

United States Department of the Interior
National Park Service

For NPS use only

National Register of Historic Places Inventory—Nomination Form

received

date entered

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic B-29 Bomber *Enola Gay*

and or common

2. Location

street & number Paul Garber Restoration Facility
Smithsonian Institution Silver Hill Road not for publication

city, town Suitland vicinity of (temporary location)

state Maryland code county Prince Georges code

3. Classification

Category	Ownership	Status	Present Use	<input checked="" type="checkbox"/> museum
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> park
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> private residence
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input checked="" type="checkbox"/> work in progress	<input type="checkbox"/> educational	<input type="checkbox"/> religious
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment	<input type="checkbox"/> scientific
<input checked="" type="checkbox"/> object	<input type="checkbox"/> in process	<input type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input type="checkbox"/> transportation
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> other:
		<input checked="" type="checkbox"/> no	<input type="checkbox"/> military	

4. Owner of Property

name Smithsonian Institution

street & number

city, town Washington vicinity of state D.C. 20560

5. Location of Legal Description

courthouse, registry of deeds, etc. Smithsonian Institution

street & number

city, town Washington state D.C. 20560

6. Representation in Existing Surveys

title None has this property been determined eligible? yes no

date federal state county local

depository for survey records

city, town state

7. Description

PG: 76A-16

Condition		Check one	Check one	not applicable
- excellent	___ deteriorated	___ unaltered	___ original site	
good	___ ruins	<u>X</u> altered	___ moved	date _____
^ fair	___ unexposed			

Describe the present and original (if known) physical appearance

B-29 bomber Enola Gay is disassembled and is stored in the Smithsonian Institution's Paul Garber Restoration Facility, Suitland, Maryland. Current plans are for the complete restoration of the aircraft and placing it on public display as soon as a suitable facility for that purpose is acquired.

Early in 1940, at the request of the Army Air Corps, the Boeing Aircraft Company, Seattle, Washington, developed specifications for a "Very Long-Range" (VLR) bomber. Even before the prototypes were test flown, the Army Air Corps placed an order for this new aircraft which became known as the B-29 "Superfortress," the world's most superior bomber in World War II. Several advanced features were incorporated in the design of the plane, such as its being the first military craft to be pressurized, and the first heavy bomber to have tricycle landing gear. Another innovation was the development of retractable, remote-controlled gun turrets that allowed a gunner to operate more than one turret at a time. Also, the gunners, except the man in the tail, were physically removed from the noise and vibration created by the 0.5-inch machine guns.

Once the B-29 went into production, certain improvements were made between 1943 and 1945. In general, the aircraft's specifications, including Enola Gay's, were as follows: wing span, 141 feet, 2 inches; length, 99 feet; height of tail fin, 27 feet, 9 inches; loaded weight (with 12,000-pound bomb load), 67.5 tons; power, four 18-cylinder radial engines with superchargers; operation radius, 1,800 miles (3,600 miles round trip); maximum speed, 375 miles per hour at 25,000 feet; and the crew varied from eleven to thirteen men. Enola Gay carried a crew of twelve on its fateful mission.

The original model was armed with ten 0.5-inch machine guns and one 20mm cannon. Armament was considerably reduced on some later models. Enola Gay and the other "atomic B-29s" were stripped of their armament and armor plating, except for the tail turrets, to give them extra height and speed. Bomb-load capacity depended on the altitude and range flown. This varied from 5,000 pounds for a long-range, high-altitude flight to 20,000 pounds for a short distance flight at low altitude. Enola Gay's nuclear bomb, "Little Boy," weighed a little over 9,000 pounds. On that mission, the plane flew over the Pacific at a low altitude until she neared Japan, when she climbed to 31,060 feet.

Other features that marked the atomic B-29s of the 509th Composite Group were the strengthened bomb bays, new bomb suspension systems, white paint on the underside to minimize glare damage, fuel-injection engines, electronically controlled reversible propellers, and the planes' markings which consisted of an arrow pointing forward within a circle.

