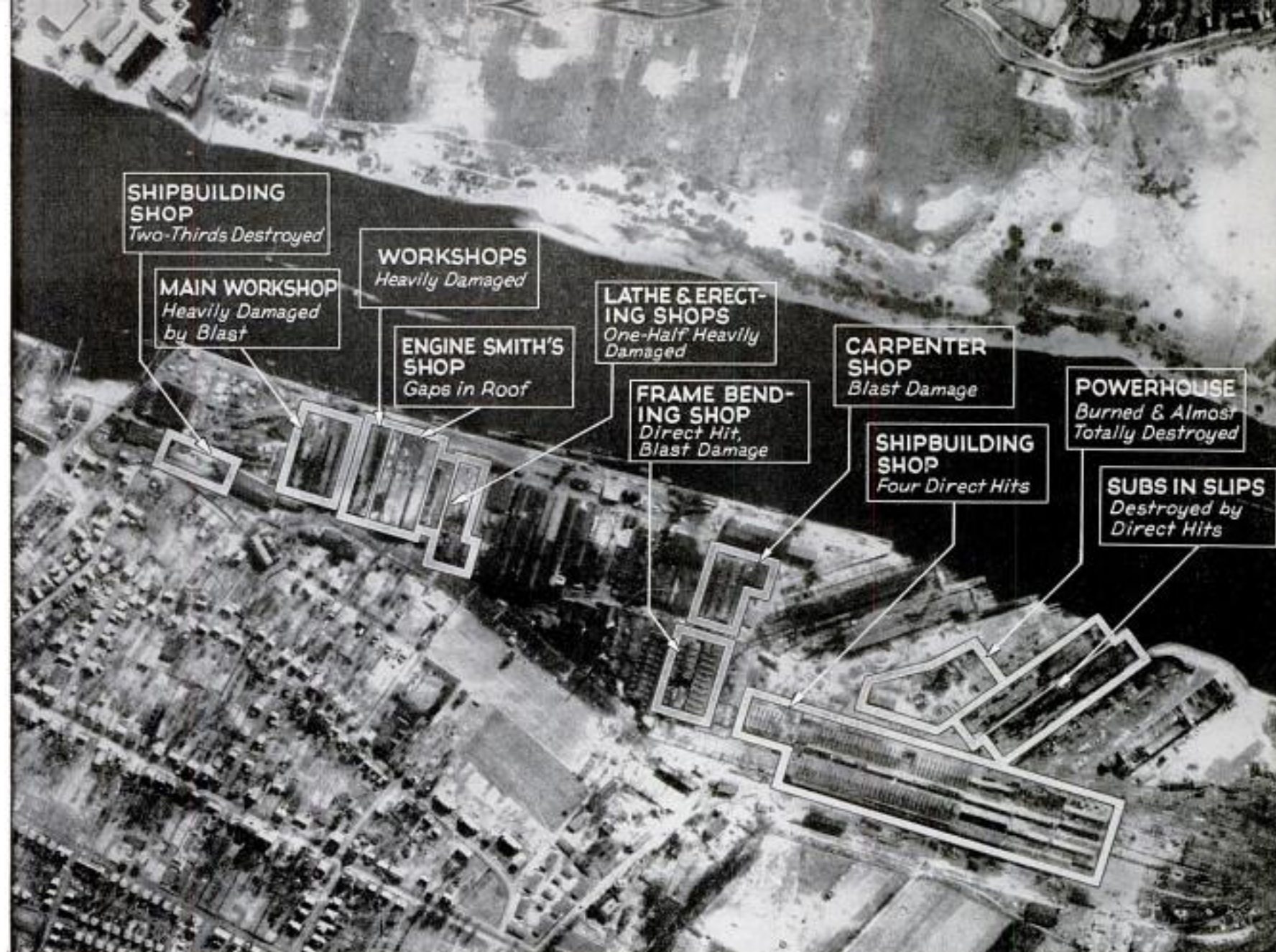
to contend with were lack of replacements for casualties, and the psychological repercussion of missions that were "scrubbed" (canceled) at the last minute.

As the milk-run missions went on and enemy opposition became stiffer, American losses began to mount. They remained low in comparison to what they were to become later, but the total force engaged was so small that any loss was felt. In addition, the Germans adopted new tactics of hammering at a single Group, so that the casualties were likely to be concentrated at one bomber station.

When this happened, morale at that station did sag temporarily. The reason was not so much the casualties as the failure to replace them promptly. The fliers expected losses; it was part of fighting a war. But they did not like empty beds in the barracks to remind them of the men who were missing. As long ago as World War I it had been recognized that a unit could endure severe punishment if the vacant seats in the mess were occupied by the following morning. This "full breakfast table" policy was axiomatic with the RAF. But on the American stations the breakfast tables did not fill up very quickly. That was the grimmest part of those parlous days.

