



44 Blackened Cities, Blackened Maps

Cary KARACAS AND David FEDMAN

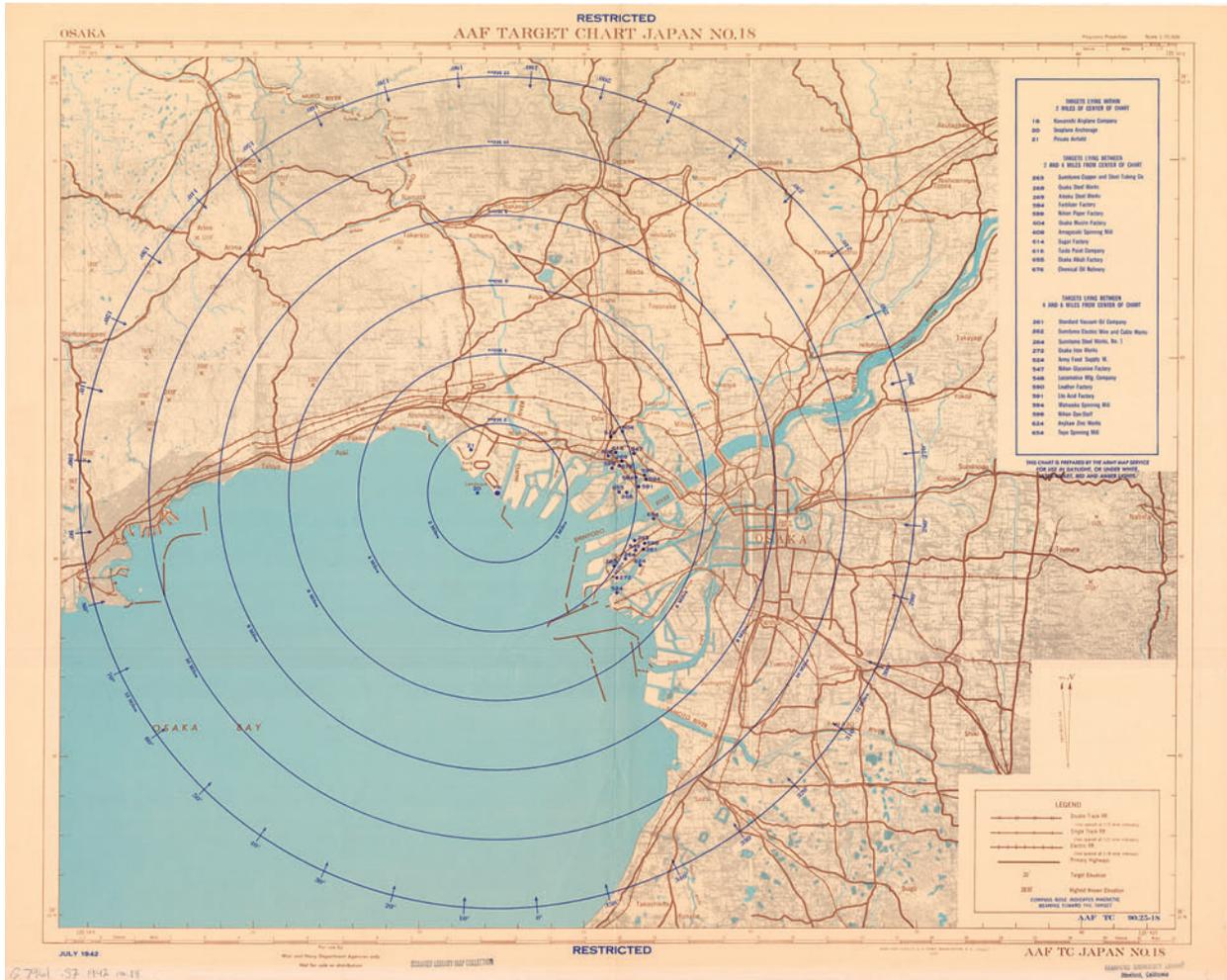


FIGURE 44.1 “AAF Target Chart Japan No. 18e Osaka,” July 1942. Army Map Services, US Army. 57 × 68 cm. Courtesy of Branner Earth Sciences Library, Stanford University.

