

# Cold War Nuclear Missiles in Miami

## 1962-1979

Charles D. Carter

In November 1960 John F. Kennedy was elected President of the United States. He was tested throughout his short presidency, beginning with the Bay of Pigs Invasion, the Berlin Crisis, and the Cuban Missile Crisis.

The most historically significant of these occurred in 1962 when Moscow surreptitiously implemented a clandestine plan to locate nuclear-capable surface-to-surface missiles in Cuba. In response, the United States blockaded the island of Cuba by surrounding it with naval ships, creating an umbrella of Air Force interceptors and bombers, and implanting surface-to-air and surface-to-surface missiles in South Florida, thereby creating an air defense network for the southern hemisphere. This response coincided with America's Cold War policy, "Contain and Deter."<sup>1</sup> The plan resulted in what the Russians now refer to as the "Caribbean Crisis" and the Cubans call the "October Crisis." This plan brought the world to the brink of thermonuclear war and the potential for mutually assured destruction (MAD) of humankind.



The Cold War came uncomfortably close-to-home when the army placed missiles in South Florida in response to the Cuban Missile Crisis.  
Courtesy of Charles D. Carter.

### Denial and Deception

From its inception, the Soviet missile operation entailed elaborate denial and deception (D&D) efforts. The denial of information on the deployment of the missiles and deceiving U.S. policymakers about the Soviet Union's intent was the foundation of Soviet leader Nikita Khrushchev's audacious Cuban venture.<sup>2</sup>

Nikita Khrushchev decided to plant offensive missiles in Cuba in the spring of 1962.<sup>3</sup> During that summer, a close circle of collaborators and contacts expanded to include Russian and Cuban military leaders, while secrecy and need-to-know prevailed. The most senior Russian officers brought into the plan were at least told that Cuba was involved in the operation, but only a few were informed of the exact nature of the mission.<sup>4</sup>

The top civilian and military officials conceptualizing the operation did not see eye-to-eye about the likelihood of pulling off a successful deception. At the very center of those making the decisions stood the commander of the Strategic Rocket Forces.<sup>5</sup> Russian experts believed that the deployment could be made expeditiously and secretly, without the U.S. discovering the missiles.<sup>6</sup> They were confident that the missiles could be hidden, claiming that they could be placed so as to blend in with the palm trees.

Secrecy surrounded the first Soviet delegation that went to propose the plan to Fidel Castro and other Cuban leaders. The officials arrived in Havana with little fanfare on May 29, 1962. The group included several missile construction specialists and other military experts, whose job it was to determine whether the missiles could be deployed in secrecy.<sup>7</sup> Once it was explained to Cuban Defense Minister Raul Castro that the supposedly "Chief Engineer" in the group was a military commander and that they needed to meet with Fidel Castro immediately, they were shown into the leader's office.<sup>8</sup> The Cuban leadership unanimously and enthusiastically gave its approval in principle.<sup>9</sup>

Soviet maritime policy began to shift in accordance with these first trips. In June and July, the USSR began to charter Western ships to carry general cargo from the Soviet Union to Cuba, reserving its own freighters for carrying military cargo.<sup>10</sup>

A Cuban delegation led by Raul Castro traveled to Moscow 2 July to discuss Soviet military shipments, including nuclear missiles. Khrushchev

met with the Raul Castro on 3 July. Raul Castro initialed a draft treaty with the Soviet Defense Minister that governed the deployment of Soviet forces to Cuba. This pact was not to be publicly revealed until a visit that Khrushchev planned to make to Cuba in November.<sup>11</sup> The plan was approved by Khrushchev on July 7, 1962.<sup>12</sup>

The Russians began to dispatch officers and specialists covertly to Cuba by air. On 10 July, the first Russian general arrived in Cuba to command the Soviet contingent.<sup>13</sup> Two days later, 67 specialists touched down. They journeyed as “machine operators,” “irrigation specialists,” and “agricultural specialists.” On 17 July, Havana announced that Cuba and the USSR had signed an agreement establishing a regular Moscow-Havana civil air route. U.S. intelligence analysis at the time speculated that the new Tu-114 flights were bringing Soviet military officers and sensitive electronic and signal-monitoring equipment to Cuba.<sup>14</sup>

The then Minister for Industry, Ernesto “Che” Guevara, and the head of the Cuban militia led another delegation to Moscow from 27 August to 2 September. The purpose was to introduce Fidel Castro’s revisions into the draft treaty. The Cubans proposed that the deployment be made public in order to head off any American overreaction; Khrushchev, however, successfully argued for continued secrecy.<sup>15</sup>

The first SS-4 missiles arrived in Mariel, a Cuban port city, on board the *Omsk* on 8 September. The *Indigirka* brought the initial shipment of nuclear warheads on 4 October.<sup>16</sup> According to one source, this ship carried 99 nuclear charges—some two-thirds of all nuclear weapons sent to Cuba and over 20 times the explosive power dropped by all Allied bombers on Germany throughout World War II.<sup>17</sup>

The United States received reports from friendly nations, newspaper correspondents, and other sources indicating that hundreds of Russian troops in fatigues had been seen in Havana and in seemingly endless convoys along Cuba’s main highways.<sup>18</sup> The information was funneled through counterrevolutionary organizations and their press in the United States, especially in Miami. The CIA discounted the information, because it did not consider the groups and people peddling it to be credible. This strategy was highly effective, according to a former Cuban intelligence officer.<sup>19</sup>

Reports flooded in from Cubans, tourists, foreign diplomats in Cuba, and newspaper officials reporting in a private capacity. At the CIA focal point at Opa-locka, Florida, intelligence officers screened countless

reports and debriefed Cubans who had fled the island.<sup>20</sup> Soviet spokesmen kept up a steady stream of denials and disinformation in September. On 4 September, Ambassador Anatoli Dobrynin sought out Robert Kennedy and stated that he had received instructions from Khrushchev to assure the President that there would be no surface-to-surface missiles or offensive weapons placed in Cuba. Dobrynin also added that the Attorney General could assure his brother that the Soviet military buildup was not of any significance.<sup>21</sup> On 6 September, Theodore Sorenson, special counsel to President Kennedy, met with Dobrynin, who reiterated his assurances that Soviet military assistance to Cuba was strictly defensive in nature and did not represent a threat to American security. The following day, Dobrynin assured the U.S. Ambassador to the United Nations, Adlai Stevenson, that the USSR was supplying only defensive weapons to Cuba. On 11 September, TASS announced that the USSR neither needed nor intended to introduce offensive nuclear weapons into Cuba.<sup>22</sup>