The other great source of nerve strain was the missions that were called off at the last minute, usually because of weather. Combat crews declared, almost unanimously, that the feeling of let-down, the sense of anticlimax that followed these cancellations was far worse than actual participation in a combat flight. And when they





SUBMARINE CONSTRUCTION FACILITIES AT VEGESACK WERE BADLY DAMAGED BY U. S. BOMBERS LAST MARCH 11. THIS RECONNAISSANCE PHOTO SHOWS THE EXTENT OF DAMAGE

happened the ground crews which had loaded the bombs and groomed the bombers felt almost as deflated as the fighting men.

As for living conditions, they were "rugged," to use the favorite airdrome adjective, but the effect on morale was negligible. Nobody liked the mud—wet, sticky, the color of fresh cement. The blackout, no matter how you sliced it—and sometimes you almost could slice it—was a nuisance and a bore. The interminable distances on a bomber station that had to be traversed on foot with passing vehicles plastering you with freezing mud, the coal stoves in the Nissen huts that defied all attempts to keep them going overnight, the lack of hot water, the apparently permanent absence of sunlight—these things were subjects of universal lamentation and complaint, but nobody cared seriously about them. Again, it was part of fighting a war. Men actually came to take a melancholy pride in the duration of their particular cold in the head and boasted hoarsely about it to the boredom of their fellows. Those who lived on the more primitive stations made no effort to conceal their contempt for the "country-club set" who had been fortunate enough to draw RAF quarters with permanent buildings and (in one case) a real live butler.

#### Lack of supplies

More serious, because it actually affected operations, was the shortage of essential supplies and maintenance. At this time servicing planes for the Twelfth Air Force in Africa was a top priority

with the Eighth Air Force in England, and often planes damaged in battle over the sub pens could not be made ready to fly again simply because there were not enough maintenance men to do both jobs. At one point the lack of equipment for cleaning machine guns became so acute that the gunners, having cleaned parts of their weapons with soap and water, took them tenderly into bed the night before a mission to prevent them from rusting. British generosity kept general supply from being a problem, but the British could not provide spare parts for American planes or specialized equipment, such as oxygen masks.

There was never any attempt to belittle the adversary, to pretend that the Germans were not good. Later on, when some misguided company at home put out an advertisement showing an insane-looking bomber pilot grinning cheerfully and demanding: "Who's afraid of the new Focke-Wulf?" somebody pinned it on the bulletin board with a laconic note underneath. "Sign here," the note said. Every combat officer in the Group signed; the Group Commander's name led all the rest.

This was a great joke, of course, but underneath it lay the seriousness with which the fliers took their jobs. There was little if any of the hysterical gaiety that traditionally clothed the death-and-glory boys who flew the crates of World War I. The attitude seemed to be: "We have a tough job to do here, and we're doing it, but we find no glory in it." Now and then, for a few hours, the atmosphere at a station might become tense and dramatic. There was one cold winter night when the boys came back from a mission that had cost

them some of their best crews, and they took candles and climbed on one another's shoulders, and smoked the record on the ceiling in great wavering capitals, proudly, and in some cases not far from tears. . . .

There was never any doubt in the minds of those airmen as to the ability of the Fots and Libs, given sufficient numbers, to penetrate to the heart of Germany unescorted and in daylight. It was that conviction, plus their sense of humor, that kept them going.

But there was still skepticism in high places. Even those who were now ready to concede the value of daylight missions were also swayed by arguments in favor of night bombing. Thundering across the Channel, the RAF was spreading ruin and terror throughout Germany. Influential voices were raised, suggesting that the best way to use the comparatively small American force would be to incorporate it in the RAF's night efforts.

The climax of the controversy resulting from this proposal came in mid-January when General Eaker, who since November had been acting as Deputy Commander of the Eighth Air Force in the absence of General Spaatz, flew to Casablanca to attend the now-famous conference. Within a few hours of arrival he was handed a set of questions by General Arnold. On the answers to those questions depended the future of the VIII Bomber Command.

The key questions that had to be answered regarding the VIII Bomber Command's showing to date were concerned mainly with the relatively few missions, the fairly high rate of abortives, and





AFTER SCHWEINFURT, RAID FROM WHICH 18 U. S. BOMBERS DID NOT RETURN, FORTRESS COMES IN SAFELY THROUGH SMOKE OF ANOTHER BOMBER WHICH CRASHED AS IT LANDED

the choice of French rather than German targets.

The answers to these questions were plain and the C.G. gave them. He pointed out that both weather and the low replacement rate were factors in holding down operations. The rate of abortives, largely attributable to the maintenance hours spent on Twelfth Air Force aircraft, was going down steadily as operational lessons learned were put into practice and mechanical kinks were ironed out. As for choice of targets, that had been dictated partly by the priority given to attacks on the sub pens, partly by lack of long-range fighter support to cover the small bomber force available. The C.G. added that as a result of the experience gained over the U-boat pens, his combat crews were now sufficiently experienced to undertake the daylight invasion of Germany.

