V-J DAY: DOOMSDAYS A MERCILESS WAR COMES TO AN APPALLING END WITH THE USE OF ATOMIC BOMBS AND THE INSTANT INCINERATION OF TWO CITIES; PAUL GRAY; TIME; 08-07-1995

After witnessing the successful test of the first atomic bomb—a primordial burst of energy on the predawn New Mexico desert, a man-made fire bright enough to flicker in reflection off the moon—Brigadier General Thomas F. Farrell sought out his immediate superior, Major General Leslie R. Groves. Groves was commander of the top-secret Manhattan Project, which had been commissioned and funded—with $2 billion—to try to build such a bomb. "When Farrell came up to me," Groves remembered, "his first words were, 'The war is over.' My reply was, 'Yes, after we drop two bombs on Japan.'" This was the morning of July 16, 1945; within amazing 30 days, both of these statements would be history.

President Truman learned of the bomb test while in Potsdam, a suburb of burned-out and bombed-out Berlin, where he was meeting with Winston Churchill and Joseph Stalin, leaders of the nations allied with the U.S. in the defeat of Nazi Germany. The news that the atomic bomb actually worked promised to solve in a flash two of Truman's most urgent problems in the Pacific: the ordering of a heavy-casualty land invasion of the Japanese home islands, scheduled to begin Nov. 1, and the necessity of making concessions to Stalin in order to secure Soviet military intervention to help speed the defeat of Japan.

The atomic bomb held out the hope that neither action would be necessary. Truman confided to his diary, "It is certainly a good thing for the world that Hitler's crown or Stalin's did not discover this atomic bomb. It seems to be the most terrible thing ever discovered, but it can be made the most useful."

The question of how to deliver and drop atomic bombs on Japanese soil had been thoroughly studied at the highest U.S. government levels well before the test in New Mexico. A list of prospective targets had been drawn up, with an emphasis, as Groves later wrote, on "places the bombing of which would most adversely affect the will of the Japanese people to continue the war." A special Air Force unit—the 509th Composite Group—had been formed in September 1944, under the command of Lieut. Colonel Paul W. Tibbets, regarded by many to be the service's best bomber pilot. Tibbets' group would be responsible for dropping the then-untested atomic devices, although few of its 225 officers and 1,542 enlisted men were told the exact nature of their assignment.

On Tinian, a 39-sq.mi. island in the Marianas some 1,500 miles south of Japan, U.S. forces had constructed the largest airport
in the world, including four parallel, 8,500-ft.-long runways designed for B-29 Superfortresses. Several of the incendiary-bomb raids on Japanese cities staged by Major General Curtis LeMay's XXI Bomber Command began and ended in the Marianas. Members of the 509th unit started arriving at Tinian in June. On July 26, components of Little Boy, the uranium-based bomb that was scheduled to be dropped first, reached Tinian aboard the U.S. warship Indianapolis.

That same day, the Potsdam Declaration was issued by the U.S., Britain and Nationalist China, the three countries at war with Japan. The document offered the enemy "an opportunity to end this war." Its language was blunt: "Following are our terms. We will not deviate from them. There are no alternatives. We shall brock no delay." It concluded, "We call upon the government of Japan to proclaim now the unconditional surrender of all Japanese armed forces ... The alternative for Japan is prompt and utter destruction." Only those who had seen or heard of the atomic bomb, including Truman and Churchill, could understand what the last words might mean.

The Potsdam text reached Tokyo on the morning of July 27 and was debated most of the day by the Japanese leaders. Some saw a possibility of national face saving in that the demand for "unconditional surrender" was linked specifically to the Japanese armed forces and made no mention of Emperor Hirohito. The one condition the Japanese were determined to maintain, at the expense, if need be, of total extinction, was that the revered Hirohito would never be deposed, imprisoned or tried as a war criminal. In the end, the military advisers successfully argued that the Potsdam Declaration must be rejected to keep up the morale of Japan's besieged forces and civilians.

The next afternoon Japan's Prime Minister, Kantaro Suzuki, held a press conference in Tokyo, at which he vowed that his government planned to ignore the declaration and would "resolutely fight for the successful conclusion of the war." But the previous night, the first components of Fat Man, the plutonium-based bomb whose prototype had been tested on July 16, had arrived at Tinian.