For many among the first wave of American soldiers and civilians to arrive in Tokyo following Japan’s surrender in August 1945, words failed to convey the ruins they encountered. “There is really no way to describe a bombed-out city,” wrote photojournalist John Swope. “There is simply nothing left—that’s all there is to it.”¹ Perhaps no one painted a portrait of this destruction more vividly than the *New York Times* reporter George Jones, who wrote in a dispatch from Tokyo, “There should be no mistaken interpretation of the word ruins. There were blocks on which not a single building stood, where the construction and civilization wrought in the past centuries had been obliterated, leaving reddish soil—and nothing else.”² Although observations of this

sort focused principally on the capital and the two cities destroyed by nuclear bombs, urban wastelands stretched across the Japanese archipelago. By war's end, the US Army Air Forces (AAF) had targeted sixty-six cities for destruction by incendiary bombing.

Initially, military strategists did not imagine striking such a blow to the Japanese homeland. "Use of incendiaries against cities," Henry Arnold, the AAF's top commander, had professed, "is contrary to our national policy of attacking only military objectives."³ Although as early as the 1930s some strategists had noted the vulnerability of Japanese cities to fire, the AAF in the Pacific prioritized the high-altitude precision bombing of Japan's aircraft engine plants, to be followed by "other war-making targets."⁴ This is reflected in a substantial set of target maps of Japanese metropolitan areas created by the US military starting in 1942 as they planned the coming air war.

"AAF Target Japan No. 18e Osaka" (fig. 44.1), one of many such maps produced in 1942, visually conveys this strategic doctrine. The dots sprinkled through-

out the concentric circles mark the location of military installations and industrial sites in the greater Osaka area, including munitions depots, billeting facilities, and chemical plants. This particular map centers on a target undeniably martial in nature: the Kawanishi aircraft plant, one of the region's largest manufacturers of airplane parts. In addition to conveying the AAF's focus on military sites, the map also hints at how new forms of spatial intelligence allowed for the production of a wide array of wartime cartography. In this instance, army cartographers relied heavily on Japanese cadastral survey maps, the likes of which cartographers and other specialists within the intelligence community—especially the Office of Strategic Services (OSS)—labored mightily to secure as they scrambled to address the paucity of geographic information about Japan.

Target maps of this sort, however, lost their utility as war planners attached to the AAF reimagined how America's expanding air power in the Asia-Pacific region might deliver a decisive blow against the Japanese empire. Based on research into the flammability of Japanese

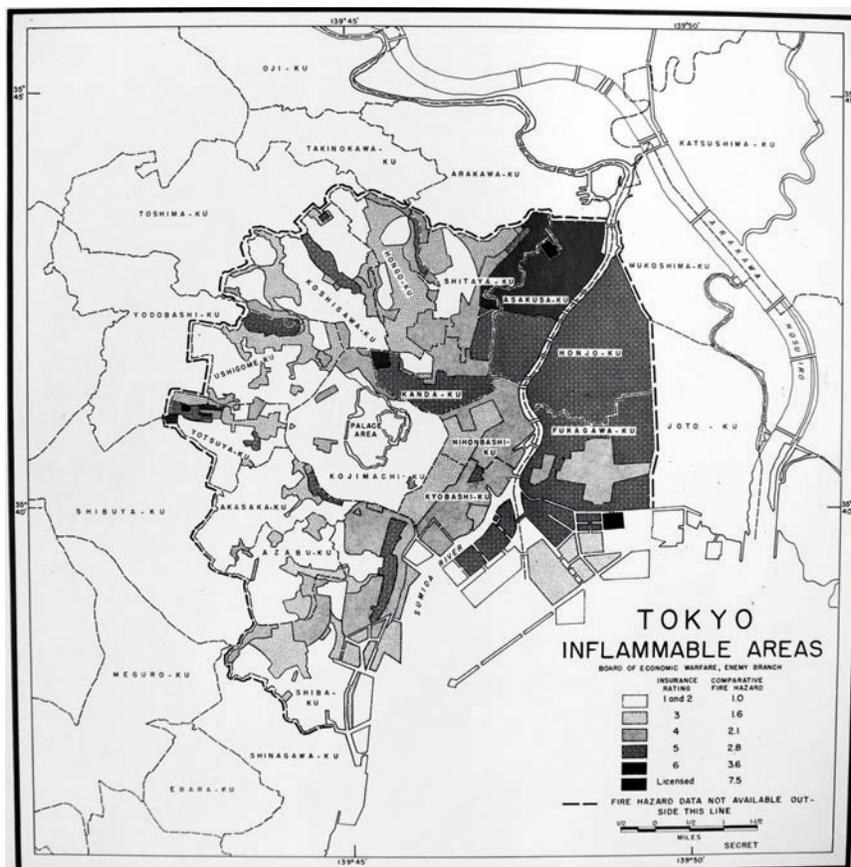


FIGURE 44.2 "Tokyo Inflammable Areas," November 1942. OSS map no. 877. 51 × 46 cm. US National Archives, Cartographic and Architectural Section, record group 226: 330/20/8.