In the end he convinced his listeners. So far as the VIII Bomber Command was concerned, the Casablanca Conference settled two things—for the time being at least. The necessary planes were going to be sent, and they were to be used for day bombing.

## TARGET: GERMANY

On January 27 the VIII Bomber Command for the first time joined the RAF in its attacks on the German homeland. The target chosen was Wilhelmshaven; the aiming point was the ways where U-boats were built.

One of the navigators on the mission has recorded a memorable few minutes of that day's trip: *At about 1030 the altimeter indicated 25,000 feet. The cloud cover had ended, far below us, and we could see the surface of the sea—like a sheet of glass. At 1045 the Captain warned the crew to be extra-alert. I looked out to the right and could see the outline of the coast of Germany and the row of islands that lay just off it. It was our first glimpse of Das Vaterland. At 1057 we were just over the islands and at 1100 the tail gunner reported flak at six o'clock, below. It was from the coastal islands and was the first time we were fired upon from German soil. At this time we were beginning to turn and we crossed the island of Baltrum and went into German territory. As we turned, the bombardier elevated the muzzle of his gun and fired a burst so that the tracers arched over into Germany. The first shots from Hell's Angels, but not the last!*

Fifty-three planes attacked the installations at Wilhelmshaven, dropping their bombs through a film of cloud that lay like thin gauze over the target area. Two more attacked Emden. The Germans were ready. A smoke screen drifted lazily across the target, below the cloud layer, at both Emden and Wilhelmshaven. Flak was attentive, if not too accurate. More than fifty enemy fighters—including twin-engined types usually employed

in defense against night bombers—rose to meet the formations. Returning gunners claimed twenty-two enemy aircraft shot down. Curiously, they also reported that the enemy pilots seemed inexperienced in contrast to those met over French targets. The Luftwaffe's first team, obviously, hadn't been at home to meet their first American guests.

The bombing on this first mission over Germany was only fair. Clouds hid much of the story the strike photographs, taken during the bombing, might have told, but they did show that while the pattern of the hits looked better, the placing of the patterns still left much to be desired. The American Plan was developing, but slowly.

The gray core of winter now settled upon the area of operations. Rain, sleet, biting winds, and freezing banks of dun cloud spun out from the North Sea to cover both the bases and the targets. In seventeen days but one operation was carried out. Emden was attacked despite icing conditions and temperatures that went below the recording capacities of the thermometers, 45 degrees below zero. Vapor trails helped guide the enemy fighters in their attack.

March was destined to be a climactic month in the history of high-level precision bombing. On March 4 the VIII Bomber Command carried out its first "D.P. job" (deep penetration attack) on the Hamm marshaling yards in the Ruhr. On March 8 another marshaling yard at Rennes was plastered with 500-pound bombs from half a hundred Fortresses.

Hamm and Rennes were the promises. Vegesack, ten days and three attacks later, was the fulfillment. A total of ninety-seven bombers—seventy-three Forts and twenty-four Liberators—attacked the Bremen Vulcan shipbuilding yards which line the Weser some few miles north of Bremen. This works, fourth-ranking producer of U-boats, was thus the object of the largest force the VIII Bomber Command had at that time managed to put over a single target. Two hundred and sixty-eight tons of high explosives were dropped, inflicting what assessment reports later called "extremely heavy damage." This included the complete destruction of the works powerhouse, two-thirds destruction of the shipbuilding shops, and damage to a number of submarines building on the ways. Two bombers were lost on this most successful of all attacks to date, while American gunners claimed fifty-two of the opposing fighters shot down.

As was the case on most missions, the returning bombers brought their inevitable quota of wounded back from Vegesack. One Fort also brought Jack Mathis home.

Jack Mathis was one of two tall brothers from

Texas who came to England to fly as Fortress bombardiers from the same station. Jack is gone now and Mark is missing from a later raid. Here is the story of Jack's last flight as told by the navigator who flew beside him:

*We ran into very little trouble on our raid on Vegesack until we started on the bombing run. A very heavy barrage of flak was thrown up at us just as we reached the target. Flak hit our ship and sounded like hail on the roof. I glanced at Lieutenant Mathis, who was crouched over his bomb sight, lining up the target.*

*"Bomb-bay doors are open," I heard Jack call up to the pilot, and then instructions to climb a little more to reach bombing altitude.*

*On the bomb run—that flak hit us. We were just seconds short of the bomb-release point when a whole barrage of flak hit our squadron, which we were leading.*

*One of the shells burst out to the right and a little below the nose. It couldn't have been over thirty feet away when it burst. If it had been much closer it would have knocked the whole plane over.*

