JOHN F. KENNEDY SPACE CENTER, HABS NO. FL-583-B
BEACH HOUSE
(KSC Center Director's Conference Center)
Cape Canaveral
Brevard County
Florida

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Department of Interior
100 Alabama St., SW
Atlanta, Georgia 30303

HISTORIC AMERICAN BUILDINGS SURVEY
JOHN F. KENNEDY SPACE CENTER
BEACH HOUSE
(KSC Center Director's Conference Center)

HABS NO. FL-583-B

Location: John F. Kennedy Space Center (KSC), eastern side of KSC on the Atlantic Ocean north of Cape Canaveral Air Force Station (CCAFS), on the east side of Phillips Parkway between Launch Complexes 40 and 41.

USGS False Cape, Florida, Quadrangle, Universal Transverse Mercator Coordinates: E 541848 N 3160906 Zone 17, NAD 1983

Date of Construction: 1962

Present Owner: National Aeronautics and Space Administration (NASA)

Present Use: KSC Conference Center

Significance: The Beach House was exceptionally significant in the lives and training of America's astronauts from 1963 to the present. Throughout its history as a NASA property, the Beach House was reserved for astronauts' use as a place to rest from their intense training programs and as a refuge before launches. During the Space Shuttle era, the Beach House hosted special meals and gatherings where the astronauts were able to wish their spouses and families farewell before risking their lives for America's space program. The Beach House stands alone among KSC's historic resources, most of which served the technical aspects of launching spacecraft, as a place that served the basic human needs of NASA astronauts. The Beach House is eligible for listing on the National Register of Historic Places under Criteria A and B in the area of Space Exploration as a resource associated with the training of astronauts. Because it has achieved significance within the past fifty years, Criteria Consideration G also applies.

Report Prepared by: New South Associates, Stone Mountain, Georgia

Date: November 5, 2013

PART I. HISTORICAL INFORMATION

List of Acronyms

CCAFS	Cape Canaveral Air Force Station
EDL	Engineering Development Laboratory
HVAC	Heating, Ventilation, and Air Conditioning
ISSP	International Space Station Program
LLRV	Lunar Landing Research Vehicle
LLTV	Lunar Landing Training Vehicle
JSC	Lyndon B. Johnson Space Center
KSC	John F. Kennedy Space Center
NASA	National Aeronautics and Space Administration
SCUBA	Self-Contained Underwater Breathing Apparatus
SSP	Space Shuttle Program
STS	Shuttle Transportation System
USACE	U.S. Army Corps of Engineers

A. PHYSICAL HISTORY

1. Date of Erection: 1962[1]

2. Architect: Not known.

3. Original and Subsequent Owners, Occupants, Uses:

The Beach House was built in 1962 as part of the Neptune Beach subdivision, which was originally platted in 1947 by Charles and Lucy K. Tschudin (Figures 1-3).[2] As shown in the 1951 aerial view in Figure 4, however, no development had taken

[1] National Aeronautics and Space Administration (NASA), "Real Property Record – Center Director's Conference Building [Beach House], K8-1699," 1989. On file at the John F. Kennedy Space Center Real Property Office. Plat Map research suggests that the house may predate 1962.
[2] F.P. Schuster, County Surveyor, Brevard County, Florida, "Neptune Beach: A Subdivision" in Brevard County, Florida Plat Book 9, Page 66, 1947.

place by 1951.[3] In 1955, the subdivision was expanded to the west according to a plat map filed that year by David A. and June I. Allen.[4] It is unknown to what extent the land was developed by the Allens in this phase; however, some work was undertaken as evidence of clearing and roads can still be seen in current aerial photos of the area. This tract of land was purchased by NASA in 1963 for $31,500 during KSC's land acquisition phase (Figure 5). NASA KSC has owned the property since that time.

4. Builder, Contractor, Suppliers:

Not known.

5. Original Plans and Construction:

The Beach House was originally a modest frame and concrete block dwelling that was typical for the Cape Canaveral/Cocoa Beach area in the early 1960s. It was a two-story house with a concrete block ground floor and frame second floor. It contained approximately 1,200 square feet of living space on the second floor with an equal amount of garage and storage space on the ground floor. The house's original appearance and interior floor plan is depicted in photos and renovation drawings produced by NASA in 1974 (Figures 6-9).[5] The house originally had a flat, built-up roof, a stained weatherboard exterior on the second floor, and a painted concrete block exterior on the ground floor. It had an L-shaped plan with a projecting bay on the east façade. The fenestration included a tripartite picture window on the east façade and three-light awning windows throughout the house's second floor. Ground

[3] 1951 Aerial Map, University of Florida Digital Collections.
[4] F.P. Schuster, County Surveyor, Brevard County, Florida, "First Addition to Neptune Beach" in Brevard County, Florida, Plat Book 11, Page 22, 1955.
[5] Ibid.; NASA, "Astronaut Training Facility, Building K8-1699," construction drawings, 1974.

floor windows included both one and two-light casement windows. There was a single interior brick chimney near the center of the house.