By July 30, scrutiny of the Suzuki statement had convinced Washington that Japan would not surrender under the Potsdam terms. Secretary of War Henry L. Stimson cabled President Truman, who was still at the conference, asking for final ratification of the order to drop the atomic bomb, which had been drafted on July 24 by Groves and approved by Stimson and Army Chief of Staff General George C. Marshall. Truman wrote out in longhand a reply for transmission back to Stimson:

"Suggestion approved. Release when ready."
Bad weather—a typhoon approached Japan on Aug. 1—only delayed what was now inevitable. The skies cleared gradually. By the afternoon of Aug. 5, on Tinian, Little Boy was being winched into the specially modified bomb bay of a B-29, which Tibbets would christen—in honor of his mother's given names—Enola Gay. The 9,700-lb. bomb was 10-1/2 ft. long and 29 in. in diameter; it looked, one of Tibbets' crew decided, like "an elongated trash can with fins." After a midnight briefing, crews of the seven B-29s assigned to carry out the mission and various support functions had breakfast and then rode by truck to their stations. The strike plane Enola Gay, with Tibbets as pilot, groaned down the runway, picking up speed that would lift its 65 tons into the air. It took off at 2:45 a.m., Tinian time. Only on the way to the target did Tibbets tell his 11-man crew that they were carrying a new kind of bomb.

Monday, Aug. 6, dawned clear, hot and humid in Hiroshima, a city on the southwestern coast of the main Japanese island of Honshu. In 1942 it had a population of 420,000, but wartime evacuations had reduced that number this summer morning to about 280,000 civilians, 43,000 military personnel and 20,000 Korean forced laborers and volunteer workers. Hiroshima housed the headquarters of the Japanese army's Second General Headquarters.

The city had so far been spared the incendiary-bomb raids that were raining fire on so many of its Japanese counterparts—perhaps, some of its citizens hoped, because it made a poor target for such an attack. Situated on a broad alluvial delta, surrounded on three sides by low mountains, Hiroshima was threaded by seven tributaries of the Ota River—watery obstacles to the spread of fires—emptying into Hiroshima Bay on the Inland Sea. On this Monday morning, some 8,900 schoolchildren had been ordered to increase Hiroshima's advantage by helping clean and widen streets.

An air-raid alert sounded at 7:09—radar had picked up the approach of the 509th Group's weather plane—and an all clear followed at 7:31, after the B-29 departed. Perhaps this apparently harmless sortie lulled the city's civil-defense monitors. In any case, just before 8:15 three more B-29s—the Enola Gay and two escorts—could be seen and then heard flying some 30,000 ft. over Hiroshima. No alarms sounded in time. The radio announcer on duty had received word that three enemy planes had been sighted, but he had momentarily paused to check his notes instead of grabbing the microphone at once. "Military command announces three enemy planes..." He never finished. Outside, a teacher supervising a team of schoolgirl laborers said, "Oh, there's a B!" They looked up and saw the eye of death.

Little Boy, which had been dropped from the Enola Gay at 8:15:30, exploded 43 sec. later, at 1,900 ft. above Hiroshima,
creating a blinding bluish-white flash and, for a fraction of a second, unearthly heat. Temperatures near the hypocenter, the ground point immediately below the explosion, surged to figures ranging from 5400 degrees F to 7200 degrees F; within a mile of the hypocenter, the surfaces of objects instantly rose to more than 1000 degrees F. Those caught in the middle of this maelstrom were the lucky ones. They died instantly, vaporized into puffs of smoke or carbonized into small, blackened, smoking corpses, mummified in their last living gesture.

People farther away from the source of the thermal wave were destined for longer agonies. The intense heat melted the eyeballs of some who had stared in wonder at the blast; it burned off facial features and seared skin all over the body into peeling, draping strips. The survivors who first emerged out of the roiling inferno that the center of Hiroshima had become walked like automatons, their arms held forward, hands dangling. In shock, they instinctively tried to keep their burned skin from touching anything, including themselves.