*A bunk of flak came tearing through the side of the nose. It shattered the glass on the right side and broke through with a loud crash.*

*I saw Jack falling back toward me and threw up my arm to ward off the fall. By that time both of us were way back in the rear of the nose—blown back there, I guess, by the flak blast.*

*I was sort of half standing, half lying against the back wall and Jack was leaning up against me. I didn't know he was injured at the time.*

*Without any assistance from me he pulled himself back to his bomb sight.*

*I heard Jack call out on the intercom, "Bombs—" He usually called it out in a sort of singsong. But he never finished the phrase this time. The words just sort of trickled off, and I thought his throat mike had slipped out of place, so I finished out the phrase, "Bombs away!" for him.*

*I looked up and saw Jack reaching over to grab the bomb-bay door handle—to close the doors. Just as he pushed the handle he slumped over backwards. I caught him. That was the first indication that anything was wrong. I saw then that his arm was pretty badly shot.*

*"I guess they got you that time, old boy," I remember saying, but then his head slumped over and I saw that the injuries were more serious than just some flak in the arm. I knew then that he was dead. I closed the bomb bay and returned to my post.*

## THE OLD ONE-TWO

*Achtung, feindliche Flugzeuge!* It is probably about 1030 hours on May 14 when the Nazi Jagdführer, or Fighter Controller, of the Holland fighter defense area is given this warning of enemy aircraft approaching.

With half a dozen other Jagdführers, each



allotted a coastal sector of *Feistung Europa*, Jagdführer Holland is responsible for the day-fighter defense of Germany and its conquered territory. It is his job, using an intricate communications and radio-locator system, to deploy the fighters grouped at strategic points throughout his defense sector so that air attacks from England can best be met. Jagdführer Holland must have sworn a round Teutonic oath on this particular morning, for the approaching hostiles had crossed the North Sea so low they had eluded his radio locator screen. Ground observers had picked them up as they neared the coast.

The Jagdführer alerts the Low Countries. Neighboring defense sectors are notified that hostiles are abroad. For a while the defense network's flashes are sporadic. At 1035 the hostiles are reported over the Dutch coast near Scheveningen. Twelve twin-engine aircraft, very low, traveling east. They are spotted at Leyden, then over the outskirts of Amsterdam, at roof-top level. The quarry is flying too low and too fast to permit a planned interception by the fighters in the air. The Jagdführer, following the traced course of the intruders on his map, probably realizes what their target is by this time; it is his business to know what points in his domain may attract the attention of enemy bombers. He knows, too, by now, that the intruders are American, that they are medium bombers, what bomb load they will be carrying, and how fast they are traveling.

At 1100 hours Jagdführer Holland learns that the generating station at IJmuiden, a town on the coast, has been attacked with delayed-action bombs. By 1103 the hit-and-run raiders are reported across the coast once more. A minute later they have passed out to sea and are away. Then the bombs, having delayed fuses, start to explode.

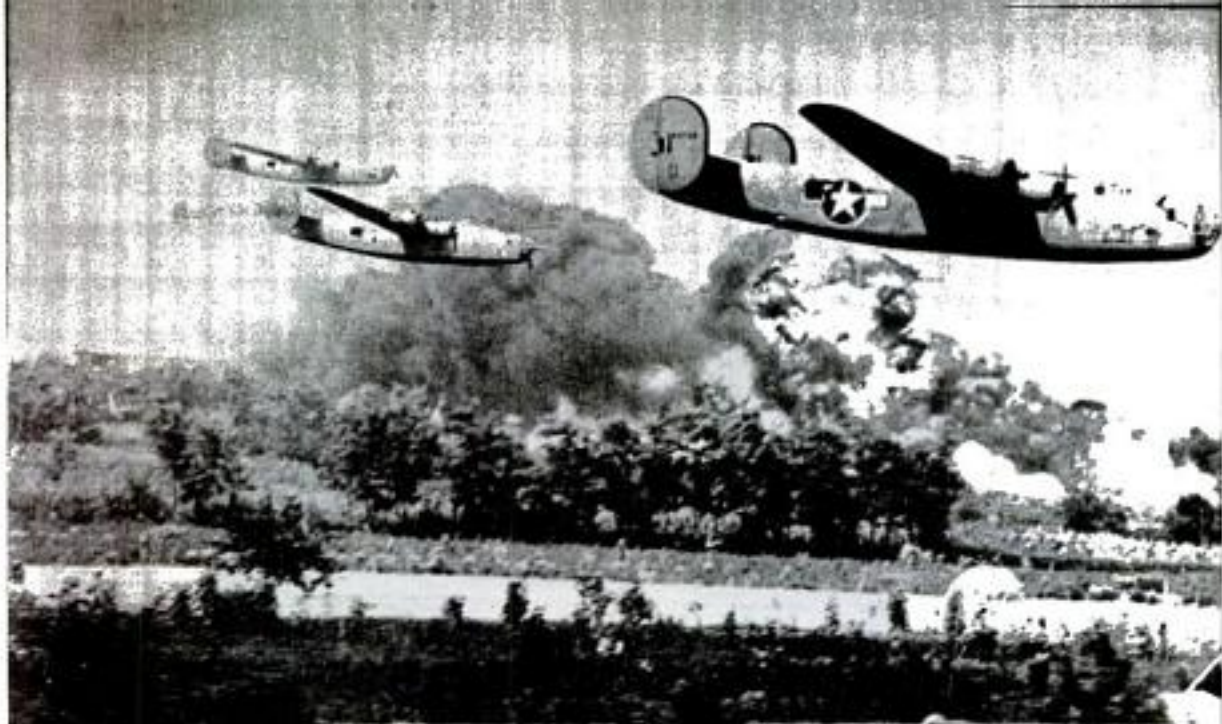
It is an inauspicious start for May 14. The efficient Nazi warning network is taken by surprise. This can happen in the best regulated defense systems, as the Jagdführer well knows; his own fighter-bombers sometimes slip in unannounced at wave-top level to bomb the English Channel coast towns. But on this occasion the IJmuiden raid may be portentous. The day is fine and there are other targets in that area. Jagdführer Holland wonders whether it would not be a good idea to pull in a few of his fighter squadrons from the Belgian sector.