The house had two original entrances, including one on the second-floor east façade that was accessed by a wood staircase and small deck. The second entrance was on the ground floor of the south elevation. Additionally, the two single garage doors were located on the ground floor of the west elevation.

The original interior contained a long rectangular den along the south side of the house. There were two bedrooms on the north side. A living room overlooking the beach and a small dining area and a hall were situated between the den and bedrooms. The kitchen and bathroom were on the west end. The ground floor contained a garage and storage area. By 1974, the storage area was converted to an office and laboratory with a small bathroom on the west end.[6]

6. Alterations and Additions:

After sustaining hurricane damage, the Beach House's exterior and interior were renovated in 1997 (Figures 10 and 11). Exterior alterations included the installation of a slightly-pitched shed roof over the original flat roof. The east façade was altered with the installation of two sliding glass doors where the original picture window was located, and the replacement of original awning windows with modern insulated windows. The house's original weatherboard exterior was retained, although its original stained finish was painted yellow. The main second floor entrance was kept in its original location, but a new door was installed. Additionally, a two-story wrap-around deck was installed

[6] NASA, "Astronaut Training Facility, Building K8-1699," construction drawings, 1974.

across the east façade to accommodate the gathering of large groups of people.

Two small, two-story additions were built on the west (rear) and north elevations of the building. The addition on the west elevation contains a mechanical room on the ground floor and a heating, ventilation, and air conditioning (HVAC) chase on the second floor. The addition on the north elevation contains an elevator for easy access to the second floor.

Interior alterations included the renovation of the second-floor into an open-plan meeting room with adjacent kitchen and bathroom. The original den, bedrooms, dining area, and hall were removed for this renovation. The original central interior chimney and fireplace were removed and replaced with the current gas-log fireplace in the northeast corner of the conference room. The Beach House originally had knotty pine wall paneling that was replaced with drywall. All new ceiling, wall, and floor finishes were installed. The ground floor garage and storage areas were converted into two finished multi-purpose rooms with a small kitchen and bathroom. The room on the north side of the ground floor contains two display cases filled with celebratory wine and other beverage bottles decorated with flight mission stickers, some of which were also signed by astronauts at the Beach House.

B. HISTORICAL CONTEXT

The 1962 Beach House was purchased by NASA during the construction of KSC in the early 1960s. Though it was a modest building, akin to the nearby Cocoa Beach vacation houses that Tom Wolfe described as "little boxes with front porches" in *The Right Stuff*, it became a landmark building

during NASA's manned spaceflight programs.[7] It was especially important to astronauts who served during the Space Shuttle Program (SSP) (1981-2011), who were granted near exclusive use of the building until it was remodeled into a KSC Conference Center in 1997. For shuttle crews, the Beach House was a place of rest and refuge as they prepared for launch, the highly anticipated conclusion of their stressful, years-long training programs. During the Space Shuttle years, astronaut crews used the house as a seaside retreat where they could find privacy, share meals with one another, reflect on the danger and excitement of their missions, and say farewell to their spouses and families. There is no other building at KSC that better represents the vulnerable and human side of spaceflight, with all its risks and rewards, than the Beach House.

NASA was created as an independent civilian space agency in 1958 in response to the Soviet Union's launch of the Sputnik satellite a year earlier. In this context of the Cold War and the "space race" with the Soviets, President John F. Kennedy announced in May 1961 the Apollo Program and its goal to land a man on the moon and return him safely to Earth before the end of the decade. Apollo would build on the accomplishments of the Mercury and Gemini Projects, which showed that NASA could place manned spacecraft into orbital flight around Earth and recover it safely. To accomplish Apollo's ambitious goal, NASA underwent a massive reorganization and expansion that included the construction of major new facilities throughout the nation, including the new "spaceport" of KSC. KSC was visualized as a launch area of unprecedented size located on Merritt Island in Brevard County, Florida, just north of NASA's previously established launch facilities at Cape Canaveral Air Force Station (CCAFS).

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[7] Tom Wolfe, *The Right Stuff* (New York: Farrar, Straus, Giroux, 1979), 161.

NASA developed an initial Master Plan for Merritt Island in 1961 and secured the services of the U.S. Army Corps of Engineers (USACE) to purchase 88,000 acres of land for KSC. As it had done previously at CCAFS, the Corps also took the lead in the design and construction of KSC's early buildings and infrastructure. Whether through direct purchase or condemnation, NASA and the Corps acquired all of the Merritt Island property by 1964, including nearly 1,500 properties containing scattered businesses, citrus groves, and homes, including the Beach House.[8]

The Beach House was built in 1962 as part of what was known as the Neptune Beach subdivision. In 1963, NASA purchased the house and surrounding subdivision for $31,500 during land acquisition for KSC. All of the other buildings in the subdivision and surrounding areas, including a store and gas station, were demolished.[9]

