



# THE RACE FOR

## DISARMING AND DIGESTING THE LUFTWAFFE

BY FREDERICK A. JOHNSEN

The gathering of German aviation technology by the United States in the final days of World War II was not a happenstance. As early as October 1944, the AAF created the Air Disarmament Division in England with a two-fold mission: collect examples of German technology, and scrap everything else that lacked a civilian purpose to prevent further use. The rapid wholesale destruction of the Luftwaffe was in some respects more symbolic than strategic; how could a defeated Germany possibly resurrect itself with weapons that just recently lost a war in an age when new technologies rapidly outmoded the operational aircraft of 1945?

### A Plan is Critical

The first AAF interest in German aviation equipment was seizing technologies and equipment for study. As the magnitude of Luftwaffe equipment became apparent, the second role of air disarmament—the destruction of the bulk of the Luftwaffe—became manifest. While still in England, Air Disarmament teams studied German history, language, and the psychology of the German people. Subject-matter experts in armaments and ordnance, radio and radar, and other specialties were groomed for the teams. Special catalogs were created explaining German nomenclature. From its earliest stages, the air disarmament plan even included the study of booby traps, just in case.

The teams had a Target Section, meaning places of interest like factories, airfields and warehouses. Useful information on target sites came from British sources as well as from German prisoners, some of whom proved willing to discuss specific locations. By March 1st, 1945, 1,500 targets had been identified for inspection. But the orderly listing of known targets had to adapt to a quick and unexpected surge northward by the Army in March, placing temporary American control over regions that already were earmarked for eventual Soviet occupation.

The spoils of war were still evident in this July 1945 photo at an unidentified Luftwaffe field in Germany. The Dornier Arrow in the foreground has been the well-aimed target of some effective strafing, while the Ar-234 behind still seems amazingly unscathed. (Photo courtesy of Stan Plet)



The disarmament teams had but a few weeks to prepare target lists for the newfound opportunity region. The territory proved especially rich in German air assets, much of which could easily have been overlooked had not the disarmament teams expanded their target roster to cover the windfall. The specialists believed the areas that later became Soviet occupied territory could not have been exploited so thoroughly by the Americans without the advance descriptive work by the disarmament targeting specialists.

The rapid march of Allied armies strained the ability to safeguard intelligence targets while prosecuting the war. Another reality made the air disarmament more complicated than expected: the relentless bombing campaign had resulted in more displacement and dispersal of military functions than the Allies realized. Intelligence teams would count breweries, barns and other seemingly innocuous buildings among their newfound targets in the ensuing months, with

unexpected yields of aircraft components and other military hardware.

### In Harm's Way

Disarmament reconnoitering teams followed close behind the advancing armies on the Continent, sometimes even outdistancing the infantry. (A veteran of the air disarmament operation recalled racing to paint hasty U.S. star markings on German aircraft in an effort to prevent American fighters from attacking the war prizes, presuming them to still be in enemy hands). The disarmament teams assessed what kind of follow-up work would be required to process the German assets.

The air disarmament specialists had color-coded lists of Luftwaffe items to be handled in different ways. The Red List explained items wanted for technical intelligence and The Blue List tallied German material that American forces could immediately put to use prosecuting the war. (Jury-rigged 285-liter German fighter drop tanks

The unfinished Me 262A, No. 711, was the first 262 captured intact when Messerschmitt test pilot Hans Fay made a run for the American lines on March 31st, 1945, surrendering himself and his unpainted jet. It flew in the U.S. until an inflight fire caused the American pilot to bail out. (Photo Courtesy of U.S. Army Signal Corps via Frederick A. Johnsen collection)



Ninth Army troops came across this Fw 190 underground repair facility in a concrete tunnel that ran 3/4 of a mile near the town of Gevelsberg, Germany in May 1945. (Photo courtesy of Stan Piet)

### INTELLIGENCE TEAMS WOULD COUNT BREWERIES, BARNs AND OTHER SEEMINGLY INNOCUOUS BUILDINGS AMONG THEIR NEWFOUND TARGETS, WITH UNEXPECTED YIELDS OF AIRCRAFT COMPONENTS AND OTHER MILITARY HARDWARE

were tried on some P-47s with plumbing modifications made by the 10th Air Depot Group. Anecdotally, some Ninth Air Force P-47 pilots said they dropped captured German firebomb canisters, filled with U.S. jellied gasoline.) The Brown List noted material that the occupying forces deemed necessary for local civilian use in occupied territory to alleviate some shortages brought about by the war.