On 13 October, a high State Department official, Chester Bowles, questioned Dobrynin on whether Moscow intended to put offensive weapons in Cuba; the Ambassador denied any such intention. The following day a U-2 aircraft photographed the area of San Cristobal, where the first missile unit was being deployed. In only six minutes, U.S. Air Force Major Richard Heyser snapped 928 photographs that yielded the first confirmation of offensive missiles in Cuba.<sup>23</sup> Washington stepped up intelligence collection of all kinds, readied massive air attack and invasion plans—including sending nuclear-armed B-52s aloft—and engaged in extensive policy deliberations in the Executive Committee. On 22 October, President Kennedy revealed the missile buildup to the world.

The clandestine operation by Russia to place medium-range and intermediate-range ICBMs in Cuba allowed them to target almost the entire continental United States. This was in addition to Russian bombers with nuclear payloads. The offensive military equipment was accompanied by Russian military troops and commanders with the authority to launch the missiles toward the United States.

The President and the Executive Committee were seeing explicit details of the Soviet nuclear offensive buildup. They were following the advances of the MRBMs and IRBMs toward operational status with each day's low-level recon photos. The missions, as the President knew, were dangerous and might escalate the crisis beyond the control of either side.

Two Operational Plans (OPLAN) were considered. OPLAN 316 envisioned a full invasion of Cuba by Army and Marine units supported by the Navy and following Air Force and naval airstrikes. However, Army units in the United States would have had trouble fielding mechanized and logistical assets, while the U.S. Navy could not supply sufficient amphibious shipping to transport even a modest armored contingent from the Army. OPLAN 312, primarily an Air Force and Navy carrier operation, was designed with enough flexibility to do anything from engaging individual missile sites to providing air support for OPLAN 316's ground forces.<sup>24</sup>

Airstrikes and an eventual invasion were planned by the U.S. in case things got hot. CINCLANT OPLAN 312-62 evolved during the summer and early fall of 1962 as the build-up of air-power in Cuba became apparent. The plan entailed the use of 500 tactical fighter aircraft and carrier aircraft in a series of strikes against Cuban offensive weapons. Initial strikes would eliminate SAM sites and associated conventional AA defenses. These strikes would be followed by massive attacks on Cuban hostile aircraft and other offensive weapons including, after their presence was discovered and until they were withdrawn, MRBMs and IRBMs. Subsequent attacks would target troop concentrations, artillery, and armor.<sup>25</sup>

On October 15, the 82<sup>nd</sup> and 101<sup>st</sup> Airborne Divisions were alerted for immediate movement to southern Florida in order to counter the manned bomber threat. In addition, the 1<sup>st</sup> Armored Division from Fort Hood, Texas, augmented by the 2/69<sup>th</sup> Armor from Fort Benning, Georgia, deployed to Fort Stewart, Georgia, in preparation for movement by ship for the invasion of Cuba. It was the only divisional-sized Army ground combat unit actually deployed as a response to the Cuban Missile Crisis. The entire operation took just 18 days.<sup>26</sup>

For six weeks the 1<sup>st</sup> Armored Division conducted live-fire training and amphibious exercises on the coasts of Georgia and Florida from its temporary home at Fort Stewart. The Division consisted of 19,000 troops, 2,000 tanks, and an arsenal of *Honest John surface-to-surface nuclear-capable* missiles. Throughout the Crisis the 1<sup>st</sup> Armored Division was in a position to move out for an invasion of Cuba within a matter of hours. Fortunately, before an invasion or a nuclear exchange could occur, the Soviet Union withdrew their missiles from Cuba and ended the crisis.

One Automatic Weapons AD Battalion was sent to protect the stag-

ing bases while twelve support units, ranging in size from detachment to battalion, also deployed to Florida to provide logistical support.<sup>27</sup>

Battery B, 1<sup>st</sup> Automatic Weapons Battalion, 59th Artillery arrived in Florida on October 25, 1962. This unit had no missiles; rather it was equipped with World War II vintage self-propelled 40mm "Dusters." These weapons were of little threat to the supersonic Soviet aircraft then in Cuba, and they provided psychological support more than defense. The 40mm weapons battalion remained in Florida until 15 December, 1962.<sup>28</sup>

On 17 October, Robert Kennedy was handed a personal message directly from Khrushchev for President Kennedy that stated, "under no circumstances would surface-to-surface missiles be sent to Cuba." The next day Foreign Minister Gromyko met with President Kennedy for two hours. Gromyko assured him that the Soviet aid to Cuba "pursued solely the purpose of contributing to the defense capabilities of Cuba and to the development of its peaceful economy."<sup>29</sup> The following day, Gromyko assured Kennedy that Soviet Cuban aid was only for the "defensive capabilities of Cuba."

On October 22, congressional leaders were shown the photographic evidence of the Soviet missile Cuban installations. Later that day, the U.S. military forces went to DEFCON 3. At 7:00 p.m., President Kennedy addressed the nation on the missile crisis in Cuba. In his address, he assured the citizens of America of the following course of action:<sup>30</sup>

1. A strict quarantine on all offensive military equipment under shipment to Cuba was being initiated.
2. The U.S. would continue and increase surveillance of Cuba and its military buildup, and the Armed Forces would prepare for any eventualities.
3. The U.S. would consider any nuclear missile launched from Cuba against any nation in the Western Hemisphere as an attack by the Soviet Union on the United States, requiring a full retaliatory response upon the Soviet Union.
4. The U.S. would reinforce the U.S. base at Guantanamo, and additional military units would be on a standby alert basis.

5. The President called for an immediate meeting of the Organization of American States, to consider this threat to hemispheric security and to invoke articles 6 and 8 of the Rio Treaty in support of all necessary action.
6. The President requested an emergency meeting of the Security Council of the United Nations to call for the prompt dismantling and withdrawal of all offensive weapons in Cuba before the quarantine would be lifted.
7. The U.S. would call upon Chairman Khrushchev to halt and eliminate this clandestine, reckless, and provocative threat to world peace and to establish stable relations between the two superpower nations.