Three-time Space Shuttle astronaut Mike Mullane has frequently remarked on the history and significance of the Beach House in the lives of astronauts. In a memoir of his experiences as an astronaut, Mullane remarked on the good fortune that the Beach House was spared during the construction of KSC:

> Only one of the existing structures survived demolition, saved by some enlightened bureaucrat who had decided it would be the perfect retreat for the early press-hounded astronauts. The building selected was well into government property, so

[8] Charles D. Benson and William Barnaby Faherty, "Moonport: A History of Apollo Launch Facilities and Operations," NASA Special Publication 4204 in the NASA History Series, 5-11; available at http://history.nasa.gov/SP-4204/contents.html, accessed April 29, 2013.
[9] Cheryl L. Mansfield, "If Walls Could Talk," available at http://www.nasa.gov/missions/shuttle/beach_house.html, accessed April 24, 2013.

> privacy was absolute. Even Jehovah's Witnesses wouldn't have been able to find this address. While the press no longer pursued astronauts as they had the Mercury Seven, the building was still used as an astronaut retreat.[10]

The house was renovated and renamed the "Astronaut Training Building" on the official real property records, but everyone at KSC knew it as the Beach House.[11] The privacy afforded the astronauts by the Beach House made it a treasured place for them as they reached the end of their long training programs and prepared to launch into space.

1. Astronaut Selection and Training:

The road to becoming an astronaut was, and continues to be, a long one that is mentally, physically, and emotionally taxing. The training program kept astronauts away from their families for long periods of time. This was especially true during the manned space programs of the early 1960s, when training programs were still under development. "When the astronauts were not training they were flying in their two-seater T-38 planes from one place to the other, or doing aerobics to sharpen their edge, or simply to unwind," wrote journalist Robert Sherrod. "Their long absences proved a plague on their home lives, and there was hardly a man among them who did not consider quitting the program at one time or another 'to spend some time with my family.'"[12]

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[10] Mike Mullane, *Riding Rockets: The Outrageous Tales of a Space Shuttle Astronaut* (New York: Scribner, 2006), 124.
[11] NASA 1989.
[12] Robert Sherrod, "Men for the Moon," in "Apollo Expeditions to the Moon," Edgar M. Cortright, ed., available at http://history.nasa.gov/SP-350/ch-8-3.html, 1975, accessed April 25, 2013.

Astronauts were required to be in peak physical and mental condition before their missions and be competent in the operation of all equipment and systems on their spacecraft. They were also required to react quickly and handle any situation that might happen in the deadly environment of space. During the early manned space program of the 1960s almost all of the astronauts chosen by NASA came from military flight backgrounds. Astronaut candidates had to be between 25 and 35 years old, weigh no more than 180 pounds, and be no taller than 5' 11". They had to hold a degree in engineering or physical science and have at least 2,000 hours of flying time in high performance jet aircraft. Qualifying candidates were subjected to full medical and psychological tests.[13]

During the Apollo Program, chosen astronaut crew members were subjected to an intensive training program. Individual astronauts were trained for their specific mission roles, including the Commander, Command Module Pilot, and Lunar Module Pilot. The majority of crew training was conducted in flight simulators that created as nearly as possible the procedures for operating the Apollo spacecraft's Command Module and Lunar Excursion Module. Flight simulators were located at the Mission Control Center at Lyndon B. Johnson Space Center (JSC) in Houston, Texas, and in the high-bay area of the Engineering Development Laboratory (EDL) at KSC. Apollo astronauts trained on the Lunar Landing Research Vehicle (LLRV) and Lunar Landing Training Vehicle (LLTV), which provided real life simulations of landing on the moon. These wingless, vertical take-off flying machines, described as "a sort of flying bedstead," simulated the last few hundred feet of powered descent to the lunar surface. The machines were notoriously hard to control, leading Neil Armstrong to eject from a malfunctioning LLTV a few months before his Apollo 11 mission. The Apollo 11 crew logged

[13] Robert Sherrod, "Men for the Moon," 1975.

approximately 2,000 hours in simulators before their flight in July 1969.[14]

In the SSP and International Space Station Program (ISSP) eras, the astronauts' path to spaceflight was (and still is) a long one that began with a rigorous application and selection process designed to select highly qualified individuals for the space program. Basic requirements included a bachelor's degree from an accredited school in engineering, biological science, physical science, or mathematics, plus three years of related professional experience or at least 1,000 hours of pilot time in jet aircraft. Advanced degrees were highly desirable, as was teaching experience at the K-12 levels. Additional requirements included the ability to pass NASA's spaceflight physical that required high standards for the candidate's vision, blood pressure, and a standing height of between 62 and 75 inches.[15]

Following the initial astronaut screening and selection process, those selected were designated Astronaut Candidates and assigned to the Astronaut Office at JSC in Houston. While there, the Astronaut Candidates underwent a two-year training and evaluation program, much of which was similar to the task requirements of the earlier space programs. The training program was designed to develop the knowledge and skills needed for formal mission training as Space Shuttle Commander, Pilot, and Mission Specialists. Much like the Apollo astronauts, the SSP and ISSP candidates were required to complete military water survival training and become qualified on Self-Contained Underwater Breathing Apparatus (SCUBA) equipment to prepare them for spacewalk training.