It is 1130 hours when Jagdführer Northwest Germany receives a message from his radio-locator headquarters. The screen has picked up *large hostiles, flying east* over the North Sea. A minute later the locator stations have pin-pointed the approaching planes on the map. Jagdführer Northwest Germany, on the balcony of his plotting room, watches the enemy-bomber symbol being placed deep in the angle of the North Sea formed by the Danish peninsula and the Frisian Islands. Another flash—the symbol is moved. The general course is southeast. The enemy, moving fast, is still miles at sea. Jagdführer Northwest Germany ponders his plan of battle.

Over his defense sector, comprising Denmark and the northwest corner of the Fatherland, are scattered scores of fighter bases. At each base Focke-Wulfs or Messerschmitts are stationed—in groups of five, ten, or twenty. These are the Jagdführer's pawns in the grim game to be played.

By 1135 the airfields in the sector are alerted and the first fighters are air-borne. At 1145 the enemy formation has turned southward and is nearing the coast at the base of the Danish peninsula. What is their target? The Jagdführer studies the likely objectives—Flensburg, Kiel, Hamburg, Hanover. Perhaps a swing to the west, which would threaten Wilhelmshaven and Emden—or a turn to the east toward Lübeck and Wismar. This is the decision that must not be wrong.

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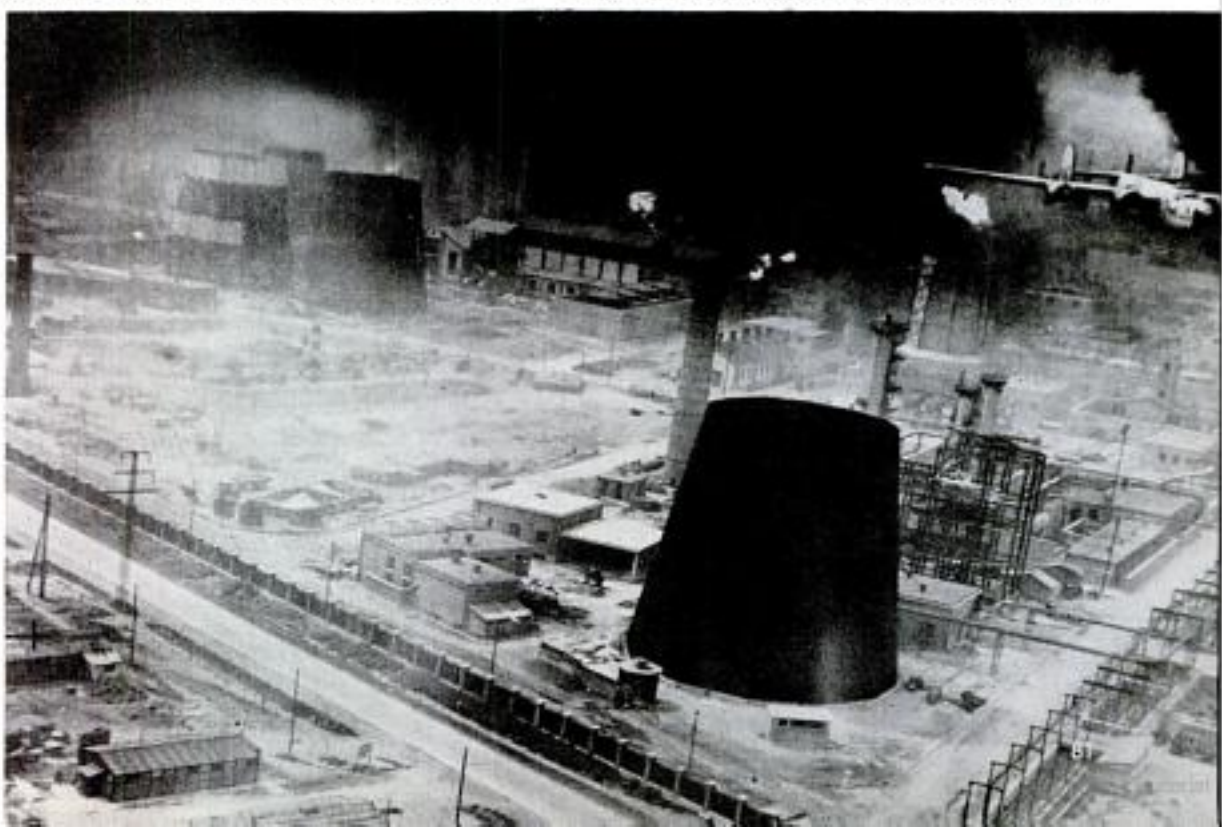
U. S. Liberators head away from the oil refineries at Ploesti, Rumania, Aug. 1, after destroying a major fuel supply for the