### **Military Blockade of Cuba**

Shortly after dawn on 23 October, Navy pilots of Light Photographic Squadron 62 and Air Force pilots of the 363<sup>rd</sup> Tactical Reconnaissance Wing took off on the first low-level photo missions over Cuba. Later that day, the President issued Proclamation 3504: *Interdiction of the Delivery of Offensive Weapons to Cuba*. It stated that as of 2:00 p.m., 24 October, forces under his command had instructions to intercept any vessel or craft proceeding toward Cuba and to interdict the delivery of surface-to-surface missiles; bombers; bombs; air-to-surface rockets and guided missiles; warheads; mechanical and electrical equipment for such weapons; and any other materials subsequently designated by the Secretary of Defense.<sup>31</sup>

Navy ships slipped out of their homeports to blockade Cuba as Air Force planes flew to strategic locations around the Caribbean. B-52 bombers, armed with nuclear weapons, flew continuously, ready to head for pre-assigned targets in the Soviet Union. Other bombers were put on 15-minute ground alert. A thousand Air Force bombers and fighters were transferred to Homestead and MacDill Air Force Bases, and hundreds of Navy and Marine Corps planes were sent to Boca Chica Naval Air Station at Key West or operated off of eight aircraft carriers operating in the area.

In addition to the U.S. naval quarantine and the preparation for nuclear war with the Soviets, Kennedy planned an amphibious invasion of Cuba by the 1<sup>st</sup> Armored Division. One admiral claimed that the proposed operation "would have compared in scope with the largest of

World War II.” Ground units slated for the invasion included the First and Second Infantry Divisions, the 82<sup>nd</sup> and 101<sup>st</sup> Airborne Divisions, and 12,000 Marines, already afloat in the Caribbean.

The RF-8As and RF-101s covered their targets 500 feet off the ground at speeds of 600 mph. With this speed and altitude, the Soviets and Cubans had no warning, only the sonic roar as the reconnaissance planes flew by on flight profiles that brought them in low over the Gulf of Mexico with a pop-up over the target. At the successful conclusion of each mission, the VP-62 pilots would paint another dead chicken on the fuselages of their Crusaders to symbolize “Castro’s chickens coming home to roost.”<sup>32</sup>

Although there were Air Force and Navy units capable of defending South Florida against an enemy bomber, it quickly became apparent to the Joint Chiefs of Staff and military strategists that the United States had failed to provide a ground-based air defense to adequately defend an attack from a fleet of Russian bombers from the southern hemisphere. To do so would require an air defense system of surface-to-air missiles.

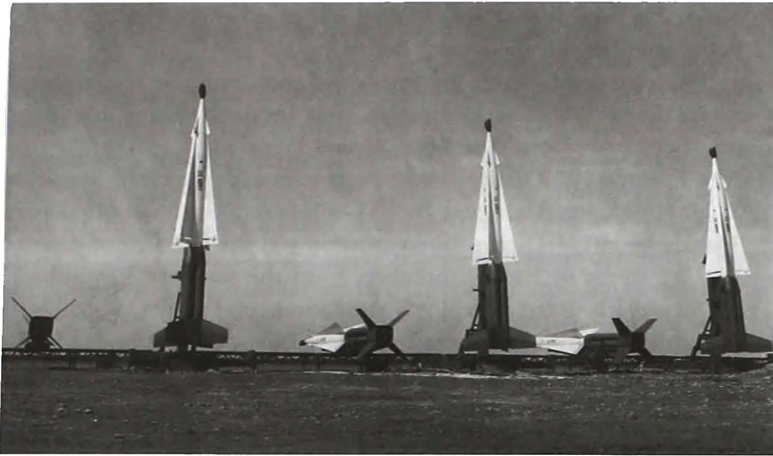
The Army’s Nike Hercules surface-to-air and surface-to-surface missile air defense system with an awesome strategic nuclear deterrent capability was currently defending many other cities, industrial complexes and military installations. The Nike Hercules also had both conventional and nuclear capability, which was initially deployed to South Florida. A Nike Hercules with a conventional warhead could intercept and eliminate a single enemy aircraft whereas with a nuclear warhead, it could wipe out an entire fleet of enemy aircraft. An additional benefit of the nuclear warhead was that it neutralized any nuclear weapons carried by enemy aircraft that might continue forward after the explosion.

### **Deployment of Surface-to-Air Missiles to South Florida**

The Defense Department had alerted the Army 6<sup>th</sup> Group at Fort Bliss on 20 October to prepare for movement to Florida. At this same time, the 2<sup>nd</sup> Missile Battalion of the 52<sup>nd</sup> Air Defense Artillery (ADA), (hereinafter referred to as 2/52) was preparing for a mission such as this.

The 2/52 was under the command and control of the 6<sup>th</sup> Air Defense Artillery Group located at Fort Bliss, Texas. It was comprised of a headquarters battery and four Nike Hercules field batteries. It had been designated as a STRAC (Strategic Army Corps) unit in 1960. Being designated as a STRAC unit meant the unit was capable of providing an eas-





Above: Hercules missiles at the D Battery missile site, near Krome Avenue and Tamiami Trail, 20 February 1963. U.S. Army photograph. John Dean, photographer. Miami News Collection, HistoryMiami, 1994-370-884.

Below: Soldiers working on radar equipment at one of southeast Florida's missile sites, 1963 August 3. Toby Massey, photographer. Miami News Collection, HistoryMiami, 1994-370-883.



ily deployable force for use in a limited war or other emergency, within 72 hours anywhere in the world. Becoming a STRAC unit also meant being "Better trained, better informed, and most effective soldiers anywhere in the world." The Distinctive Unit Insignia reflects this in its motto, "Semper Paratus," Latin for "Always Prepared."

On Thursday, 25 October, orders were issued for the HHB, Batteries A, C, D, 10<sup>th</sup> Signal Unit, and 200<sup>th</sup> Ordinance Detachment to depart for Florida by rail.<sup>33</sup> Their primary mission was the first line of defense against the threat of Russian bombers from the southern hemisphere. The 2/52 was scheduled to deploy by troop train on Friday October 26<sup>th</sup> but were delayed in deployment from Fort Bliss due to a bridge being washed out after heavy rains some distance east of El Paso. Temporary repairs were made, and the train with crept across the washout area and then headed east on Sunday 28 October.<sup>34</sup> Travelling by way of New Orleans, the battalion arrived in Homestead, south of Miami, on 31 October.