8. Significance

PG:76A-16

Period	Areas of Significance—Check and justify below					
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion		
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science		
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture		
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input checked="" type="checkbox"/> military	<input type="checkbox"/> social		
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian		
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater		
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics government	<input type="checkbox"/> transportation		
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)		

Specific dates 1945 Builder Architect Glenn L. Martin Co., Omaha, Nebraska

Statement of Significance (in one paragraph)

Enola Gay's dropping of a nuclear bomb on Hiroshima on August 6, 1945, had many significant outcomes affecting mankind. First, was the terrible devastation of the city of Hiroshima. Instantly, 78,000 people were killed; thousands more were wounded, either from the blast and resulting firestorm or from nuclear radiation. Of the city's 90,000 buildings, 62,000 were destroyed within a four-square-mile area. Second, the destruction of Hiroshima, followed by the similar destruction of Nagasaki three days later, caused the Emperor of Japan to instruct his government to surrender unconditionally, thus bringing the world's costliest war to a conclusion. Third, the introduction of nuclear warfare and the threat thereof had a far-reaching effect of awesome proportions on future world politics and international relations. Fourth, this new weapon and subsequent developments, such as the hydrogen bomb, have had a vast impact on battle readiness, tactics, and strategy, almost worldwide. Further, and strangely, out of the terror have come benefits for mankind in the form of nuclear medicine, energy, and peaceful scientific developments.

Atomic Bombs and Bombers

In 1939, Professor Albert Einstein wrote President Franklin D. Roosevelt describing the possibility of constructing a tremendously powerful bomb from uranium. In 1942, President Roosevelt placed the nation's resources behind the costly and time-consuming research and development in this field. Maj. Gen. Leslie R. Groves, Corps of Engineers, took charge of the work, which was code-named the Manhattan Project. Dr. J.R. Oppenheimer established a laboratory at Los Alamos, New Mexico, in the spring of 1943, where much of the important research was conducted. Shortly thereafter, Gen. Henry H. Arnold, commanding the U.S. Army Air Force, was instructed to provide specially modified B-29 bombers for a new weapon. The Glenn L. Martin Company of Omaha, Nebraska, turned out 46 of these "atomic bombers." Meanwhile, development of the new weapon proceeded under great security. Two types of bombs were developed simultaneously. One depended on uranium 235 for its chain reaction; the other made use of plutonium. In the Pacific, United States forces captured the Marianna islands of Saipan and Tinian and liberated Guam in the summer of 1944. Five B-29 airfields were constructed on the three islands for the long-range bombing of Japan.

On September 1, 1944, Lt. Col. Paul W. Tibbets, Jr., learned that he was to command the organization that would drop the new weapon. He took command of the 509th Composite Group and its one squadron, the 393d, at an airfield near Wendover in a remote section of Utah. A self-contained unit, the 509th

1. An air group normally consisted of three squadrons.

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Group even had its own military police. When fully formed, its complement was 225 officers and 1,542 enlisted men. At Wendover, Tibbets began a special air crew training program with new techniques in bomb-dropping and long-distance navigation. At one point, he took ten of his planes to Cuba for training in long-distance navigation over water at night.

In February 1945, Adm. Chester W. Nimitz, Commander in Chief, Pacific, with his headquarters now on Guam, learned that the atomic bomb would be available on August 1, 1945. At the same time, North Field on Tinian was selected as the base for the 509th Group. The first elements of Tibbets' command arrived on Tinian in May and, by July 1945, the 509th was fully settled into its closely guarded area.² Also in July, scientists exploded the first atomic device in a test at Alamogordo, New Mexico. Tibbets continued the training of his air crews at Tinian, flying over the Pacific and practicing bomb-dropping with conventional weapons on such Japanese-held islands as nearby Rota. On July 20, ten of the bombers began flying individually over Japan to further their experience and skills. Cruiser USS Indianapolis delivered components of the two bombs to Tinian while the uranium 235 was flown to the island.³