In April, the 54th Air Disarmament Squadron (ADS) encountered Luftwaffe resistance near Giebelstadt airfield, where the specialists worked to disassemble a Me 262. Three squadron members, according to the unit history, "wandered into un-captured territory, much to their surprise. No casualties were suffered, but no time was lost in leaving that area." The following month, with victory coming on May 8th, 1945, the 54th ADS relocated to the promising Messerschmitt complex at Augsburg. But the move was harried by roads choked with military traffic moving in one direction and displaced residents going another way as the German regime collapsed.

### Messerschmitt Treasure Trove

At Augsburg, the 54th ADS began getting a feel of the reach of Messerschmitt, securing records on experimental aircraft, contracts with Japan, and plans for new underground facilities. One of



The German Autobahn highway system became ideal operational runways for the beleaguered Luftwaffe aerodromes as is evidenced by this hidden Me 410 seen by a passing Army jeep near Munich. (Photo courtesy of Stan Piet)



Several of the over 1,400 Me 262s completed before VE-day outside the jet assembly factory at Obertraubling, Germany. The factory was well subdued by 15th AF bombing that was forcing their war industries underground and to low-profile production facilities in the forests. (Photo courtesy of Stan Piet)

## A HUGE AND METHODICAL ORGANIZATION FOR THE INSPECTION, COLLECTION, AND DESTRUCTION OF AN ENEMY'S WAR-MAKING POWER WAS PREVIOUSLY UNHEARD OF

A point defense rocket interceptor, the Ba 349 Natter, was another last-ditch effort to protect the Homeland. Only three dozen were ultimately completed with only one fatally piloted test flight attempted. (Photo courtesy of Stan Piet)

the 54th's great adventures was a trip to Lechfeld, where U.S. mechanics worked with some cooperative German counterparts to render a number of Me 262s airworthy. The squadron historian encapsulated the effort: "This might be called a target of opportunity and special operation. The Technical Team was dispatched under the supervision of M/Sgt. Freiburger, team commander.

The team was composed of the following members of this organization: S/Sgt. Medved, Sgt. Brumfield, Cpl. Erickson, Cpl. Zurliene, S/Sgt. Higgins, Cpl. Connors, Pvt. Dunn, Cpl. Olsonoski, Pvt. Strows and Sgt. Baldachino. Their mission was to learn as much as possible from the German mechanics about the new jet engines as well as see that everything operated smoothly in

the reparation of the Me 262s, preparing them to fly. The boys started to work on 10 jet ships that were fairly intact. There were eight ships, single seated fighters, one two seated job obviously used for instructional purposes and one fighter, the only one of its kind in existence that was equipped with a 50mm cannon that protruded approximately six feet out in front of the propellerless nose. This fighter was also capable of carrying 30 rounds of 50mm ammunition. During the course of events that followed at Lechfeld, S/Sgt. Higgins discovered and neutralized a TNT charged, 15-pound booby trap under the cockpit seat of one ship. Sgt. Brumfield, Cpl. Olsonoski and Cpl. Erickson, our own 54th Air Dis. Sqdn. mechanics were taught by the German mechanics how to start and taxi the jet ships, and were autho-



riized to do so, certainly a thrill for men who had been away from engines for such a long time.

On the 10th of June, the Me 262s accompanied by German pilots and mechanics departed from Lechfeld for the States via Paris and Cherbourg where they were to be shipped back by way of aircraft carrier. Sgt. Freiburger and the rest of the boys sort of hated to see them be taken away after the days of ceaseless, untiring effort they had expended in getting them ready to fly. But the job was done, and now they had to be content with rejoining the organization to launch forth on ever new and different Air Disarmament projects.

At least one German pilot participated in the preparations and movement of the Me 262s from Lechfeld, including training AAF pilots in the two-place Me 262.