The Florida East Coast Railway delivered the troops to deep south Dade. The rail's right-of-way paralleled U.S. Route One for a large portion of the journey. Troops moved through a county whose residents were busy stocking up on food items amid wide-ranging discussions over the severity of the crisis, and concern for the future. Especially concerned was the city and county's large Cuban exile population, who gathered in today's Little Havana and elsewhere, engaging in passionate discussions of the crisis, and pouring into churches to pray for a resolution of this threat to the well-being of the world, as well as for the end of the Castro dictatorship.

Once the 2/52 arrived at Homestead AFB, the men deployed to the various locations where the missiles and radars would be set up. Warheads arrived from Pueblo Army Depot crated on flatbed tractor trailers, and the missiles came from Redstone Arsenal. State police pulled over some of the trucks on the way to South Florida with warnings of citations for weight, lights, and other code violations. The truck drivers had been provided with a telephone number to call immediately in case of such an occurrence.<sup>35</sup>

After the first the missiles were assembled and armed with warheads, the Florida Highway Patrol escorted the five-ton Army trucks and missiles to Carol City, Perrine, and the Everglades to become operational.<sup>36</sup> All batteries were fully operational on temporary field sites on 14 November.<sup>37</sup>

B Battery of the 52<sup>nd</sup> ADA was not part of the deployment to South Florida in response to the crisis, because it had been deployed to Johnston Island in the South Pacific on 13 September to launch and detonate a Nike Hercules missile with a 10 KT nuclear warhead on Operation Dominic, a series of 36 nuclear test explosions conducted in 1962 by the United States in the Pacific. This action was to respond in kind to the Soviet resumption of testing after the tacit 1958-1961 test moratorium.<sup>38</sup> Most of these shots were conducted with free-fall bombs dropped from B-52 bomber aircraft. Twenty of these shots were to test new weapons designs; six to test weapons effects; and several shots to confirm the reliability of existing weapons. The Thor missile was also used to lift warheads into near-space to conduct high altitude nuclear explosion tests; these shots were collectively called Operation Fishbowl.<sup>39</sup>

### **Conventional Warheads**

Although many Nike Hercules sites were equipped with nuclear warheads, the South Florida units arrived with conventional warheads.<sup>40</sup> This was due to regulations that required a missile battery to become certified before being armed with nuclear weapons. This included site security and an “inner security area” within a security area known as “exclusion area” with military police and dogs. Since the arrival of the Nike Hercules units had to set up very quickly in tents and the only security was rolls of concertina barbed wire and roving armed soldiers, it would take time for nuclear certification.

Additional missile units in the Miami, Homestead, and Key West were equipped with HAWK missiles for the low-flying and slower aircraft that could slip in under the normal field of vision for the radar system of the Nike Hercules missiles. A HAWK missile battalion was deployed to Florida. The 8<sup>th</sup> Battalion of the 15<sup>th</sup> Artillery arrived from Fort Lewis, Washington, and set up Hawk missiles at Patrick, MacDill, and Homestead Air Force Bases and the 6<sup>th</sup> of the 65<sup>th</sup> in Key West.

### **Living Conditions<sup>41</sup>**

The soldiers of the 2<sup>nd</sup> of the 52<sup>nd</sup> arrived mid-morning October 31 via rail, with minimal ground equipment. They then set up working air defenses under the most primitive conditions. Although military planners typically located air defense sites in major cities and their sub-

urbs, in South Florida the first duty stations were located in the Everglades or in the midst of south Dade County bean and tomato fields. At these primitive South Florida field locations, constantly running tactical generators provided electricity. Soldiers lived in tents at the sites. At first, their squad tents did not even have walls or floors. They constantly battled mosquitoes, snakes, rats, and spiders.

Because showers were not immediately available at the temporary sites, soldiers bathed in nearby canals or travelled to Homestead AFB only once a week on an Army bus. Some shaved in their steel helmets rather than making the trip to Homestead AFB or a Carol City school where a local principal offered the locker room showers to the soldiers of C Battery after normal school hours.<sup>42</sup>

The Army tried to improve the conditions for the troops at the temporary sites as quickly as possible by installing wooden floors for the tents and wood walkways to permit dry travel between battery facilities. Tents were constructed with sinks and showers in order to provide proper hygiene and boost morale; however, "little could be done to ameliorate the heat, humidity, and effects of the insects. Altogether, it was a rather rustic existence."<sup>43</sup>

From October 1962 until the summer of 1965, the men lived in squad tents in the mosquito-infested swampland of the Everglades, rocky tomato fields of west Miami, and cow pastures near Carol City. For months, they had no running water, commercial electricity, or bathroom facilities other than portable "Jiffy Johns."

Meals were cooked on open gas ranges, and the soldiers ate from mess kits, and shaved from their steel helmets using cold water trucked in from a fire hydrant.

### **Missile Site Locations**

The 13<sup>th</sup> Group and 2/52 Headquarters and the headquarters batteries based their operations at Princeton in the former B & L Farms tomato packing house. The exact location was SW 244<sup>th</sup> Street and SW 137<sup>th</sup> Avenue on the west side of U.S. Highway 1.

Battery A was deployed to an area near the main entrance to Everglades National Park (Everglades NP) on the west side of SR 9336. The launching area was along Canal C-111 and the administration and IFC was approximately one mile north on the same side of the highway. The location has been returned to farming of vegetables and Everglades



Even Armageddon provides photo opportunities for publicists. Here, Miss Miami and two of her attendants pose atop a missile. 1963. Courtesy of Charles D. Carter.



‘Porfirio Portillo of Las Cruces, New Mexico, pauses from duty for a smoke. He is a member of the 13th Artillery Group, trained in using HAWK and Nike-Hercules rockets to shoot down enemy jet fighters. Their base is a rudimentary camp set up in former bean and tomato fields. The soldiers’ biggest gripe, after boredom, is the South Florida mosquitoes.’ -- Caption in the Miami News, 1963 August 18.