On July 24, Gen. Carl A. Spaatz, commanding the new U.S. Strategic Air Forces in the Pacific, received orders directing the 509th Group to deliver its first special weapon on the first good weather after August 3. Four possible targets were assigned: Hiroshima, Kokura, Niigata, or Nagasaki. Lt. Gen. Curtis LeMay arrived from Guam on August 3 bearing the orders for Special Bombing Mission No. 13. The strike was set for August 6, with Hiroshima selected as the primary target. On August 5, none other than Mao Tse-tung in northern China had his headquarters radio a favorable weather forecast to Tinian. That afternoon, a B-29 rolled toward loading pit 1 and the uranium bomb, Little Boy, was winched up into its bomb bay.

Tibbets decided to fly the B-29 commanded by Capt. Robert Lewis who would be along as co-pilot. That evening, Tibbets ordered his mother's name, Enola Gay, painted on the fuselage. Lewis, reportedly, became angry when he first saw the name on his plane, but, apparently, soon acquiesced to the fact. The hand-picked crew for Enola Gay was composed of:

2. Disgruntled Seabees of the 13th Naval Construction Battalion were forced to give up their comfortable quarters to the airmen.

3. A week later, a Japanese submarine sank Indianapolis.

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Col. Paul W. Tibbets, Jr., pilot and commander
Capt. Robert Lewis, co-pilot
Maj. Thomas Ferebee, bombardier
Capt. Theodore Van Kirk, navigator
Lt. Jacob Beser, electronic surveillance
Lt. Morris R. Jeppson, ordnance officer
Sgt. Joseph Stiborik, radarman
Sgt. George Caron, tail gunner
Sgt. Richard Nelson, radioman
Sgt. Robert Shumard, assistant engineer
Sgt. Wyatt Duzenburg, flight engineer

Capt. William Parsons, U.S. Navy, was also on board. After Enola Gay was in the air, Parsons, assisted by Lieutenant Jeppson, armed Little Boy.

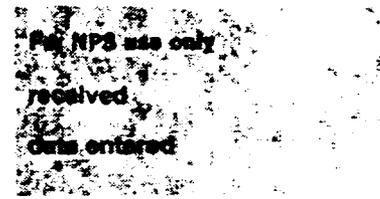
In addition to Colonel Tibbets' plane, six other B-29s were involved in the mission. Capt. Charles McKnight, in Top Secret, was posted at Iwo Jima, where a third bomb-loading pit had been prepared in case an emergency occurred to Enola Gay by the time it rendezvoused over that island. Three weather planes preceded Tibbets to Japan to report on weather conditions at the potential targets. (All three reported favorable conditions.) Two B-29s accompanied Tibbets, one carrying scientific instruments, the other, cameras. Maj. Charles Sweeny flew the scientific plane; three days later he would drop the plutonium bomb on Nagasaki.

The flight to Hiroshima was uneventful. As the plane approached the target, Tibbets informed the crew that they were carrying an atomic bomb. Enola Gay's bomb doors opened and the bomb dropped at 8:17 a.m. One minute later it detonated, 800 feet off from the aiming point. The rest was history. At 2:58 p.m., Enola Gay touched down at North Field, Tinian, a little more than twelve hours since her departure.

Colonel Tibbets retired from the U.S. Air Force about twenty years later with the rank of brigadier general. The Department of Defense donated Enola Gay to the Smithsonian Institution. On reflecting on the changes in public opinion over the years concerning nuclear warfare, Tibbets concluded that he was an expendable victim. To the American public on V-J Day, 1945, he was one of the indispensable heroes of World War II.

