## **CHAPTER II: FACILITIES**

## Headquarters

When WDD was established on 1 July 1954, it set up temporary headquarters in a former parochial school and parish church at 401-409 East Manchester Boulevard in Inglewood, California. The old schoolhouse was only a stopgap solution, however, and early in 1955, WDD moved into buildings on Arbor Vitae Street in southwest Los Angeles, near Los Angeles International Airport. These offices housed not only Air Force and civil service personnel, but also personnel working for the Ramo-Wooldridge Corporation, which supported WDD's missile programs.



These buildings, formerly St. John's Catholic Church and school, housed WDD in the first six months after its creation. The Ramo-Wooldridge Corporation leased the buildings, which were no longer occupied, to use as office space. The largest building, at left, was the church, the building in the center was the rectory, and the building at right was the school administration building. WDD removed several prefabricated classroom buildings to provide parking space.

In 1955, Ramo-Wooldridge purchased 40 acres on the southeast corner of Aviation and El Segundo Boulevards in El Segundo. The site was three miles from the Arbor Vitae complex but was the closest site available. Beginning in the middle of 1956, a complex of seven buildings was constructed on the site to provide offices and laboratories for Ramo-Wooldridge's operations. That complex, known as the Research and Development (R&D) Center, was completed in the fall of 1958, and employees of the Corporation's Space Technology Laboratories moved into it.<sup>5</sup>

<sup>5</sup> The Ramo-Wooldridge Corporation's Guided Missile Research Division was renamed Space Technology

Laboratories in 1957, just before it moved into the R&D Center. As noted in the previous section, Ramo-Wooldridge became Thompson-Ramo-Wooldridge (TRW) in 1958.

The Arbor Vitae Complex and the R&D Center provided much more room than the old schoolhouse, but they did not provide enough. By the late 1950s, the missile program had expanded, and WDD (now AFBMD) had become involved in space programs as well. The manpower associated with these growing programs left the Arbor Vitae complex and the R&D Center extremely congested, and AFBMD had to find additional facilities for its staff and their activities. Trailers were rented and parked at the Arbor Vitae complex and the R&D Center, and additional buildings were rented in southwest Los Angeles, Inglewood, Hawthorne, Lawndale, and Torrance.

In April 1961, AFBMD was divided into Ballistic Systems Division (BSD) and Space Systems Division (SSD). BSD moved to Norton AFB in San Bernardino, California, between July and September 1962. Employees of TRW who performed systems engineering for missile programs went there as well. Meanwhile, in December 1960, the Air Force purchased the R&D Center from TRW to serve as a home for The Aerospace Corporation, which had been created in June 1960 and was now supporting Air Force space programs. As a result of these changes, SSD now occupied the Arbor Vitae complex, and Aerospace occupied the R&D Center. The departure of BSD and TRW relieved pressure on the facilities, and there was now enough office space for SSD and Aerospace.



Douglas Aircraft's El Segundo Division displays its products during an open house on 14 November 1954. Area B of Los Angeles AFB now occupies the area pictured here. The aircraft paint booth in the background was modified to create Building 219, the People Center. The airplanes shown are (left to right) AD-5 Skyraider, AD-6 Skyraider, A4D Skyhawk, A3D Skywarrior, F4D Skyray, F3D Skyknight, and A2D Skyshark. (Photograph courtesy of The Boeing Company)

While the office space problem had been solved, another problem remained: the fact that the Arbor Vitae complex and the R&D Center were three miles apart. It was obviously more efficient to consolidate SSD and Aerospace in one place, and during 1961-1962, a plan was devised to bring that about. The plan involved the acquisition of two pieces of real estate adjoining the R&D Center. One, a 50-acre parcel at the northwest corner of Aviation and El Segundo Boulevards, was part of the Douglas Aircraft Corporation's El Segundo aircraft plant. The fifty acres in question were owned by the Navy, though they had been used by Douglas during and after World War II as part of its aircraft manufacturing facilities. This 50-acre site was transferred to the Air Force's ownership in October 1962.

The other site involved in the consolidation plan was a 31-acre parcel owned by the Utah Construction and Mining Company at the southwest corner of the same intersection. The Aerospace Corporation acquired that site in November 1962 and built its new headquarters there between February 1963 and April 1964. As Aerospace personnel moved into their new headquarters, Air Force people moved into the R&D Center and the Navy's portion of the former Douglas Aircraft facility. By 30 April 1964, this process was complete, and the Air Force property at the intersection of Aviation and El Segundo Boulevards was designated Los Angeles Air Force Station (AFS). The R&D Center became Area A of Los Angeles AFS, and the former portion of the Douglas Aircraft plant became Area B.