German army and U-boat fleet. Some of the bombers used in this raid were transferred to Africa from the Eighth Air Force.



Oily smoke billows over Ploesti as the bombers come in low over the burning refineries. Below, the smoke is so dark that

the sky looks like night. The raid knocked out 50% of Ploesti's facilities for a year. The operational cost was 53 U.S. bombers.





The moments tick away. The plotters move about silently as they chart the course of the invading force. At 1150 the first of the air-borne fighter groups makes contact with the enemy. *Achtung, Dickheads, Amerikanische. Warning, American heavy bombers.* The Jagdführer reaches a decision. The target will be Kiel. The important Germania and Deutsche Werke shipyards, not yet attacked by the Fortresses, are ideal objectives for the Americans and their precision bombing. Orders start pouring out over the telephone. Fighters roar into the air from stations 50 and 100 and 200 miles away. Kiel is their common goal. Five miles above that port they will intercept the bombers—if the Jagdführer has guessed right.

At 1200 the hostiles in "great force," are reported ten miles southwest of Kiel. Jagdführer Northwest Germany has a bad few moments. Are



TWO NAZI FIGHTERS DIVE TO ATTACK U. S. BOMBERS

they going to bypass the target he has chosen and leave the bulk of his fighters waiting over Kiel? That will mean a chase and waste of precious flying time. At 1201 the hostiles have made a turn and are reported on a northeasterly course, almost over Kiel. The Jagdführer has guessed right. The main body of the fighters is in contact with their quarry now. The battle of Kiel is on.

At 1206 comes word that the Germania yards and the Deutsche Werke have been bombed, with "great destruction." The bombers have swung northwest. Now they have turned back across the peninsula, heading for the safety of the open sea. The fighters are hanging on, attacking the flanks of the retreating formation. Some of them, from the more distant stations, are beginning to run low on gas. Requests to land fill the air.

Jagdführer Holland is having his own troubles. At 1205, while Kiel is being bombed, his radio-lator stations report hostiles high off the English coast, flying southeast. This is a spear pointed at the heart of his defense sector. Jagdführer Holland orders several squadrons into the air. Jagdführer France, covering the sector to the west, does likewise. They wait. At 1214 Jagdführer Northwest Germany inquires about possible assistance while his squadrons are refueling. The answer he receives is short and to the point. At 1218 the hostiles are reported over the coast east of Dunkirk, heading southeast. Multiengine bombers, escorted by fighters, flying very high. Jagdführers Holland and France both vector their airborne squadrons to intercept the interlopers and then try to figure which way the Forts are headed. At 1230 the hostiles are over Ypres. Here they turn east. At 1230 several of Jagdführer's squadrons finally make contact with the intruders. Two minutes later Jagdführer Holland learns that approximately fifty Fortresses have bombed one of his most important stations—his fighter field at Courtrai. Hangers, shops, dispersal areas, and runways

have been hit. The raiders have turned north and headed for the coast.

At 1242 Jagdführer Northwest Germany reports the large body of hostiles which attacked Kiel have now passed out to sea on a westbound course.

At 1300 Jagdführer Holland's network reports large hostiles approaching the coast near Ostend. He calls on Jagdführer France for help. At 1308 the hostiles cross the coast. It is another force of four-engined bombers with fighter support. The hostiles fly southeastward toward Brussels. Jagdführer Holland vectors his squadrons toward Ghent. Some make contact and follow the hostiles as they turn abruptly northeasterly at Brussels. The Jagdführer knows now what is coming. He throws his entire available force into combat around the target at Antwerp. The Fortresses bomb the Ford and General Motors plants at 1320.