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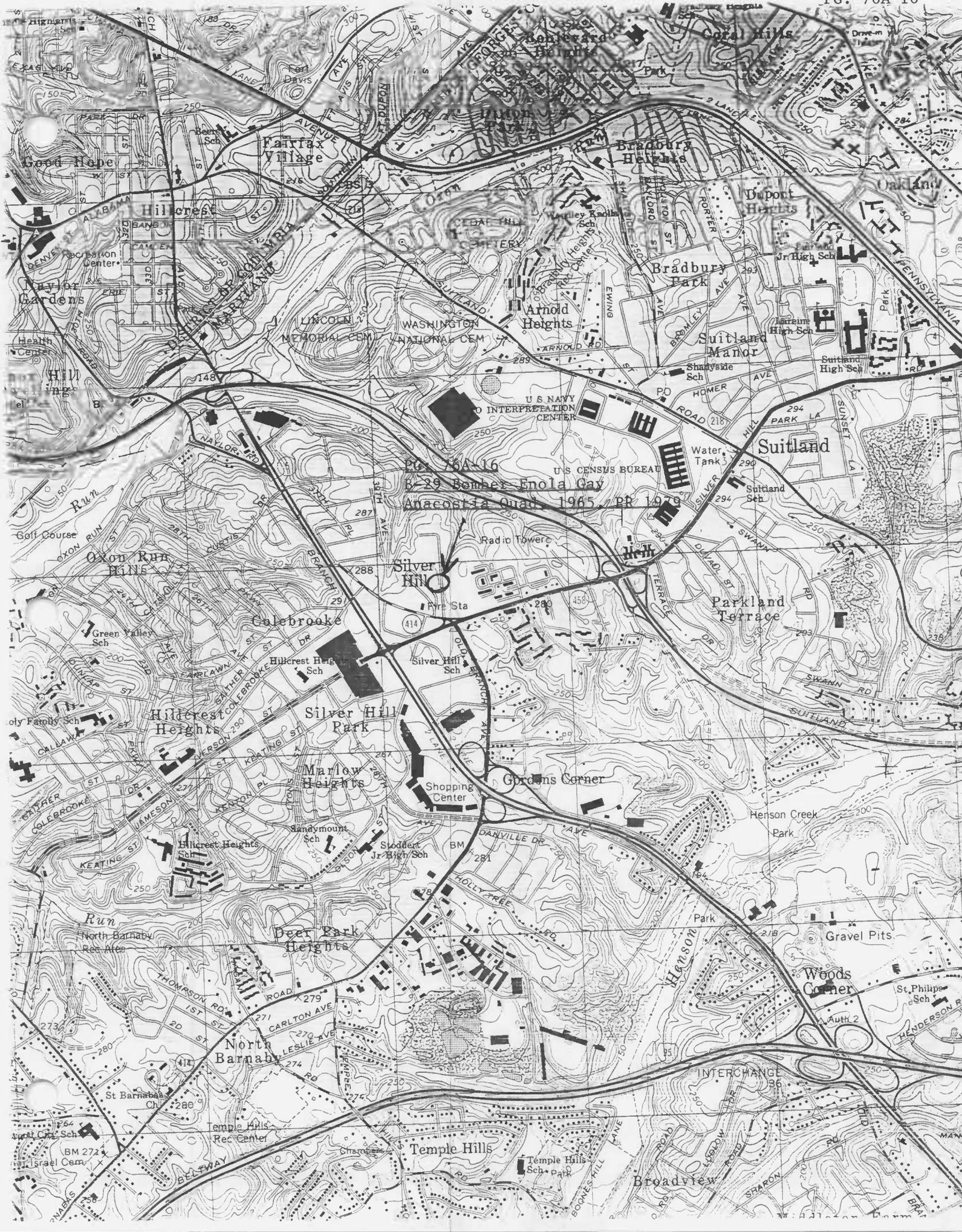
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