They stumbled toward the riverbanks, some crying out, "Mizu, mizu!" (Water, water); the temperature and their injuries had left them severely dehydrated. Because light colors reflect heat and dark ones absorb it, some bomb victims had the images of their clothing tattooed on their flesh: the pattern of a kimono on a woman's back, the unburned swath left by a sash around the waist of an otherwise charred man. "Big black flies appeared and tried to lay eggs on human flesh," says survivor Michiko Watanabe, now 65. "The injured were so weak that they couldn't brush away the flies that nestled in their hands and necks. Some were black from a blanket of flies that covered them."

The heat from Little Boy singed more than 4 sq mi. of Hiroshima reddish-brown. In the process, it left a bizarre photographic negative of the instant of destruction. Objects, human or inanimate, that came between the blast and other objects cast their shadows as unburned patterns on the protected space: a spiral ladder was imprinted on the surface of a storage plant behind it. Survivors foraging for food in vegetable gardens later that day dug up potatoes and found that they had been baked in the ground.

Nature itself seemed deranged by the violence. Whirlwinds tore through the city. Fires jumped rivers with ease. Dark, marble-size drops of water—later called black rain—condensed off the explosion's towering smoke and fell to earth.

After the thermal heat came the blast, spreading out from the explosion center at an initial speed of 2 m.p.s. and then subsiding toward the speed of sound. Shock waves were the principal threat of conventional bombs, but Little Boy achieved
a new order of destructive power. Unleashing the equivalent of 12,500 tons of TNT, it essentially flattened Hiroshima in one blow: only 6,000 of the city's 76,000 buildings were undamaged; 48,000 of them were entirely destroyed. Practically every window and mirror in the city splintered, hurling shards of glass into the bodies of anyone nearby. The explosion started more fires outside the central ring of devastation, as flammable houses collapsed onto cooking fires or sputtering electric wires. People pinned under rubble inside burning buildings cried out for help; few heard them, and even fewer were in any condition to save them from burning alive. An estimated 100,000 died that first day, and the death toll climbed to 140,000 by the end of the year.

Assistance of any kind vanished that morning in Hiroshima. All the usual functions of municipal government simply stopped when the bomb exploded. Hospitals and medical centers, to which the tens of thousands of grievously wounded people swarmed, were part of the general ruin. Of the city's 150 doctors, 65 had died in the blast and most of the rest had been seriously hurt. More than 90% of the nurses were either dead or incapacitated.

Those physicians able to function did so heroically. They could not know that they would be the first medical experts to observe a new disease, the third effect, after heat and blast, of Little Boy. On Tuesday an official of the Red Cross Hospital in Hiroshima discovered that the X-ray plates stored in a basement vault that had survived the blast and a fire had all been exposed. The atomic bomb had spread radiation throughout central Hiroshima, with lingering, lethal effects on its survivors that would not be fully understood for years.

The outside world learned of the Hiroshima bomb—but not of its gruesome effects—from a terse White House announcement approved by President Truman, who was steaming home from Potsdam on the U.S.S. Augusta. The big news was saved for the beginning of the third paragraph: "It is an atomic bomb. It is a harnessing of the basic power of the universe. The force from which the sun draws its powers has been loosed against those who brought war to the Far East." This was the first public announcement anywhere indicating that nuclear weapons even existed.

Japanese radio offered its citizens, few of them presumably listening in Hiroshima, a more tentative report: "Hiroshima suffered considerable damage as the result of an attack by a few B-29s. Our enemies have apparently used a new type of bomb. The details are being investigated."

In truth, Tokyo initially knew almost nothing about what had happened in Hiroshima. As General Marshall noted later, "What we did not take into account was that the destruction would be so
complete that it would be an appreciable time before the actual facts of the case would get to Tokyo." As Washington waited impatiently for word of surrender, the Japanese Cabinet tried to find out what on earth had happened to Hiroshima. Since the first reports seemed unbelievable, some Japanese leaders wanted desperately not to believe them. Others decided that even if Truman's announcement was true—that Hiroshima was hit with an atomic bomb—Japan should continue to fight. "I am convinced," War Minister Korechika Anami told his colleagues in the Cabinet, "that the Americans had only one bomb, after all."

Such a response had been anticipated by General Groves, who argued all along to the Manhattan Project's civilian overseers that at least two atomic bombs would be necessary to effect Japan's surrender: the first to demonstrate the awful destructive power of a nuclear weapon and the second to convince the Japanese military that there were more where that came from.