traditional architecture, an awareness of the high concentration of Japan's war industries in urban areas, and a growing appreciation of the destructive potential of incendiary bombing (as demonstrated by Britain's attacks upon German cities, often with AAF support), planners in Washington began to include entire Japanese cities on their list of recommended targets. Maps made later in the war illustrate this shift. Cartographers working within the OSS made thematic choropleth maps of the largest cities, such as "Tokyo Inflammable Areas" (fig. 44.2), which detailed levels of population concentration and flammability for each ward. The most densely populated residential areas—also the most flammable—attracted the attention of the AAF's Committee of Operations Analysts. Successful large-scale incendiary attacks on such neighborhoods in Japan's six largest cities, the committee estimated, would destroy over two hundred

square miles and kill a half million people, thereby denting Japan's ability to further prosecute the war.⁵

With the American seizure of the Mariana Islands in the summer of 1944 and the subsequent arrival of newly developed B-29 Superfortress bombers, the plan of the Committee of Operations Analysts to incinerate Japan's largest cities became a tactical reality. Given the insignificant results yielded by the first few months of precision-bombing attempts and the growing fear that the AAF would not play a central role in the defeat of Japan, it comes as no surprise that Henry Arnold and other high-ranking airmen enthusiastically welcomed this shift.⁶ The US government, after all, had made a significant investment—costlier than the Manhattan Project—in the B-29 bomber, and a lack of compelling results would have doubtless deflated hopes for an independent air force once the war ended.

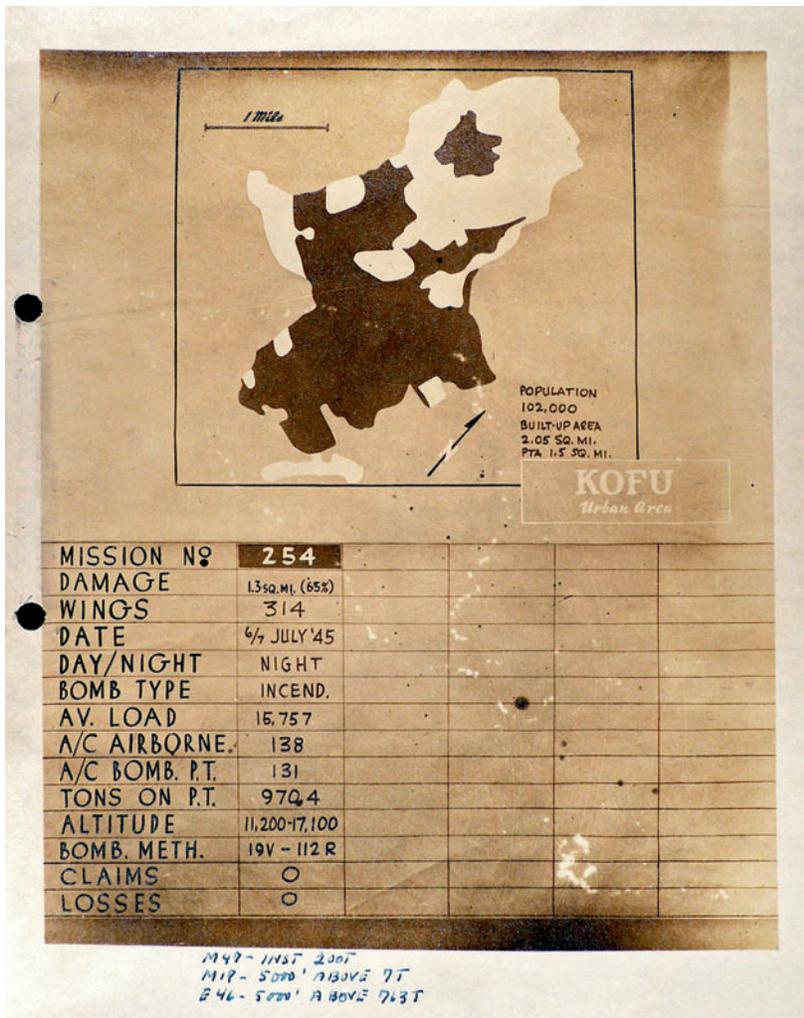


FIGURE 44.3 "Damage Report Map of Kofu City," July 1945. XXI Bomber Command. 20 × 27 cm. US National Archives, record group 243, series 59, box 5.