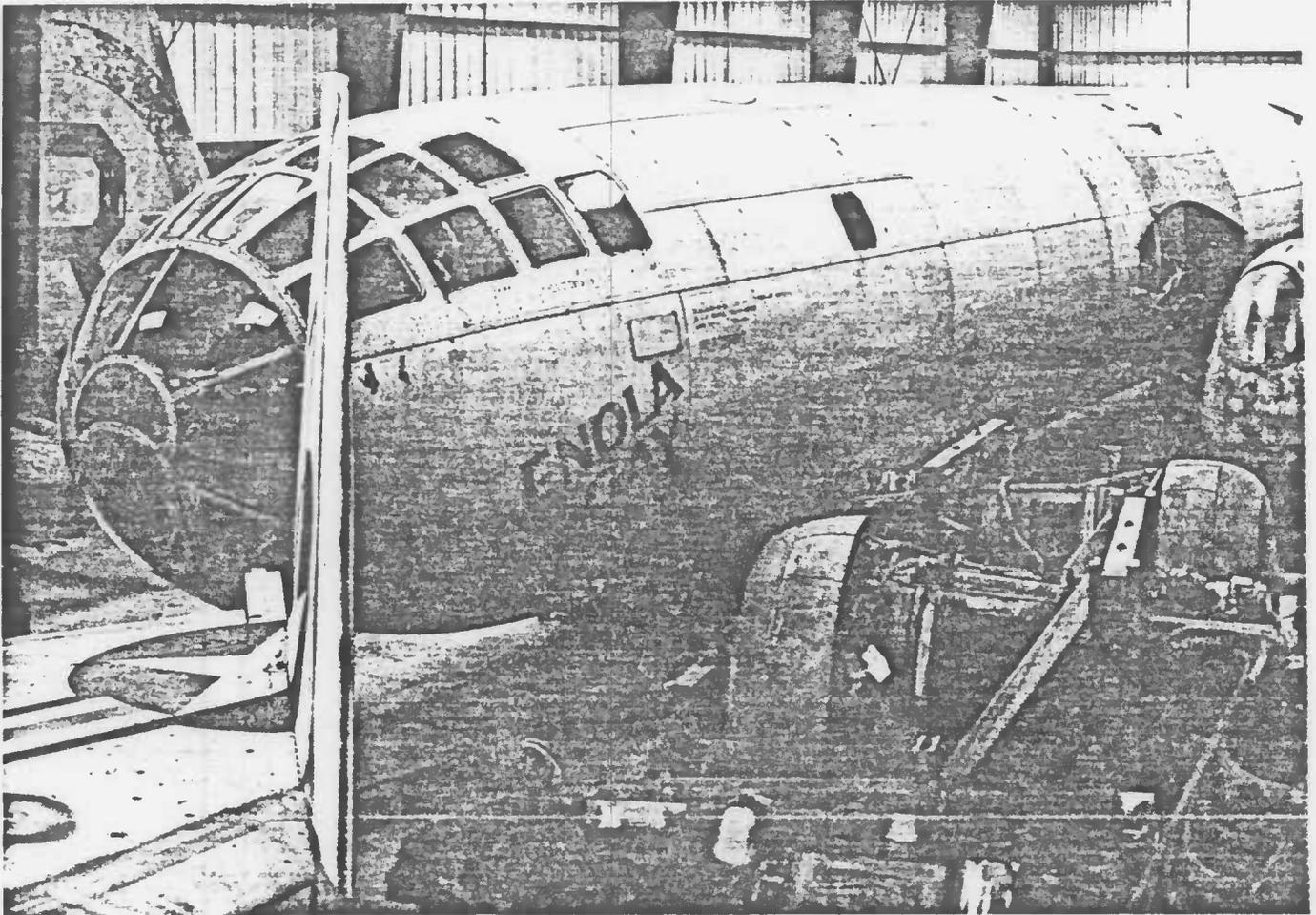
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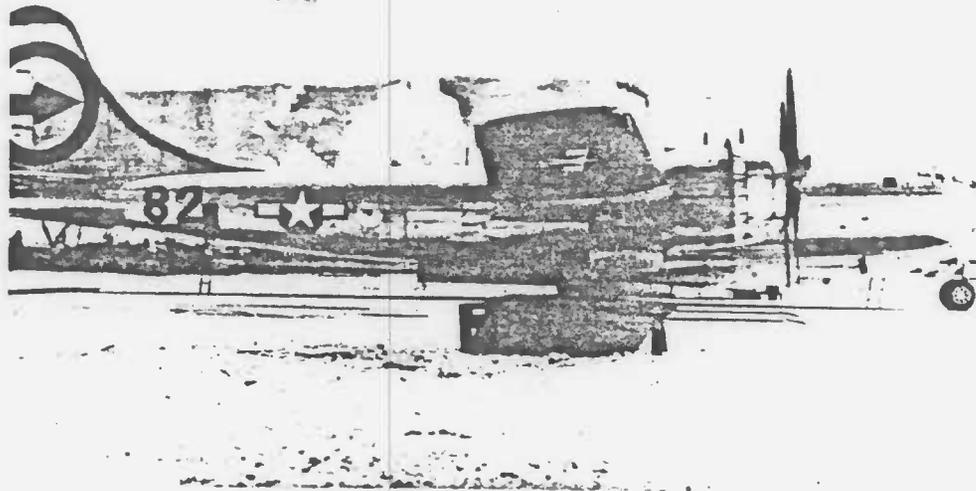