[14] Robert Sherrod, "Men for the Moon," 1975.
[15] NASA, "NASA Facts: Astronaut Selection and Training" (Houston, Texas: Lyndon B. Johnson Space Center, 2011), available at http://www.nasa.gov/centers/johnson/pdf/606877main_FS-2011-11-057-JSC-astro_trng.pdf, accessed April 24, 2013, 1-2.

The water survival test required candidates to swim three lengths of a 25-meter pool without stopping and then swim three lengths of the pool in a flight suit and tennis shoes with no time limit. Candidates were also required to continuously tread water for 10 minutes while wearing a full flight suit.[16]

Throughout NASA's history of manned spaceflight, Astronaut Candidates have been exposed to the problems associated with low atmospheric pressures in altitude chambers and have learned to react to emergencies in these conditions. Candidates have undergone exposure to microgravity training in modified jet aircraft that perform parabolic maneuvers and produce 20-second periods of weightlessness. These microgravity aircraft sequences were repeated up to 40 times in a single training day.[17]

Today, graduation from the Astronaut Candidate Program depends on the satisfactory completion of the above training requirements as well as mastering the systems of the ISS, extravehicular activity skills training, robotics skills training, and aircraft flight readiness training. Those candidates who successfully complete the training and are selected as astronauts become permanent Federal employees.[18]

Selected astronauts continue their formal training program by completing computer-based training lessons on the ISS vehicle systems and performing simulated exercises to recognize malfunctions and initiate corrective actions, as needed. They also trained at the Neutral Buoyancy Laboratory at JSC, which acclimated the crew to the dynamics of body motion under the weightless condition of space. On top of all this,

[16] NASA, "NASA Facts: Astronaut Selection and Training," 2.
[17] Ibid, 3.
[18] Ibid.

astronauts who are pilots must maintain flying proficiency by flying 15 hours per month in NASA's fleet of T-38 jets.[19]

2. Astronauts and the Beach House:

It was in the midst of this intensive selection and training program that the Beach House provided astronauts "a refuge from the toils of space preparations."[20] In the early days of its ownership by NASA, astronauts could actually stay overnight in the house's two bedrooms. By the Space Shuttle era, however, astronauts assigned to an upcoming mission were confined to sleeping in the spartan, windowless crew quarters located in the Operations & Checkout Building in the KSC Industrial Area.[21] The days and weeks leading up to a Space Shuttle launch were often fraught with delays due to poor weather or launch equipment malfunctions, leading to a lot of down time for the astronauts. "Not all our time is totally full," remembered astronaut Bob Cabana, "getting briefings or preparing to go fly, and it can get kind of claustrophobic over there just being cooped up in crew quarters. And it's really nice to be able to go out to the Beach House and just walk on the beach. Walk up and down the beach, pick up shells, listen to the waves lapping on the shore."[22] The claustrophobia and fatigue experienced by astronauts waiting to launch and dealing with all-too-frequent last minute launch cancellations encouraged frequent astronaut treks out to the retreat.[23]

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[19] NASA, "NASA Facts: Astronaut Selection and Training," 3.
[20] James A (Gene) Thomas, *Some Trust in Chariots: The Space Shuttle Challenger Experience* (Xulon Press, 2006), 91.
[21] Mullane, 2006, 121-122.
[22] Bob Cabana, interviewed in NASA short film, "Space Shuttle Era: NASA Kennedy Beach House," available at http://www.youtube.com/watch?v=pFDpwGcQ96o, accessed May 1, 2013.
[23] Mullane, 2006, 122-124.

During the Space Shuttle era, the Beach House was best known as the location of pre-launch barbecue dinners, which became a significant tradition for astronauts, their families, and KSC management. Former NASA Launch Manager, James A. (Gene) Thomas, remembered that the dinners brought the key launch team managers close to the flight crew for a time of fellowship and bonding before launch. At these gatherings, Thomas recalled:

> I always felt a special closeness in sharing with men and women who were all conscious of the risks the Shuttle was subjected to each time we launched. We rarely talked of Shuttle things; we seemed to be more interested in telling of aviators who had gone before. The early astronaut legends were always good topics at the dinner table.[24]

Other astronauts commented on times at the Beach House when they were acutely aware of their connection to one another and those who had come before them. Janice Voss flew five Space Shuttle missions and fondly recalled the special times she spent at Beach House dinners with her family, especially her parents. "And the Beach House has been there forever," she stated, "and that history that stretches out for so long. For my family to meet the other crew members in a more casual setting, it's nice to have that really quiet time to be with your family and share that history and culture with them so they feel a little bit more connected to what's going on."[25]

It was also during these meals and the quiet time that followed that astronauts were able to relax for a short period and see their spouses and families before risking