The foregoing is a generalized picture of what probably happened among the directors of the Nazi day-fighter defense system on May 14. On that day the VIII Bomber Command dispatched well over 200 planes in four hours, attacking four targets, losing eleven bombers, and claiming sixty-seven Nazi fighters as destroyed. It was the first American multiple attack. It is not an ideal example—early experiments seldom are—but as the first, it deserves commemoration.

Between March 18, the date of the Vegesack raid, and May 14, the VIII Bomber Command had carried out attacks on a steadily increasing scale. It had blasted targets in Wilhelmshaven, Rotterdam, Bremen, and in one spectacular attack had destroyed the Renault plant in Paris. But the operations of May 14 were the first American multiple attack. Later multiple operations perfected the technique of delivering a rapid succession of attacks, confusing the enemy and dispersing his fighter strength.

The months of May and June settled down to a grim exchange of blow for blow. Flensburg, Kiel, Wilhelmshaven, Emden, Bremen, the synthetic-rubber plant at Hüls, the submarine bases in Occupied France—these were hit and hit hard. The Nazi defense command sought desperately for ways to stop the Fortress formations from reaching their targets. Air-to-air bombing increased; fighters armed with rocket guns were reported by returning crews. The Forts were not stopped.

## FULL STRIDE

The last week of July, 1943, was not a good one for European dictators. To one it brought political annihilation, abrupt and ignominious. To the other it brought the greatest sustained aerial offensive yet mounted by the VIII Bomber Command.

Out in force five times, the Fortresses hit sixteen major industrial targets. They made their longest flight—1900 miles—when they attacked the German U-boat base at the Norwegian port of Trondheim, not far from the Arctic Circle. They achieved their deepest penetration into Germany when they struck an aircraft factory at Oschersleben, only eighty miles from Berlin. In those seven climactic days they claimed 296 enemy fighters destroyed. Eighty-eight Fortresses were lost.

The best picture of the terror and destruction attendant on a massed air battle such as the one that took place over Regensburg was given by an officer who served as copilot of a Fortress in the last Group of the formation, a Group that consequently was hit harder than any other:

At 1917 hours, near Wensdracht, I saw the first flak blossom out in our vicinity, light and inaccurate. A few minutes later, two FW 190's appeared at one o'clock level and whizzed through the formation ahead of us in a frontal attack, nicking two B-17's in the wings and

breaking away beneath us in half rolls. Smoke immediately trailed from both B-17's, but they held their stations. As the fighters passed us at a high rate of closure, the guns of our group went into action. The pungent smell of burnt powder filled our cockpit, and the B-17 trembled to the recoil of nose and ball-turret guns. I saw pieces fly off the wing of one of the fighters before they passed from view.

Here was early action. The members of the crew sensed trouble. There was something desperate about the way those two fighters came in fast right out of their climb without any preliminaries. For a few seconds the interphone was busy with admonitions: "Lead 'em more" . . . "short bursts" . . . "don't throw rounds away" . . . "there'll be more along in a minute."

Three minutes later, the gunners reported fighters climbing up from all around the clock, singly and in pairs, both FW 190's and ME-109's. Every gun from every B-17 in our Group was firing, crisscrossing our patch of sky with tracers. Both sides got hurt in this clash, with two Fortresses from our low squadron and one from the Group ahead falling out of formation on fire with crews bailing out, and several fighters beading for the deck in flames or with their pilots lingering behind under dirty yellow parachutes. I noticed an ME-110 sitting out of range on our right. He was to stay with us all the way to the target, apparently reporting our position to fresh squadrons waiting for us down the road. At the sight of all these fighters, I had the distinct feeling of being trapped. The life expectancy of our Group suddenly seemed very short, since it appeared that the fighters were passing up the preceding Groups in order to take a cut at us.

Swinging their yellow noses around in a wide U-turn, the twelve-ship squadron of ME-109's came in from twelve to two o'clock in pairs and in fours, and the main event was on.

A shining silver object sailed over our right wing. I recognized it as a main exit door. Seconds later, a dark object came hurtling through the formation, barely missing several props. It was a man, clapping his knees to his head, revolving like a diver in a triple somersault. I didn't see his chute open.

A B-17 turned gradually out of the formation to the right, maintaining altitude. In a split second, the



BOMBERS IN THE STRATOSPHERE LEAVE VAPOR TRAILS

B-17 completely disappeared in a brilliant explosion, from which the only remains were four small balls of fire, the fuel tanks, which were quickly consumed as they fell earthward.