Building 105 in Area A of Los Angeles AFB, as it appeared during the 1960s and early 1970s. Command Section offices have always been on the sixth floor of Building 105. The Thor Agena launch vehicle in front of the building, a local landmark for many years, was toppled by a gust of wind on 25 March 1975.

SSD's successors have remained at Los Angeles AFS, which was redesignated Los Angeles Air Force Base (AFB) on 15 September 1987. For several decades, Air Force elements responsible for development and production of ICBMs remained in San Bernardino. This geographical separation continued even during the SAMSO era, when the missile and space functions belonged to the same organization. However, the situation finally changed because of the drawdown of missile programs following the end of the cold war. The old BSD/BMO headquarters in San Bernardino closed in September 1995, and the few remaining personnel moved to Los Angeles AFB.

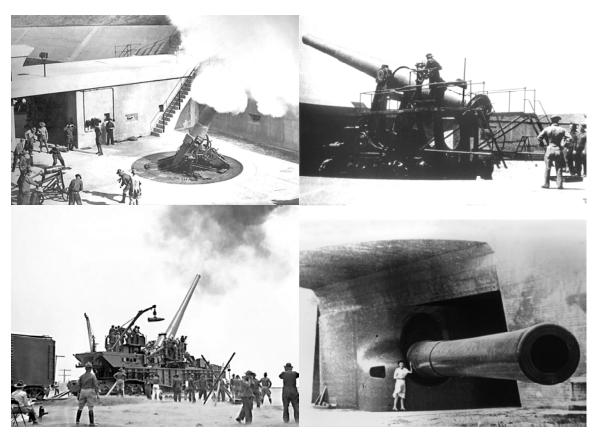
In the years since it was established, Los Angeles AFB has expanded by the acquisition of two geographically separated annexes. One, referred to as the Lawndale Facility or Annex 3, is 13 acres in size and is located on Aviation Boulevard in the city of Hawthorne, about a mile south of the main base. The Lawndale Facility has one building, a former Army missile plant. The facility was acquired by the Air Force in 1982, and renovation of the building was completed in December 1986. It was then used as office space by personnel working in ballistic missile defense programs managed by Space Division, and later by the Space-Based Laser Program managed by SMC, the Defense Systems Management College, and the Defense Technical Information Center.

## Fort MacArthur

The other annex is Fort MacArthur, another former Army installation acquired by the Air Force in 1982. It is 96 acres in size and is located in the community of San Pedro, about 13 miles south of the main base. The Fort now serves as a housing area for military personnel who work at Los Angeles AFB, but it had a long and proud history as an Army installation before it was acquired by the Air Force. We will briefly discuss that early history and then focus on the acquisition of the Fort by the Air Force and the construction of housing for Air Force personnel.

The area occupied by Fort MacArthur has been a government reservation since at least the mid 19th century. When ships of that era discharged cargo on the shore of San Pedro Bay, a tract of land was used primarily for traffic at the boat landing. This tract was defined and protected in 1846 by the last Mexican governor of California, Pio Pico, who confirmed the private ownership of Rancho de los Palos Verdes but required the owners to leave free "500 varas square" (44.25 acres) at the port of San Pedro. After the United States government acquired California from Mexico, it continued to recognize the 500 varas square as a government reservation, and in 1888, President Grover Cleveland declared the area a military reservation. In 1914, the reservation became Fort MacArthur, named in honor of Lieutenant General Arthur MacArthur, a military leader in the Spanish-American war, a governor of the Philippines, and the father of future General of the Army Douglas MacArthur. At that time, the Fort comprised three parcels of land: the original 500 varas square, later known as the Middle Reservation; an area on Point Fermin, later known as the Upper Reservation; and a small plot on Terminal Point. The Middle Reservation would later be expanded to take in much of the area along the bluffs to the south, and the Fort would also acquire other property, including a parcel fronting on Cabrillo Beach, known as the Lower Reservation, and parcels at White Point and Point Vicente.

Fort MacArthur was established to provide a home for coastal artillery batteries that the government had decided to build at San Pedro. In 1917, the Army completed construction of four batteries of 14-inch disappearing carriage rifles and two batteries of 12-inch mortars on Point Fermin. By 1919, it had constructed housing and headquarters buildings on the Middle Reservation in the Mission Revival and California Craftsman architectural styles. In 1917, the fort was garrisoned by the 1st Coast Artillery Company, Fort MacArthur, and, by 1918, by the 2<sup>nd</sup> and 3<sup>rd</sup> Companies of the Coast Defenses of Los Angeles. During World War I, the fort guarded the harbor and served as a training and staging area for Army units departing for the European theater. Over 4,000 soldiers at one time were stationed at the fort before the end of the war.