[24] Thomas, 91.
[25] Janice Voss, interviewed in NASA short film, "Space Shuttle Era: NASA Kennedy Beach House," available at http://www.youtube.com/watch?v=pFDpwGcQ96o, accessed May 1, 2013.

their lives for America's space program. Mullane remembered saying goodbye before his first Space Shuttle mission (STS-41-D) in August 1984:

> We said our final good-bye to our wives at [a] luncheon at the astronaut beach house… The NASA-catered lunch was attended by our wives, the family escorts, and key launch personnel. The gathering was informal. There were no speeches, no toasts. Everyone helped themselves from a table set with sandwich fixings and chips. We filled our plates, found a place to park a beer, and enjoyed ourselves.[26]

Later, however, after everyone left except for the astronauts and their spouses, Mullane recalled how he and his wife, Donna, strolled on the beach and confronted the senses of fear and danger they felt on that night before launch. "A river of tears had been shed on these sands," wrote Mullane, "as couples struggled to come to grips with their tomorrows and the potential for glory or death. Now it was our turn."[27] For some astronauts, like those on the Space Shuttle *Challenger* and *Columbia* disasters, it was the last place they saw their loved ones before liftoff.

The Beach House provided an important place for astronauts to process their fears about the inherent risk of danger during Space Shuttle launches. The fear of disaster and death was ever-present at these last meetings at the Beach House, it was balanced by the overwhelming excitement and anticipation held by astronauts. Mullane remarked that the Beach House "plays an essential role in every astronaut's life."[28] "Before the first mission," he continued, "to sit out here

[26] Mullane, 2006, 130.
[27] Ibid.
[28] Mullane, "The Beach House," in *Air & Space*, June/July, 1992, 41.

and look at the sky and say, 'I'm next! I'm next! It's going to happen! I'm going into space! That would just overwhelm me."[29] This excitement was constantly tempered, of course by the dangers of spaceflight:

> You're boundlessly joyful at the thought of riding into space again. I mean you're overwhelmed with that joy, but at the same time… you have that fear factor that's hard to get your mind around that. But it is the reality of an astronaut's life and the spouse's life in those final days and hours before a mission, fear and joy.[30]

The Beach House served not only the astronauts but also their spouses who were faced with the possible death of their wives and husbands. Astronaut spouses had the additional burden of choosing a "family escort," usually another astronaut, who would watch the launch with them and offer support in case tragedy struck. Mullane's wife remarked, "what I'm picking isn't a family escort; it's an escort into widowhood."[31]

The isolated, beachside setting of the Beach House was one of the building's most significant characteristics. Here was a place where the privacy and natural features of the building's site were essential to the experiences of those astronauts who visited it. In one interview, Mullane declared "this is sacred sand out here, it really is. There's no spouse, no astronaut walks that sand that doesn't

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[29] Mullane, quoted in Alex Pasternack, "Inside the Private NASA Beach House Where Astronauts Chill Out Before Space," *Motherboard*, published 2012, available at http://motherboard.vice.com/blog/inside-nasa-s-beach-house-where-astronauts-and-their-families-say-goodbye, accessed May 1, 2013.
[30] Mullane, interviewed in NASA short film, "Space Shuttle Era: NASA Kennedy Beach House," available at http://www.youtube.com/watch?v=pFDpwGcQ96o, accessed May 1, 2013.
[31] Ibid.

know, that there is a possibility that this is forever."[32] The significance of the property extended beyond the walls of the house itself to the sand of the beach, the surrounding landscape, and the ocean. Pam Melroy, a three-time Space Shuttle astronaut, also commented on the setting:

> the psychic energy is kind of incredible [at the Beach House]… But the best part really is being able to walk along the beach, because I think seeing the ocean satisfies some part of you that, you are seeing the Earth, and you know you're going to miss it, and it's really special, but somehow the giantness of the ocean makes you feel like it's all part of space too. So it seems like it's a perfect place to get you ready to go.[33]

Early NASA officials likely did not anticipate the significance of their decision to spare the Beach House from demolition during the land acquisition phase of KSC. This frame and concrete block house could not have been more different from the massive technological landscape of the KSC launch pads, spacecraft processing facilities, and administrative buildings that NASA planned to build on the rest of Merritt Island. In contrast, the Beach House possessed a decidedly human scale surrounded by a pristine beachside landscape. It allowed astronaut crews to connect with one another and say farewell to their families. It is a totally unique building at KSC in both its modest form and its purpose to serve the human side of spaceflight.

During its history as a NASA property the Beach House became a landmark building in the lives of America's astronauts. As a retreat, it played an important role in the lives of

[32] Mullane, quoted in Pasternack, 2012.
[33] Pam Melroy, quoted in Pasternack 2012.

America's astronauts during every manned space program of the twentieth century, from the early days of Project Mercury through Gemini, Apollo, the Space Shuttle, and the International Space Station. The Beach House maintained its near-exclusive use by Space Shuttle astronauts until it was remodeled into the KSC Conference Center in 1997. With the end of the Space Shuttle Program in 2011, the Beach House is still open to astronauts and now also hosts KSC management planning retreats, meetings, and other events.