The U.S. zone of occupation in Germany fortuitously had a fairly even distribution of targets for the disarmament teams. Part of the thorough scavenging of Germany for Luftwaffe assets was made feasible by dividing the U.S. zone into a northern sector administered by the 1st Air Disarmament Wing (Provisional) headquartered in Fulda and a southern sector handled by the 2nd Air Disarmament Wing (Provisional) based at Kaufbeuren. Four groups and 10 squadrons functioned under the wings to administer America's

portion of the disarming of the Luftwaffe. Such a huge and methodical organization for the inspection, collection, and destruction of an enemy's war-making power was previously unheard of.

### Organized Scrounging

The tons of equipment and documents earmarked by the United States for further research required substantial logistics chains to manage the gathering and transfer of the material out of Europe. The Air Disarmament Division and the Ninth Air Force Service Command established depots at several German airfields and aircraft plants for this purpose. The 10th, 42nd, 44th and 45th Air Depot units began crating and shipping German items in May 1945. To the 10th and 42nd Air Depots went aircraft and engines, specifically. In addition to priceless aircraft and other pieces, the Allied disarmament effort had to contend with

**Top:** Pictured at the Bell Aircraft Corporation in Buffalo, New York in 1948, the P.1101 V1 prototype was originally discovered at the previously unknown Messerschmitt Design Factory in Oberammergau, Bavaria at the end of WW II and brought to the U.S. under Operation Paperclip. Re-engined with an Allison J-35, this aircraft was a major inspiration in the design of the Bell X-5. (Photo courtesy of EN-Archive)  
**Inset:** The Bell X-5 research aircraft borrowed heavily on Germany's P.1101. It is now on display in the National Museum of the United States Air Force in Dayton, Ohio. (Photo courtesy of USAF)



**IN ADDITION TO PRICELESS AIRCRAFT, THE ALLIED DISARMAMENT EFFORT HAD TO CONTEND WITH THOUSANDS OF ROUTINE LUFTWAFFE SUPPLY ITEMS, SOME OF WHICH HAD CIVILIAN APPLICATIONS IN WAR-TORN GERMANY**

Inside Dornier's Oberpfaffenhofen factory in late April 1945, as U.S. troops inspect one of two Do 335 A-12 trainers in final assembly. (Photo courtesy of Stan Piet)

thousands of routine Luftwaffe supply items, some of which had civilian applications in war-torn Germany. Nearly 34,000 tons of Luftwaffe material was distributed to the German population by the occupying Allied governments.

Planeloads of German documents arrived in England during 1945, where the AAF's Air Documents Research Center employed 300 people who translated, catalogued, indexed, and microfilmed tons of German technical documents. It has been said the mining of these documents resulted in the addition of 100,000 new technical terms to the English language.

The United States pored over German assets in areas it initially held, even though they would ultimately become the jurisdictions of other Allies. The British, French, and Americans agreed in principle that each country would first meet its own technology needs in its zone, and then inform the other two western Allies of the availability of any excess examples. The closest and longest liaison took place between the Americans and the British. The flow of materiel was said to be more from the American Zone to the British,

and some Americans documenting air disarmament said it was an indication of the thoroughness of the American disarmament efforts. Pointedly, such liaison was never established between the Americans and the Russians.

**Beating the Soviets to V-2s and Technology**

Nowhere was the lack of teamwork between the Americans and the Soviets more apparent, and more beneficial to the United States, than at the V-2 rocket complex at Nordhausen. While the Russians seemed to vacillate on who from their side would tackle the rocket complex, no such hesitation hampered the Americans, who rushed to Nordhausen before war's end, in April 1945. A somber scene of many dead Nordhausen slave labor workers plus unfinished V-2 rockets confronted the Americans. The specialists, aware of the potential of the rockets they surveyed, quickly loaded enough pieces to create at least 100 V-2s and shipped the booty into the U.S. zone of occupation. The rocket acquisitions filled 16 Liberty ships at Antwerp. Much of what remained

at Nordhausen after the Americans picked it over was damaged, lessening the value of Nordhausen to the Russians, to Stalin's dismay.

The Nordhausen V-2 complex wasn't the only site where American proactivity secured results ahead of the other Allies. Colonel Donald L. Putt, survivor of the Boeing 299 Fortress prototype accident in 1935, was assigned to give overall guidance to the collection of German aircraft, equipment and documents in Europe, known by the rather forced acronym of Project LUSTY (LUftwaffe Secret Technology). At Braunschweig (Brunswick), aeronautical research facilities beyond America's previous understanding of German capacity were enticing.