Our airplane was endangered by falling debris. Emergency hatches, exit doors, prematurely opened parachutes, bodies, and assorted fragments of B-17's and Hun fighters breezed past us in the slip stream.

I watched two fighters explode not far beneath, disappearing in sheets of orange flame, B-17's dropping out in every state of distress, from engines on fire to control surfaces shot away, friendly and enemy parachutes floating down, and, on the green carpet far behind us, numerous funeral pyres of smoke from fallen fighters, marking our trail. The sight was fantastic; it surpassed fiction.



I watched a B-17 turn slowly out to the right with its cockpit a mass of flames. The copilot crawled out of his window, held on with one hand, reached back for his chute, buckled it on, let go, and was whisked back into the horizontal stabilizer. I believe the impact killed him. His chute didn't open.

Ten minutes, twenty minutes, thirty minutes, and still no letup in the attacks. The fighters queued up like a bread line and let us have it. Each second of time had a cannon shell in it.

Our B-17 shook steadily with the fire of its .50's, and the air inside was heavy with smoke. It was cold in the cockpit, but when I looked across at the pilot I saw that sweat was pouring off his forehead and over his oxygen mask. He turned the controls over to me for a while. It was a blessed relief to concentrate on holding station in formation instead of watching those everlasting fighters boring in. It was possible to forget the fighters. Then the top turret gunner's twin muzzles would pound away a foot above my head, giving a realistic imitation of cannon shells exploding in the cockpit, while I gave an even better imitation of a man jumping six inches out of his seat.

A B-17 of the Group ahead, with its right Tokyo tanks on fire, dropped back to about 200 feet above our right wing and stayed there while seven of the crew successively bailed out. Four went out the bomb bay and executed delayed jumps, one bailed from the nose, opened his chute prematurely, and nearly fouled the tail. Another went out the left-waist-gun opening, delaying his chute opening for a safe interval. The tail gunner dropped out of his hatch, apparently pulling the rip

cord before he was clear of the ship. His chute opened instantaneously, barely missing the tail, and jerked him so hard that both his shoes came off. He hung limp in the harness, whereas the others had shown immediate signs of life after their chutes opened, shifting around in the harness. The B-17 then dropped back in a medium spiral and I did not see the pilots leave. I saw it just before it passed from view, several thousand feet below us, with its right wing a solid sheet of yellow flame.

After we had been under constant attack for a solid hour, it appeared certain that our Group was faced with annihilation. Seven of us had been shot down, the sky was still mottled with rising fighters, and it was only 1120 hours, with target-time still thirty-five minutes away. I doubt if a man in the Group visualized the possibility of our getting much further without one hundred per cent loss. I know that I had long since mentally accepted the fact of death, and that it was simply a question of the next second or the next minute. I learned firsthand that a man can resign himself to the certainty of death without becoming panicky. Our Group fire power was reduced thirty-three percent, ammunition was running low. Our tail guns had to be replenished from another gun station. Gunners were becoming exhausted and nerve-tortured from the prolonged strain.

One B-17 dropped out of formation and put its wheels down while the crew bailed out. Three Me-109's circled it closely, but held their fire, apparently ensuring that no one stayed in the ship to try for home.

Near the I. P., at 1150 hours, one hour and a half after the first of at least 200 individual fighter attacks, the pressure eased off, although hostiles were still in the

vicinity. We turned at the I. P. at 1154 hours with fourteen B-17's left in the Group, two of which were badly crippled. They dropped out soon after bombing the target and headed for Switzerland.

Weather over the target, as on the entire trip, was ideal. Flak was negligible. The Group got its bombs away promptly on the leader. As we turned and headed for the Alps, I got a grim satisfaction out of seeing a rectangular column of smoke rising straight up from the Me-109 shops.

The rest of the trip was a marked anti-climax. A few more fighters pecked at us on the way to the Alps. A town in the Brenner Pass tossed up a lone burst of futile flak. We circled over Lake Garda long enough to give the cripples a chance to join the family, and we were on our way toward the Mediterranean in a gradual descent. The prospect of ditching as we approached North Africa, short of fuel, and the sight of other B-17's falling into the drink, seemed trivial matters after the vicious nightmare of the long trip across southern Germany. We felt the reaction of men who had not expected to see another sunset.

At 1815 hours, with red lights showing on all the fuel tanks in my ship, the seven B-17's of the Group which were still in formation circled over a North African airdrome and landed in the dust. Our crew was unscratched. Sole damage to the airplane: a bit of ventilation around the tail from flak and 20-mm. shells. We slept on the hard ground under the wings of our B-17, but the good earth felt softer than a silk pillow.

THE END



A FORTRESS LEAVES BLAZING FOCKE-WULF PLANT AT MARIENBURG, GERMANY. BEFORE BEING KNOCKED OUT BY PRECISION BOMBING, FACTORY PRODUCED 110 PLANES A MONTH