PART II. ARCHITECTURAL INFORMATION

A. GENERAL STATEMENT

1. Architectural Character:

The Beach House is a modest frame and concrete block dwelling that was typical for the Cape Canaveral/Cocoa Beach area in the early 1960s. The house's original flat roof, plain weatherboard exterior, and approximately 1,200 square feet of primary living space would have made it an affordable beachside home for middle class families at that time.

2. Condition of Fabric:

The overall condition of the Beach House is good. The building is regularly used and maintained by KSC.

B. DESCRIPTION OF EXTERIOR

The Beach House is a two-story dwelling with a frame second floor and concrete block ground floor. The house has a slightly-pitched shed roof, a painted weatherboard exterior, and painted concrete block foundation. The east façade features a non-original, two-story, wrap-around deck on a

concrete pier foundation. Entrances on the façade include a single pedestrian entrance and a pair of non-original sliding glass doors. There are replacement windows in the original windows openings throughout the house. The house has a rectangular plan that measures 37′-9″ x 40′-0″. There are two, two-story bay additions on the north and west elevations. The addition on the north elevation contains an elevator and the addition on the west elevation contains a mechanical room on the ground floor and an HVAC chase in the second floor. The house originally had an internal brick chimney that was removed during renovations in 1997.

C. DESCRIPTION OF INTERIOR

The interior of the second floor is an open-plan living/conference room with an adjoining kitchen. There is a restroom off the northwest corner of this main area and a wooden staircase leading to the ground floor in the southwest corner. The walls are finished with painted drywall and the floor is finished with modern laminate flooring. The ceiling is finished with a drop-ceiling of acoustical tiles. Doors throughout the house are standard hollow-core wood doors with basic wood trim and hardware.

The ground floor contains two main rooms. The first is a finished living room with an adjoining kitchen. The second is an adjacent room containing two display cases filled with celebratory wine and other beverage bottles decorated with Space Shuttle mission stickers and astronaut autographs. There are two restrooms on the east end of this room. The walls are painted drywall, the ceiling is rough-textured and painted drywall, and the floor is finished with modern laminate flooring. The Beach House is equipped with standard residential HVAC, lighting, and plumbing systems.

D. SITE

The Beach House is located on the eastern shore of KSC on the Atlantic Ocean. It is on the east side of Phillips Parkway between Launch Complexes 40 and 41. The house faces east toward a stretch of isolated beach and is surrounded by low dunes covered in palmetto bushes and other vegetation. The nearest facilities are launch complexes that are only barely visible from the house. The house is reached via a sandy driveway that terminates at the rear of the house. A sandy path leads from the driveway and front of the house over the dunes and down to the beach. There are no outbuildings on the property.

PART III. SOURCES OF INFORMATION

A. PRIMARY SOURCES

National Aeronautics and Space Administration [NASA]. "Real Property Record – Center Director's Conference Building [Beach House], K8-1699." 1989. On file at the John F. Kennedy Space Center Real Property Office.

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Wolfe, Tom. *The Right Stuff*. New York: Farrar, Strauss, Giroux, 1974.

C. ARCHITECTURAL DRAWINGS AND PLANS

National Aeronautics and Space Administration [NASA] "Astronaut Training Facility, Building K8-1699, Rehabilitation." Construction Drawings, 1974.

_____. "Vertical Lift at Center Director's Conference Center." Construction Drawings, 1996.

_____. "HVAC Modifications to the Center Director's Conference Center." Construction Drawings, 1997.

D. EARLY VIEWS

Kennedy Space Center. No negative number. Circa 1963. On file at Kennedy Space Center Archives.

_____. Photograph negative number 116-KSC-74C-939. 1974. On file at Kennedy Space Center Real Property Office.

_____. Photograph negative number 116-KSC-74C-940. 1974. On file at Kennedy Space Center Real Property Office.

_____. Photograph negative number KSC-393C-3808. 1993. On file at Kennedy Space Center Archives.

_____. Photograph negative number Image KSC-393C-3808-04. 1997. On file at Kennedy Space Center Archives.

_____. Photograph negative number Image KSC-01PP-0992. 2001. On file at Kennedy Space Center Archives.

_____. Photograph negative number Image KSC-01PP-0933. 2001. On file at Kennedy Space Center Archives.

E. INTERVIEWS

Cabana, Bob. Interviewed in NASA short film, "Space Shuttle Era: NASA Kennedy Beach House." Available from http://www.youtube.com/watch?v=pFDpwGcQ96o, accessed May 1, 2013.

Voss, Janice. Interviewed in NASA short film, "Space Shuttle Era: NASA Kennedy Beach House." Available from http://www.youtube.com/watch?v=pFDpwGcQ96o, accessed May 1, 2013.

Mullane, Mike. Interviewed in NASA short film, "Space Shuttle Era: NASA Kennedy Beach House." Available from http://www.youtube.com/watch?v=pFDpwGcQ96o, accessed May 1, 2013.