Colonel (later Lieutenant General) Putt described his work in a 1974 interview: "The ground armies traveling east uncovered this secret research and development base outside of Brunswick, in a place called Volkenrode. And this was the Hermann Goering Aeronautical Research Establishment, a great place. It had been started in 1935, and until the ground armies went

through it in [March] 1945 nobody ever knew it was there, including British intelligence. It was well camouflaged." Colonel Putt said his task was to go to Volkenrode "and take over that place."

"I got Theodore von Karman and the American Scientific Advisory Group to come over and interview the scientists that we had rounded up. They had buried a lot of things in the forests and metal-lined the wooden boxes that we dug up. It was kind of a cloak-and-dagger operation. Lots of fun." But the lucrative German technology at Volkenrode was in a part of Germany that was identified for British control whenever the war ended.

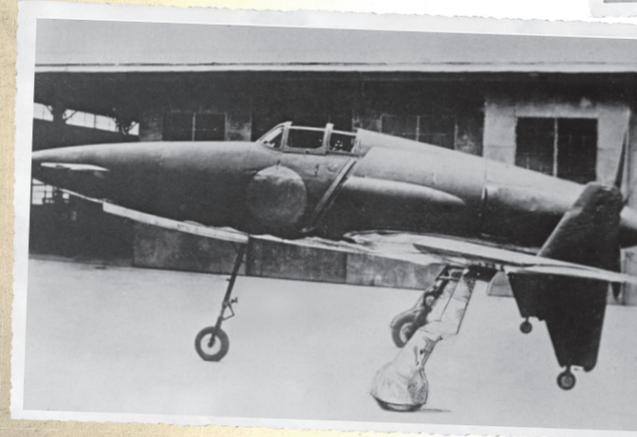
Some of the German scientists at Volkenrode had quietly blended into the Braunschweig community once the war front had advanced beyond them. Putt's group learned of one man who had buried something of interest on his property. The German was persuaded to reveal his cache



**NIPPON SECRETS**

Japan's aviation progress did not match Germany's but still demonstrated innovative concepts and engineering worth capturing. The Imperial Navy continued developing new designs until the Emperor's surrender announcement.

**RIGHT:** Yokosuka's MXY7 Ohka (Cherry Blossom) was flight tested in late 1944, both in the glider and rocket-powered configuration. Armed with a 1,700 lb. warhead, each Ohka was to be carried within about 20 miles of its target by a Mitsubishi G4M Betty bomber, and released on its one-way mission. Americans knew it as "the Baka bomb" presumably because "baka" meant "foolish" in Japanese. Ohkas sank at least two ships. (Photo courtesy of Stan Piet)



One of the most advanced configurations of the war, with canards Kyushu's J7W Shinden (Magnificent Lightning) had more than a year of development before its last-minute flight testing in August 1945. The pusher engine, a 2,100hp radial, was expected to produce a 460mph maximum speed, more than capable of intercepting B-29s. Four 20mm cannon were expected to inflict mortal damage on Superfortresses, but only two J7Ws were built before the war ended. (Photo courtesy of Joe Picarella)



The Mitsubishi J2M Raiden (Thunderbolt) was a land-based naval interceptor that departed from Japan's traditional lightweight fighter philosophy. With a 1,575hp radial engine and four 20mm cannon, the "Jack" boasted 400mph top speed and earned the respect of Allied aircrews. First flown in 1942, it entered service in early 1944 but only about 550 were built. (Photo courtesy of Stan Piet)



The quickly snatched loot from Nordhausen included V-2 tailfin assemblies awaiting mating with rocket bodies at White Sands, New Mexico, on May 10th, 1946. Stalin was not pleased that America beat the Soviets to Nordhausen. (Photo courtesy of Nara via Frederick A. Johnsen collection)

and led the Americans to a garden shed behind his home. Beneath the brick floor, which he removed piece-by-piece, the scientist dug into the earth and extracted a number of sealed tins. One contained a rocket fuel formula, Putt recalled. That was a recurring event, as the scientists and engineers who had developed these remarkable technologies hated to see them destroyed or

squandered.