David Cupp, photographer. Miami News Collection, HistoryMiami, 1994-370-4120.

restoration. (Battery A moved to the Hole-in-the-Donut, within Everglades National Park. The location is now a historic site.)

Battery C deployed to Carol City, with the launch area along the Snake Creek Canal between NW 57<sup>th</sup> Avenue (Red Road) and NW 47<sup>th</sup> Avenue. The administration and IFC areas were located approximately one mile east near what is now NW 195<sup>th</sup> Drive and NW 52<sup>nd</sup> Avenue. The location is now occupied by the Charles D. Wyche Jr. Elementary School.

Battery D located to a site between Perrine and Kendall west of US Highway 1. The property is now the Kendall-Tamiami Executive Airport.

Tactical considerations and the requirements of each particular weapons system determined the site locations. These considerations often meant locating the sites in areas prone to flooding. Commanders did not always listen to the warnings of local residents about the hazards associated with the temporary sites. When A Battery set up operations near the entrance to Everglades National Park, local farmers told the commander that a better location should be found because any rain would flood the area. Ignoring the local knowledge, the commander deployed his troops anyway. Frequent rains subjected the unlucky soldiers to constant flooding. Soldiers had to truck in numerous loads of fill dirt just to stay above water.<sup>44</sup> Flooding was not the only problem at the temporary sites.

### **From Temporary to Permanent Status**

In April 1963, the missile sites of South Florida would become a permanent part of the Army Air Defense Command (ARADCOM) and would become permanent sites. The U.S. Army Corps of Engineers constructed permanent structures to house and facilitate the men, the equipment and the overall operation of a nuclear missile site.

In the summer of 1965, the batteries relocated to newly constructed, permanent sites.

### **Site Configuration**

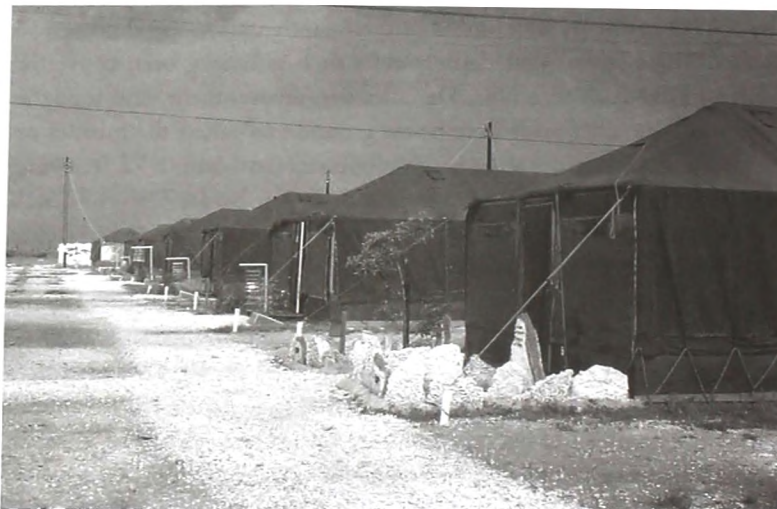
Nike sites around the continental United States (CONUS) and in the NATO countries were varied in their configuration based on several factors. These factors included variables such as having been converted from an Nike Ajax to a Nike Hercules site, environment, and topography. Some launcher areas were below ground and raised the missiles on elevators, some missiles were in air-supported tents with a 72 foot-long zipper, and others were in above-ground section barns. The missiles in South Florida were all in section barns since the sites were all within less than six feet above sea level and surrounded by water.

The radar section has to be a certain distance from the missiles so the Missile Tracking Radar (MTR) could move mechanically fast enough to keep up with the launched missile to send location signals and receive burst commands. Since the Nike Hercules exceeds Mach 1 (761.2 mph) before the booster fins pass the point of where the nose of the Nike was before launch (approximately 41 feet), the distance is required to allow



Above: Soldiers walk down “main street” of their missile base camp, 1963 Aug 3. Miami News Collection, HistoryMiami, 1981-099-21.

Below: Camp tents in the administrative area, 1963.  
Courtesy of Charles Carter.





for the MTR to pivot. The Nike reaches Mach 3.5 (approximately 2700 mph); as a consequence of this enormous speed, it actually travels higher than its intended target and dives back down for the interception and detonation.

B Battery was the only Nike Hercules site to have the High Power Acquisition Radar (HIPAR) with added features and capabilities. The remaining batteries continued to use the Alternate Battery Acquisition Radar (ABAR) they had used during the initial deployment.

### **Administration Area**

The administration area consisted of the living quarters as well as eating, recreation, and day-to-day administration and operations. Functional areas included non-commissioned officers (NCO) personal rooms, enlisted men's dormitory, latrine/sinks, open shower room, laundry room, medic room, barber shop, officer latrine, officer operations room, battery commander and executive officer's offices, orderly room, supply room, janitor closet, supply storage, communications center, officer quarters, officer quarters toilet, arms room, mail room, exhaust fan room, post exchange (PX), PX storage, day room/classroom, chapel, hobby shop, janitor closet, corridors, lobbies, mess hall dining, kitchen, storage, toilet behind kitchen, heater room, and vestibules.

Outside of the administration building, but considered part of the administration area, were a main gate security guard shed, water pump and pump house, sewage pump, athletic courts, paint, oil, and liquids (POL) shed, sewage treatment plant and drainfield, and a motor pool.

### **Integrated Fire Control (IFC) Area**

The IFC area was where the radars and all the required support equipment and facilities were located, including boresight mast, transformers, generator building, interconnecting corridor, battery control trailer (BCT), radar control trailer (RCT), alternate battery acquisition radar (ABAR) van, Fire Unit Integration Facility (FUIF), 20-foot low power acquisition radar (LOPAR), 20-foot missile tracking radar (MTR), 30-foot target ranging radar (TRR), 40-foot target tracking radar (TTR), and 47-foot alternate battery acquisition radar (ABAR).

### **Launching Area**

The launching area contained the facilities and equipment necessary to facilitate and support the maintenance, training, and launching of Nike Hercules missiles. Facilities and equipment included main gate sentry, two perimeter security stands, exclusion area security building, water supply well, pump, and storage tanks, generator sheds, paint, oil, and liquid (POL) shed, launch control trailer (LCT), ready building, sewage pump station, sewage treatment facility and sewage drainfield, military police kennels, missile assembly and warhead building, three missile section barns, surrounded by a limestone berm containing a section control room, generator shed, and a fuse detonator magazine.