Major types of armament emplaced at Fort MacArthur: 12- inch mortar (upper left); 14- inch disappearing carriage rifle (upper right); 14- inch railway gun (lower left); and 16- inch rifle (lower right). (Photographs courtesy of Fort MacArthur Museum)

During World War II, the fort maintained its defenses, trained artillerymen for service overseas, and processed soldiers entering and leaving military service. None of the large guns was fired at enemy targets, but a small gun shelled a suspected enemy submarine in the first month of the war. The armament was modernized again in 1943 when two 16-inch rifles were emplaced at White Point near the Upper Reservation. All of the major armament was inactivated and most of it sold for scrap between 1943 and 1948.

Fort MacArthur's mission changed radically after the war. In 1948, it became a major training center for Army reservists. Reserve units from all of southern California

reported to the fort for supervision and training. In 1954, the fort became an antiaircraft missile site when a Nike Ajax missile battery (Nike Site LA-43) was emplaced on the Upper Reservation. Fifteen other Nike sites were built in remote locations around southern California, all controlled by the 47th Artillery Brigade headquartered at Fort MacArthur until 1969, and later by the 19<sup>th</sup> Air Defense Artillery Group. During 1958-1963, the Nike Ajax missiles were replaced by the more powerful Nike Hercules missiles, capable of carrying nuclear warheads.



Left: A Nike Ajax missile, probably at Redstone Arsenal, Alabama, in the 1960s. It was 32 feet long and flew at Mach 2.3 to a range of 30.7 miles and an altitude of 60,000 feet. It carried three conventional warheads detonated by ground command. Fort MacArthur had about 20 Nike Ajax missiles from 1956 to 1963. Right: A Nike Hercules missile at White Sands, New Mexico, probably in the 1960s. The missile was 40 feet long. It flew at Mach 3.65 to a range of 96.3 miles and an altitude of 100,000 feet. It carried one conventional or nuclear warhead detonated by ground command. Fort MacArthur had 12 Nike Hercules missiles from 1963 to 1974. (Photographs courtesy of Redstone Arsenal Historical Information)

By 1974, the NIKE sites had become obsolete and were shut down, causing the Army to reduce its presence at Fort MacArthur. The Army retained the Middle Reservation as an administrative center for support of active and reserve Army and National Guard units in southern California. However, it disposed of all other land attached to the fort, which included the Lower Reservation, the Hospital Area, the Upper Reservation, White Point, and Point Vicente. In 1975, Fort MacArthur became a subpost of Fort Ord and was manned by an Army support detachment.

In 1978, the Army announced that it would transfer its support units from Fort MacArthur to the Los Alamitos Armed Forces Reserve Center and would declare the remaining land excess. At that point, SAMSO was looking for a site to build housing for its military personnel, many of whom could not afford to buy or even rent housing in the

very expensive Los Angeles market. SAMSO saw Fort MacArthur as the solution to its problem, and it asked the Air Staff to place a hold on the land. In September 1979, the Department of Defense approved the transfer of Fort MacArthur from Army to Air Force jurisdiction. After some initial delays, Congress appropriated funds for construction of military housing at the Fort, and 370 townhouses were built there between November 1981 and December 1985. In addition, 33 existing homes at the Fort were renovated. Fort MacArthur was officially transferred from Army to Air Force control on 1 October 1982, and Air Force families began moving into the first of the newly built townhouses at that point.

## **Additional Housing**

While the construction of townhouses at Fort MacArthur alleviated the housing problem for Air Force personnel in Los Angeles, it did not completely solve it, and even before construction was finished, Space Division began looking for a place where it could build another 170 units. It targeted 50 acres at White Point, which the Army had declared excess in 1975 and turned over to the City of Los Angeles. The city was unwilling to transfer this land to the Air Force, but a compromise was eventually reached whereby the Air Force received title to 11.34 acres at White Point and 22.09 acres of nearby Bogdanovich Park. An agreement to this effect was signed in April 1987, and between August 1987 and August 1989, 170 units of military family housing were built at the White Point site, which was renamed Pacific Heights, and at Bogdanovich Park, which was renamed Pacific Crest.

SMC gave up its original plans to build 150 additional units of housing on Fort MacArthur's Upper Reservation because of environmental concerns. Instead, it decided to build a final increment of housing consisting of 71 units on another 24.4 acres of White Point. The site, then occupied by Navy housing, was available because of the closure of the United States Naval Station in Long Beach. This project was delayed during 1997 by concerns about the historical preservation of sites associated with the large guns which had guarded the Harbor of Los Angeles during World War II and earlier. The Air Force satisfied those concerns by undertaking preservation efforts, and construction proceeded. The construction contractor finally completed the 71 units on 7 November 2000. The new housing site was named Pacific Heights II. Its completion gave Los Angeles AFB a total of 644 units of military family housing at Fort MacArthur, Pacific Heights, Pacific Crest, and Pacific Heights II, making the base a much more attractive assignment for military families.