PG: 76A-16
 B-29 Bomber Enola Gay
 Anacostia Quad, 1965, PR 1070



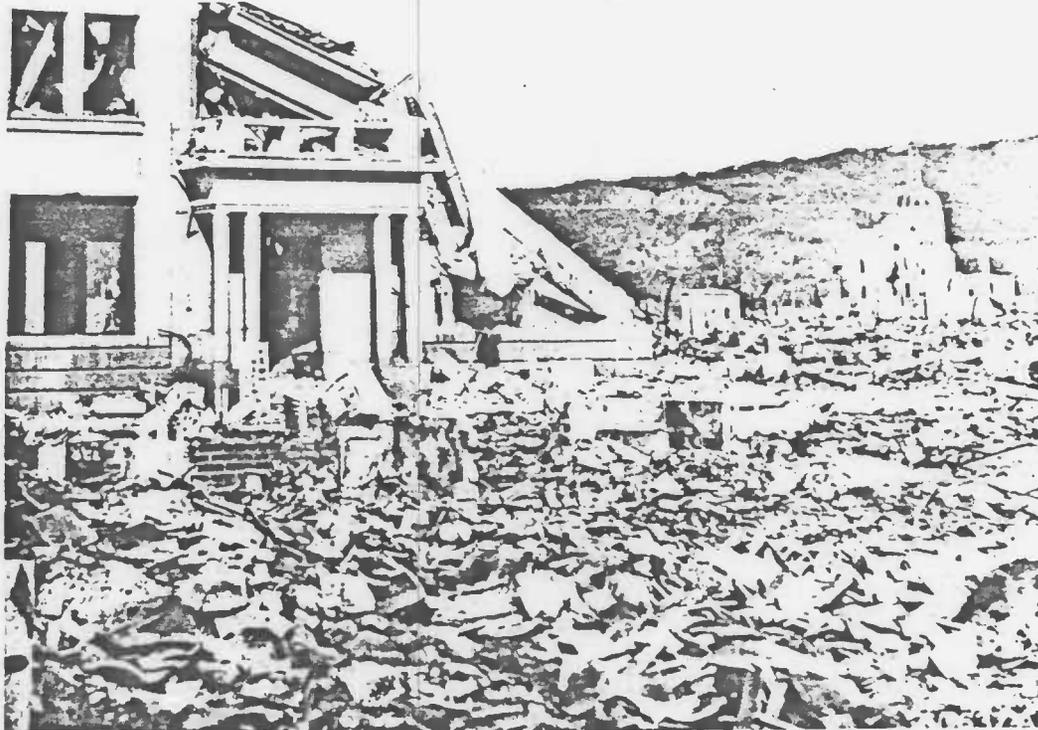
5. Enola Gay today. The disassembled aircraft will be restored by the Smithsonian Institution and placed on public display.

Courtesy, Smithsonian Institution



1. Enola Gay at North Field, Tinian.

Courtesy, Smithsonian Institution and U.S. Air Force



3. Hiroshima after the atomic bomb strike. Structure on the right remains unreconstructed as a peace memorial. October 7, 1945.

Courtesy, Smithsonian Institution and U.S. Air Force