### **Nuclear Certification**

Now that the missile sites had the facilities and staff to become certified for nuclear warheads, the process began. The first step was to pass a Technical Proficiency Inspection (TPI). In late 1965, the first nuclear warheads were installed on the Nike Hercules missiles in South Florida.

### **Florida Too Important to Remove Air Defense**

Military strategists realized that Russia had not increased the size of its fleet of bombers as originally assumed but rather, increased the size of its ICBM fleet capable of delivering nuclear warheads anywhere in the United States.

The Nike Hercules was useful against airplanes of a certain speed and altitude. Unfortunately, ICBMs exceeded that speed and altitude. Therefore, its usefulness in defending against Russian bombers attacking America could no longer justify its costs, since an attack would most likely be in the form of an ICBM. The military needed to shift the costs from the Nike Hercules program to the anti-ICBM program.

Research by the U.S. military on the Nike Zeus missile system had developed to the point where small improvements would allow it to be used as the basis of a "real" ABM system. Work started on a short-range, high-speed counterpart known as the Sprint to provide defense for the ABM sites themselves. By the mid-1960s, both systems showed enough promise to start development of base selection for a limited ABM system dubbed Sentinel. However, due to political debate, Sentinel never expanded beyond defense of missile-bases.<sup>45</sup>



Servicemen work on a missile in the launch area, 1965.  
Courtesy of Charles Carter.

At about the same time, the USSR reached strategic parity with the U.S. in terms of ICBM forces. A nuclear war would no longer be a favorable exchange for the United States, as both countries would be devastated. This led in the West to the concept of *mutually assured destruction* (MAD) in which any changes to the strategic balance had to be carefully weighed. To the U.S., ABMs now seemed far too risky—it was better to have no defense than one that might trigger a war.<sup>46</sup>

In 1972, the Anti-Ballistic Missile Treaty (ABM Treaty or ABMT), a treaty between the United States and the Soviet Union, limited both countries in the use of anti-ballistic missile (ABM) systems used in defending areas against missile-delivered nuclear weapons. It reduced the number of sites to one per party, largely because neither country had developed a second site. The sites were Moscow for the USSR and Grand Forks Air Force Base, North Dakota, since its Safeguard facility was already under construction for the U.S.<sup>47</sup>

As a direct result, in 1974, the Army Air Defense Command (ARADCOM) and formerly the Army Antiaircraft Artillery Command (ARAACOM), which had been established in 1950, was disbanded. All

remaining Nike Hercules sites were deactivated *except the batteries in Alaska and Florida*, these being retained due to their proximity to Communist countries. At this time, the Army transferred control of the Florida units to the U.S. Army Forces Command (FORSCOM).

When deterrence became a part of the United States' national strategy, ARADCOM was key and essential to that effort. Was it successful? Measured by the number of attacks on the United States by the Soviets in the 24 years of ARADCOM's existence, it was 100 percent so.<sup>48</sup>

### **Nuclear Deactivation**

In the spring of 1975, the Joint Chiefs of Staff ordered the Army to remove the W-31 nuclear warheads and replace them with conventional high explosive T-45 fragmentation warheads. This operation, named in "Operation Golden Shoes," involved the support of the Army 295<sup>th</sup> Military Police Company (Physical Security), Army Chinook CH-47 and Huey helicopters, and Air Force C-141 heavy-lit cargo aircraft. By late summer, all the W-31s in South Florida had been replaced with T-45s.

### **Florida Units are the Last Active Nike Site to Defend America**

In early 1979, the order came down for the Alaska sites to deactivate and for the Florida sites to prepare to relocate to McGregor Range at White Sands, New Mexico (a part of the Fort Bliss complex). By June, all Alaska sites had deactivated, and the batteries of the 2nd Missile Battalion in Florida became the last remaining Nike Hercules missile units defending America within the continental United States.

### **Standing Down**

In September 1979, the 2<sup>nd</sup> Missile Battalion of the 52<sup>nd</sup> Air Defense Artillery (ADA), including its headquarters and four firing batteries, stood down from its defense mission within the continental United States, moved to Fort Bliss, and became a training battalion in support of NATO countries who were still using Nike Hercules as their national air defense system.

### Deterrence to War

On 23 July, 1963, the men in the Nike Hercules units of the 2<sup>nd</sup> Missile Battalion of the 52<sup>nd</sup> Air Defense Artillery (ADA) were awarded the Army Meritorious Unit Commendation. The award was

for exceptionally meritorious achievement in the performance of outstanding services in the defense of their country during the period 20 October 1962 to 1 June 1963 while conducting active aerospace defense of the continental United States. Under almost primitive field conditions the Army missile units and their supporting detachments were deployed to complete a defensive ring around southern Florida against the threat posed to the United States during the Cuban crisis. The outstanding performance of duty by the units, both individually and collectively, contributed in great measure to the success of a highly important mission, operating under a joint command, and reflects great credit on themselves, the United States Army Air Defense Command, and the United States Army.”<sup>49</sup>

This was one of the few times that a unit received this award for completing a deterrence mission during the Cold War—essentially, they received a medal for *not* doing their job. Bob Wright, Chief of Records at the Army Center for Military History, Washington, D.C., asserts that this was highly unusual.

The supersonic ring of weaponry had provided an air defense network with multiple missile systems integrated into a single system for the first time. The men were aware the Russians would need to destroy this system to achieve reaching targets farther north. They remained prepared consistent with their battalion motto, “Semper Paratus” (Always Prepared).

### Training NATO Countries

In September 1979, the 2<sup>nd</sup> of the 52<sup>nd</sup> stood down from its CONUS defense mission, moved to Fort Bliss, and became a training battalion, in support of NATO countries who were still using Nike Hercules as their national air defense system.

### Deactivation of 2/52

In September 1982, A and C batteries of the 2<sup>nd</sup> of the 52<sup>nd</sup> were deactivated, leaving the HHB, B Battery, and D Battery as a training battalion for NATO Forces. Four years later on March 15, 1983, the 2<sup>nd</sup> Missile Battalion (Nike Hercules) 52<sup>nd</sup> ADA was deactivated in a ceremony at Fort Bliss, Texas. This was the last time a Nike Hercules unit existed in the Continental United States.