_____. Johnson Space Center Oral History Project. Interviewed by Rebecca Wright, Albuquerque, New Mexico – 24 January 2003. Available at http://www.jsc.nasa.gov/history/oral_histories/participants.htm, accessed April 29, 2013.

F. LIKELY SOURCES NOT YET INVESTIGATED

Research was conducted at KSC and CCAFS using primary and secondary sources. A source that was not investigated, which may contain secondary information, was NASA Headquarters.

PART IV: PROJECT INFORMATION

NASA KSC determined that the Beach House is eligible to the NRHP under Criteria A and B in the area of Space Exploration as a resource associated with the training of astronauts. Because it has achieved significance within the past fifty years, Criteria Consideration G also applies. NASA KSC has completed HABS documentation of the building, in keeping with the Agency's documentation of other NRHP-listed or eligible properties. New South Associates, Inc., under contract with InoMedic Health Applications (IHA), a subcontractor to NASA KSC, conducted the HABS documentation and historic research for this project in March 2013. David Diener served as the project photographer, David L. Price served as Project Historian, and Mary Beth Reed served as the Principal Investigator.

In order to complete the project, New South Associates' personnel were allowed full access to the facility, under the supervision of Barbara Naylor, KSC Historic Preservation Officer, and Nancy English, KSC Cultural Resources Specialist. Photographs were taken of the building's interior rooms, exterior, and context. David Price compiled the historic documentation required for the project. Elaine Liston, KSC Archivist, provided a wealth of information from her office in the KSC Archives Office.

Figure 1. 1976 False Cape 7.5-minute USGS quadrangle map showing the location of the Beach House.