One of the finds at Volkenrode was research that led Boeing to the benefits of swept wings for its nascent XB-47 bomber. The German documentation, viewed in Germany by Boeing engineer George S. Schairer in May 1945, would subsequently agree with developing NACA findings. Quickly executed wind tunnel tests in the United States confirmed the German data, and helped Vic Ganzer, a Boeing engineer, verify the optimum 35-degree sweep for the B-47.

### Midnight Requisition

Putt said Volkenrode yielded “very good laboratory equipment, wind tunnel models and all kinds of things.” With the knowledge of the AAF Air Technical Service Command’s leader in Europe, Major General Hugh J. Knerr Putt ran an aerial freight service between Braunschweig and Wright Field, shipping items home. “I don’t know how many B-24 loads we send back. We had a B-17 and a B-24,

alternating.” After Putt’s men initially enjoyed the run of the place, a British scientific group arrived. “When the British moved in, we allowed as how we would probably have to stop shipping stuff out,” Putt recalled. “But we didn’t stop right away. We’d wait until they were asleep at night, and then we had a gang of men move into the laboratories to pick up stuff, haul it across town where this little field was.” General Putt said by the time the British scientists awakened in the morning, the pieces appropriated by his team the night before were already winging toward American researchers.

For as long as he was in place, Colonel Putt worked the local German sites for items useful to the AAF. “I remember one night we picked up a new type of internal combustion engine. It was a single-cylinder affair that was in the propulsion plant. We’d take these things down to a central place where they were boxed and packed. But the British had seen that thing during the day,” Putt remembered. The following day the British wanted to look at the engine, but it had vanished. After they queried Putt about the missing motor, he asked for some time to locate it. He put it back where the British could inspect it. This time, the British tried to quietly appropriate the motor when Putt’s team did not ship it off immediately. Colonel Putt learned the motor now resided in the automobile of one of the British team members. Demonstrating what some might call American brashness, Putt complained soundly about the missing motor, and the British politely returned it. “Then we packed it up and sent it off,” he said.

Colonel Putt and the other Americans explored a tunnel where they discovered instrumentation with highly polished mirrors that enabled visualization of airflow over an airfoil. Putt was impressed; the AAF had not done extensive work in this area of measurement. He enlisted the aid of a handful of Germans who were familiar with this interferometer device to dismantle it safely and help the Americans move it across town so it could be shipped off to Wright Field. The Germans disassembled most of the equipment one night, but Colonel Putt learned the British had heard of its existence and wanted to inspect it. Putt had his German accomplices reassemble the piece, allowing the British to see it in operation. The next night, it vanished into the one-way pipeline of commandeered German materiel headed for Wright Field.

Apparently Col. Putt and his team, by virtue of

their early arrival at Braunschweig and the military base organization they quickly established there, managed to retain status as hosts for visiting inspection teams even though this region would fall under British supervision with victory. The Americans helped visitors during the day, Putt said. “But as soon as everybody was in bed with lights were out, we’d spring into action.”

“Finally, the British became aware of our operation,” Putt recalled years later. “Shortly before

### AMERICANS EXPLORED A TUNNEL WHERE THEY DISCOVERED INSTRUMENTATION WITH HIGHLY POLISHED MIRRORS THAT ENABLED VISUALIZATION OF AIRFLOW OVER AN AIRFOIL



Advancing GIs regularly came across abandoned German aircraft such as this Me 262 that was dispersed away from known airfields and factories. Many were unusable due to a lack of fuel and pilots, and were often sabotaged or booby-trapped for the curious. (Photo courtesy of Stan Piet)

the Potsdam Conference (in July 1945), the British threw this up to General Arnold. Very shortly after that ... General Knerr flew in one day and said: ‘I think we ought to get you out of here.’”

But it is likely the other American officers who knew of these operations were at least secretly happy for Putt’s successes in skimming German technologies in a supposed British portion of Germany.

By July 1945, the collecting of technology samples was largely accomplished; what remained was the job of scrapping what was left. In effect, the Luftwaffe, its secrets, its technology and its aircraft ceased to exist on the European continent. What had taken so long to build up, in a matter of months was gone. A universal nightmare finally came to an end. †

Portions of this article are excerpted from ‘Captured Eagles—Secrets of the Luftwaffe’ written by the author and published by Osprey in 2014.

Another V-2 collected by the 1st Disarmament Wing is seen leaving Wirsburg, Germany bound ultimately to the U.S. (Photo courtesy of Stan Piet)