The Army continued to use Nike-Hercules as a front-line air defense weapon in Europe until the Patriot missile batteries were deployed. Other NATO units from West Germany, the Netherlands, Belgium, and Greece, continued to use the Nike-Hercules for high-altitude air defense until the late 1980s. With the collapse of communism in Eastern Europe, the units were deactivated.

### **2/52 Reactivated: Different Mission - Different Weapons**

On April 16, 1988, The 2<sup>nd</sup> Missile Battalion of the 52<sup>nd</sup> ADA Regiment was reactivated at Fort Bragg, North Carolina, as a HAWK unit. It was once again deactivated on September 15, 1993, at Fort Bragg.

In 1990, The 2<sup>nd</sup> Missile Battalion was reactivated as a Patriot Missile Battalion and deployed to Saudi Arabia, Bahrain, and Kuwait as a unit of the of the XVIII Airborne Corps at Fort Bragg. The 2<sup>nd</sup> of the 52<sup>nd</sup> served in Operations Desert Shield and Desert Storm. It was awarded the Valorous Unit Award and an embroidered streamer for the defense of Saudi Arabia and liberation of Kuwait.

On 15 August 1996, under the control of the 108<sup>th</sup> Brigade (now located at Fort Polk, Louisiana, as a Patriot and Avenger brigade), the 2/52 ADA moved to Fort Bliss. Still under the control of the Airborne Corps at Fort Bragg, the 2<sup>nd</sup> of the 52<sup>nd</sup> added an airborne tab above its patch. The 2<sup>nd</sup> of the 52<sup>nd</sup> (Stinger) was the brigade's only unit to serve on jump status. This platoon had the distinction of being the first ADA unit to be deployed in the opening days of the Gulf War.

In 2010, South Korea and Italy removed the last of the Nike Hercules as their national air defense weaponry.

## **Former Missile Sites Continue to Serve South Florida**

### **A Battery (HM-69): Everglades National Park**

In 1980, the facility was transferred to the National Park Service and since then has been used as the Daniel Beard Research Center, where, among other science projects, scientists study and assist in the eradication of non-indigenous species in Florida.

In 2007, A Battery received National Register of Historic Places status due to its significance in the history of the United States and its impact on the culture of South Florida. It has been designated as a National Historic District with twenty-two remaining structures from the Nike missile site.

Since 2009, the staff of Everglades National Park has conducted tours of the partially-restored Nike site from December through April. Since then, more than 10,000 park visitors have toured the site. It has become one of the most visited attractions in the park.

On October 21, 2012, to coincide with the 50<sup>th</sup> anniversary of the Cuban Missile Crisis, an actual Nike Hercules, which had been refurbished as a project by the George T. Baker Aviation School, was unveiled at the former nuclear missile inside Everglades National Park. A ceremony to commemorate the men who served in South Florida from 1962 through 1979 was conducted by the Everglades National Park on Sunday, October 21, 2012.

### **B Battery: Key Largo (HM-40)**

In 1980, the year after B Battery closed as a Nike missile site, the B Battery administrative building was used to house Cubans who came to Miami as part of the Mariel Boatlift. Since then, the administrative and IFC areas have been transferred to the Navy and finally to the Florida State Parks. In 1982, the former administration and IFC areas became part of the Dagny Johnson Key Largo Hammock Botanical State Park.<sup>50</sup>

The former launch area was transferred to the U.S. Fish and Wildlife Service in 1980 and became the Crocodile Lake National Wildlife Refuge. It was established to protect critical breeding and nesting habitat for the endangered American crocodile and other wildlife.<sup>51</sup>

**C Battery: Hialeah/Miramar**

The administration of an IFC area was transferred to the U.S. Navy in 1980, who converted it into a U.S. Navy and Marine Reserve Training Center. The launch area was completely demolished and is the future site of the Florida National Guard Snake Creek Training Center.

**D Battery: Krome Avenue and Tamiami Trail**

In 1980, the administration and IFC area was utilized to house Cuban refugees during the Mariel Boatlift. The launch area was used as a detention center for those who were considered as high risk and needed to be detained.

It remained as a federal detention center for Cuban, Haitian, and other non-Americans who were deemed mentally incapable, criminals or deportees. Frequently known as the "Krome Avenue Detention Center," the official name is the "Krome Service Processing Center (SPC), Department of Homeland Security Detention Facility."<sup>52</sup>

**Endnotes**

- 1 Truman became an architect of American Cold War policy. So did State Department official George Kennan, then stationed in Moscow, who in 1946 warned of Soviet inflexibility. The United States, wrote Kennan, would have to use "vigilant containment" to deter the USSR's inherent expansionist tendencies. The doctrine of containment became a principle of U.S. policy for the next several decades; [http://history-world.org/history\\_of\\_the\\_united\\_states8.htm](http://history-world.org/history_of_the_united_states8.htm).
- 2 <https://cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no1/article06.html#fn1>.
- 3 Gen. Anatoli I. Gribkov and Gen. William Y. Smith, *Operation ANADYR: US and Soviet Generals Recount the Cuban Missile Crisis* (Chicago, Berlin, Tokyo, and Moscow: edition q, inc., 1994), 24; <https://cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no1/article06.html#fn4>.
- 4 Ibid.
- 5 Raymond L. Garthoff, *Reflections on the Cuban Missile Crisis*, revised edition (Washington, DC: The Brookings Institution, 1989), 12-13.
- 6 Garthoff, p. 17; <https://cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no1/article06.html#fn1>.