Maps produced by the Marianas-based XXI Bomber Command throughout the first half of 1945 clearly reveal the decisive shift toward firebombing Japan's cities. Following the first, weeklong assault on the six largest urban areas in March 1945, the command's mapping division created damage assessment maps. Together with aerial photographs, these visually conveyed to Washington the extent of destruction that each raid accomplished. As the air war expanded in scope and intensity, the swaths of black that demarcated destroyed neighborhoods grew on successive maps printed over successive months. Pleased with the results of targeting Tokyo, Yokohama, Kawasaki, Osaka, Nagoya, and Kobe, analysts then recommended attacking the country's medium-sized cities as well. Where concentric rings on target maps in 1942 had focused on military sites, those published toward the end of the war targeted the heart of the built urban environment.

Representative of the voluminous body of maps generated by this lethal project is the Kofu urban area damage assessment map (fig. 44.3). Produced after a July 1945 firebombing raid on a city that analysts themselves admitted had no military or industrial significance, maps such as this one reveal the American embrace of the incendiary destruction of Japanese cities as a legitimate wartime tactic. Tellingly, save for population figures, the maps contain little indication of the communities that resided within the targeted areas. This was new. While the 1942 target charts had also obscured the social dimensions of Japan's urban spaces, they did not reduce whole cities to target zones. These earlier maps included a variety of indicators of the city as a lived space, noting the locations of schools, community buildings, and railways. The dozens of damage assessment maps that the XXI Bomber Command produced, however, reduced representation of the Japanese city to but two values: black (the area destroyed by fire) and white (that which escaped the flames). Stripped of the professionalism and nuances of previous maps, the stark rendering of the Japanese city in these black-and-white categories conveys not only the extent of the destruction achieved by the AAF but also a troubling moment in the history of modern war: one in which a city and its inhabitants—including those too young, old, or enfeebled to contribute to the war effort—were reduced to target zones selected for indiscriminate destruction.

Notes

1. Carolyn Peter, John Dower, and John Swope, *A Letter from Japan: The Photographs of John Swope* (Los Angeles: Grunwald Center for the Graphic Arts, 2006), 220.
2. George Jones, "Writer over Tokyo Says Ruin Is Real," *New York Times*, August 29, 1945, 3.
3. As cited in William Ralph, "Improvised Destruction: Arnold, Lemay, and the Firebombing of Japan," *War in History* 13 (2006): 498.
4. Haywood Hansell, *Strategic Air War against Japan* (Maxwell Air Force Base, Alabama, 1981), 50.
5. Committee of Operations Analysts, *Economic Effects of Successful Area Attacks on Six Japanese Cities*, 4 September 1944. Source: US National Archives, record group 18, entry 57, box 8.
6. A detailed examination of the shift to incendiary tactics can be found in Thomas Searle, "It Made a Lot of Sense to Kill Skilled Workers': The Firebombing of Tokyo in March 1945," *Journal of Military History* 66 (2002): 103–33.

Suggested Readings

- Fedman, David, and Cary Karacas. "A Cartographic Fade to Black: Mapping the Destruction of Urban Japan during World War II." *Journal of Historical Geography* 38 (2) (July 2012): 306–28.
- Henrikson, Alan. "The Map as an 'Idea': The Role of Cartographic Imagery during the Second World War." *American Cartographer* 2 (1975): 19–53.
- Searle, Thomas. "It Made a Lot of Sense to Kill Skilled Workers': The Firebombing of Tokyo in March 1945." *Journal of Military History* 66 (2002): 103–33.
- Selden, Mark. "A Forgotten Holocaust: U.S. Bombing Strategy, the Destruction of Japanese Cities and the American Way of War from World War II to Iraq." In *Bombing Civilians: A Twentieth-Century History*, edited by Yuki Tanaka and Marilyn Young, 77–96. New York: New Press, 2007.
- Sherry, Michael. *The Rise of American Air Power: The Creation of Armageddon*. New Haven: Yale University Press, 1987.

This reading is an excerpt from *Cartographic Japan: A History in Maps*.

Wigen, Kären, Fumiko, Sugimoto and Cary Karacas, *Cartographic Japan: A History in Maps*. Chicago, IL. The University of Chicago Press, 2016.