On Aug. 8, Fat Man—a bulbous bomb, nearly 12 ft. long and 5 ft. in diameter, weighing 10,000 lbs.—was loaded into another of the 509th Group's B-29s at Tinian. The plane and its complement of escorts took off the next morning at 3:47 and headed for Kokura, a city that contained a major weapons arsenal, on the north coast of the island of Kyushu. Finding the target obscured by clouds and facing a fuel shortage on the strike plane, Major Charles W. Sweeney decided to fly over the alternate target on his way to an emergency landing on Okinawa.

Thus did Nagasaki enter history, an afterthought on the day of its ordeal and ever since a footnote: the second city to be hit by an atomic bomb. Fat Man exploded 1650 ft. above the city of some 240,000 people on the western coast of Kyushu at 11:02 on the morning of Aug. 9. In many ways, the event was a carbon copy of the horrors of Hiroshima: flash, heat, blast, radiation; permanent shadows cast by bombshine; thirsty, mortally burned people, emerging from the smoke and dust, trailing strips of their skin behind them. Some in Nagasaki had been afraid that their city would be attacked by the new weapon. Hideo Matsuno, then 27, a reporter with the government's propaganda arm, had read an Aug. 7 intelligence report about Hiroshima. "We knew about the atomic bomb," he says.

Fat Man released the equivalent of 22,000 tons of TNT, almost twice the power set forth by Little Boy. Trees had been knocked over in Hiroshima; in Nagasaki they were snapped in two. But the devastation in Nagasaki was limited, to an extent, by its topography; from the harbor, the city radiated northward in two valleys, separated by steep hills. The bomb exploded over the Urakami valley, Nagasaki's northwesterly fork, and the worst of the damage was contained there. The destruction, nevertheless, was infernal. About 74,000 were killed instantly. The Urakami
Catholic church, which had the country's largest Christian congregation at the time, was destroyed; more than two-thirds of the congregation died as a result of the bombing. "It was as if a giant had crushed it," says Takako Yoshida, then 18, who saw one of the church's two mammoth bell towers lying in the river below as she was being carried out on a stretcher three days later.

Japan's Supreme War Council was meeting in a military building on the grounds of the Imperial Palace in Tokyo at the moment of the Nagasaki bombing. A military aide entered the meeting at 11:30 a.m. with word that Nagasaki had been hit with the same sort of bomb as Hiroshima. This news was bad enough, but it only added to the council's bleak agenda, which was headed by the announcement, received in Tokyo the night before, that the U.S.S.R. had abruptly and unexpectedly declared war on Japan. Already, on the morning of Aug. 9, some of an estimated 1.6 million Soviet troops had attacked Japanese-held Manchuria.

As it had been since May, this six-member Supreme Council remained split down the middle on the questions of whether and how to end the war. One faction, headed by Prime Minister Suzuki and joined by Foreign Minister Shigenori Togo and Navy Minister Mitsumasa Yonai, favored negotiating for peace on the most favorable terms still remaining; the other, led by War Minister Anami, argued that defeat and death would be more honorable than surrender and occupation and that Japan had no choice but to fight on. The debate continued in a Cabinet meeting that ran more than eight hours. At last, Suzuki told the deadlocked Cabinet that he would convene an Imperial Conference, a meeting at 11 p.m. that brought the Supreme Council before Emperor Hirohito.

The 18-ft. by 30-ft. room in the imperial air-raid shelter was virtually unventilated and sweltering when the Emperor arrived as the meeting began and took his seat on a small dais. The assembled leaders, headed by the Supreme Council's Big Six, as they were called, listened again to a reading of the Potsdam Declaration and then began debating three possible responses to the terms it imposed. One plan, favored by Suzuki and Togo, called for an acceptance of the Potsdam demands, with the sole condition that Hirohito and the imperial dynasty be retained in Japan.

More than two hours of argument over these alternatives only emphasized the hopeless abyss between the pacifists and the militarists. Then Kiichiro Hiranuma, president of the Privy Council, who had been specially invited to attend by Hirohito, proposed asking for the Emperor's opinion, shocking everyone into silence. Everyone, that is, but Prime Minister Suzuki, who quickly pointed out that it was the right move, given that the