- 7 Garthoff, p. 15; also, Gribkov and Smith, 14.
- 8 Fursenko and Naftali, p. 186.
- 9 James G. Blight, Bruce J. Allyn, and David A. Welch, with the assistance of Davis Lewis, *Cuba on the Brink: Castro, the Missile Crisis, and the Soviet Collapse* (New York: Pantheon Books, 1993), 8. This source draws extensively on input from key Soviet/Russian and American officials who had a hand in the crisis.
- 10 Brugioni, 92.
- 11 Gribkov and Smith, 21.
- 12 Gribkov and Smith, 24; <https://cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no1/article06.html#fn1>.
- 13 Fursenko and Naftali, 192.
- 14 Brugioni, 93.
- 15 <https://cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no1/article06.html#fn14>.
- 16 Gribkov and Smith, 52.
- 17 Fursenko and Naftali, 217. There is conflicting source information on the number of warheads specifically for the SS-4 missiles. Gribkov states that 36 such warheads were introduced. This issue cannot be resolved based on current evidence, but 36 appears to be a likely figure as that tracks with Soviet doctrinal requirements for re-fire missiles.
- 18 Brugioni, 101.
- 19 Domingo Amuchastegui, "Cuban Intelligence and the October Crisis," *Intelligence and National Security*, volume 13, number 3, Autumn 1998, p. 101. This is a special issue on intelligence and the missile crisis, edited by James G. Blight and David A. Welch. It is a unique collection of articles on the roles played by different intelligence services.
- 20 Detzer, 59.
- 21 Brugioni, 115.
- 22 Blight, Allyn, and Welch, 463-464.
- 23 The details of the U-2 mission are found in Volume XI: *Foreign Relations of the United States, 1961-1963, Cuban Missile Crisis and Aftermath*, edited by Edward C. Keefer, Charles S. Sampson, Louis J. Smith, and David S. Patterson (Washington, DC: US Government Printing Office, 1996), p. 29. Although uncertain about the status of the weapons in Cuba at the time of discovery, we now know that only some of the nuclear-capable delivery systems were ready for action in late October. Of the 36 SS-4s deployed, for example, only about half were ready to be fueled—an 18-hour process—and not one had been programmed for flight. See Gribkov and Smith, 63.

- 24 Kamps, Charles Tustin, "The Cuban Missile Crisis," *Air & Space Power Journal*, AU Press, Air University, Maxwell Air Force Base, Alabama, Fall 2007, Volume XXI, number 3, 88.
- 25 Cuban Crisis, Operational Aspects, December 26, 1962; National Defense University, Taylor Papers.
- 26 [https://bliss.army.mil/2HBCT1AR/1ad\\_history.html](https://bliss.army.mil/2HBCT1AR/1ad_history.html).
- 27 <http://history.army.mil/books/AMH-V2/PDF/Chapter09.pdf>. After the end of the crisis in late October, all U.S. Army forces deployed to Florida and Georgia were ordered to return to their home stations, except the three AD battalions and their support units.
- 28 *Cold War in South Florida*, National Park Service, Historic Resource Study, October 2004, Appendix One: A Brief History of Air Defense in South Florida Steve Hach, 75.
- 29 Blight, Allyn, and Welch, 465-466.
- 30 <http://americanrhetoric.com/speeches/jfkucubanmissilecrisis.html>.
- 31 [https://cia.gov/library/center-for-the-study-of-intelligence/kent-csi/docs/v44i4a09p\\_0008.htm](https://cia.gov/library/center-for-the-study-of-intelligence/kent-csi/docs/v44i4a09p_0008.htm).
- 32 *Ibid.*
- 33 Letter Orders 10-T-181, Headquarters, U. S. Army Air Defense Center, Fort Bliss, Texas dated 25 October 1962, Subject: Movement-Temporary Change Of Station Of Organization/ Unit.
- 34 *Ibid.*
- 35 *Ibid.*
- 36 Personal interview of LTC Jay G. Dresser, U.S. Army, Retired, 2/52 as E&M Officer, October 1962 and Executive Officer of D-2-52 1963-1964.
- 37 2d Msl Bn, 52d Arty Unit History dated 10 April 1963. Other units deployed to Florida were the 6<sup>th</sup> Missile Battalion (HAWK), 65th Artillery, from Fort George G. Meade, Maryland; the 8th Missile Battalion (HAWK), 15<sup>th</sup> Artillery, from Fort Lewis, Washington; and Battery B {SP}, 1<sup>st</sup> Gun Battalion, 59<sup>th</sup> Artillery, from Fort Bliss.
- 38 U.S. Department of Energy, Nevada Operations Office (December 2000), *United States Nuclear Tests - July 1945 through September 1992*.
- 39 Operation Dominic occurred during a period of high Cold War tension between the West and the Soviet Union, since the Cuban Bay of Pigs Invasion had occurred not long before. Nikita Khrushchev announced the end of a three-year moratorium on nuclear testing on 30 August 1961, and Soviet tests recommenced on 1 September, initiating a series of tests that included the detonation of Tsar Bomba. President John F. Kennedy responded by authorizing Operation Dominic. It was the largest nuclear weapons testing program ever conducted by the United States, and the last

- atmospheric test series conducted by the U.S., as the Limited Test Ban Treaty was signed in Moscow the following year.
- 40 1962 Oct 27 - TWX from CONCONAD - Gerhart to JCS Request Authority to Use Nuclear Weapons in Cuban Missile Crisis.
- 41 *Cold War in South Florida*, National Park Service, Historic Resource Study, October 2004, Appendix One: A Brief History, of Air Defense in South Florida Steve Hach.
- 42 Ibid.
- 43 Ibid.
- 44 "Missile Sites Up to Ankles," *Cutler Ridge-Perrine Post*, December 1963; and "Mud and Missiles," *Cutler Ridge-Perrine Post*, 26 September 1963.
- 45 [http://en.wikipedia.org/wiki/Anti-Ballistic\\_Missile\\_Treaty](http://en.wikipedia.org/wiki/Anti-Ballistic_Missile_Treaty).
- 46 Ibid.
- 47 <http://fas.org/nuke/control/abmt/>.
- 48 "Vigilant and Invincible," Moeller, Stephen P. *Air Defense Artillery Magazine*, 1995.
- 49 U.S. Army General Order No. 33, Headquarters, Department of the Army, Washington, D.C., 23 July 1963, The 32d Continental Air Defense Command Region, Direction of the Secretary of The Army, Paragraph 203, AR 672-5-1, Army Meritorious Unit Commendation, Earle G. Wheeler, General, United States Army.
- 50 *Cold War in South Florida*, National Park Service, Historic Resource Study, October 2004, 86, Steve Hach.
- 51 <http://naplesgarden.org/blog.shtml?date=2012-07>.
- 52 <http://fws.gov/refuges/profiles/index.cfm?id=41581>.
- 53 The Fish that Trusts the Water, Lipman, 2012.