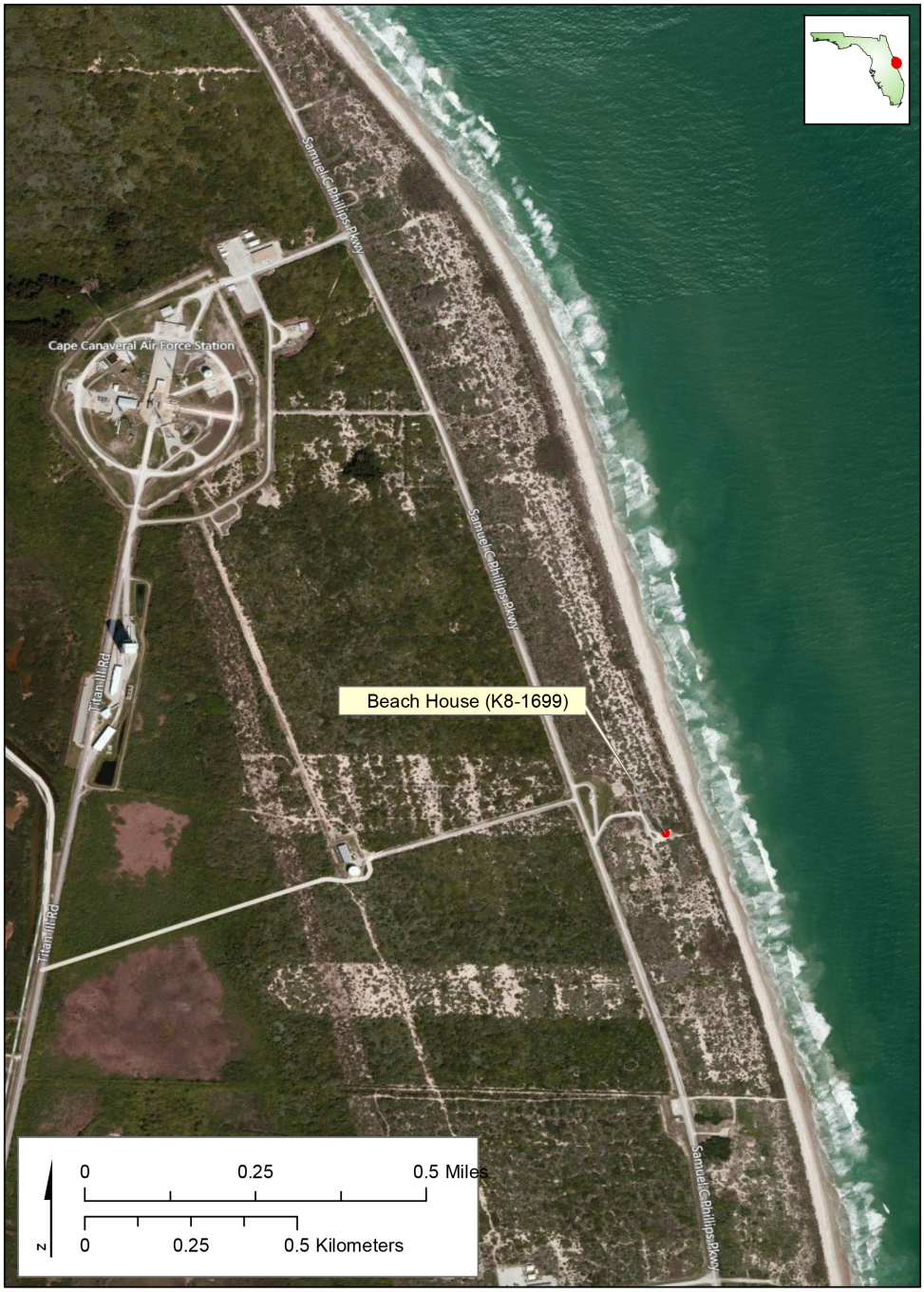

Figure 2. 2013 aerial photograph showing the location of the Beach House southeast of Launch Complex 41(ESRI Resource Data).

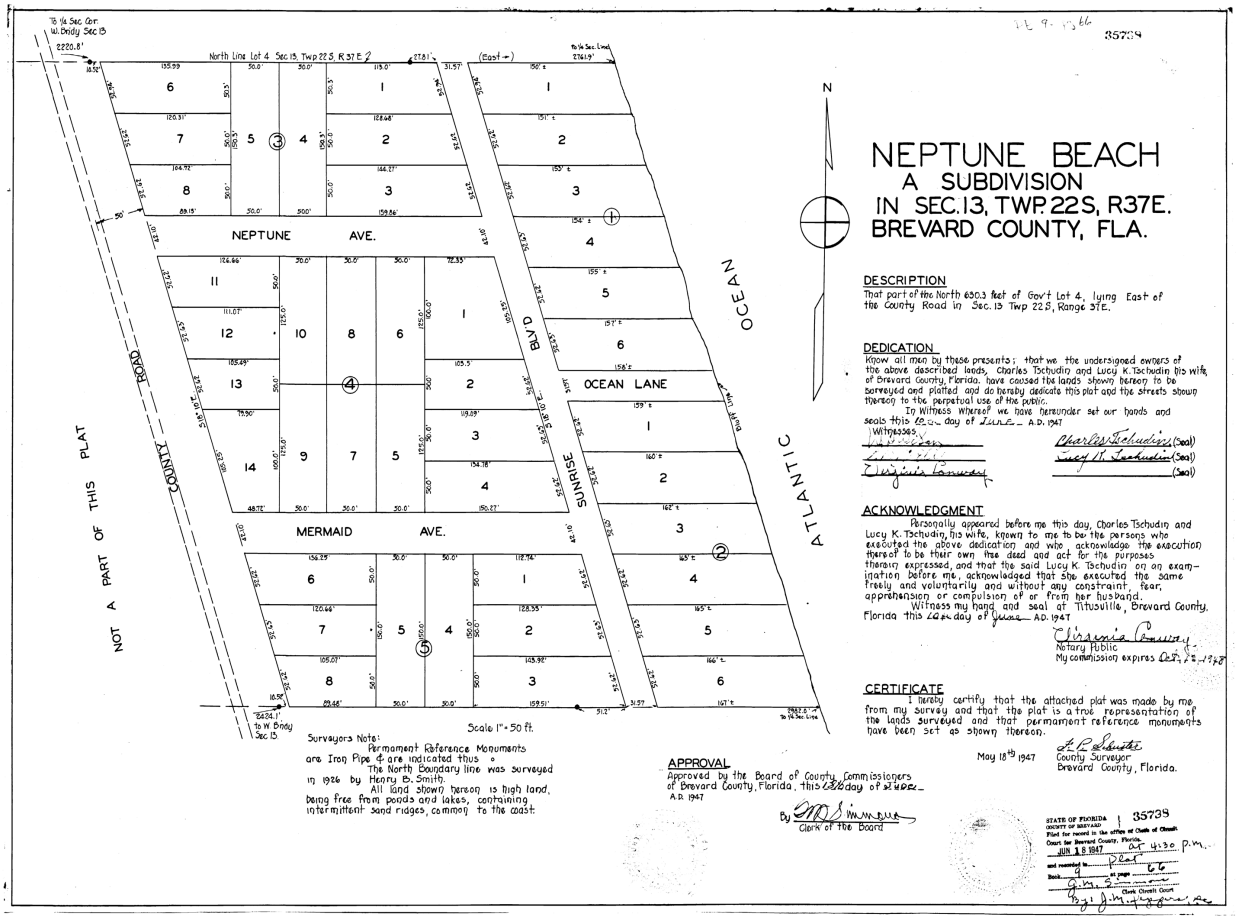

Figure 3. 1947 plat map of "Neptune Beach: A Subdivision."

Figure 4. 1951 aerial view of Cape Canaveral showing the approximate location of the Beach House.

Figure 5. Circa 1963 photograph of the Beach House with another house in the background before it was demolished by NASA KSC. Note the original awning windows of the Beach House are open. Oblique view to the northeast. (Courtesy of Kennedy Space Center Archives, no negative number).

Figure 6. 1974 photograph of the Beach House facade, view west. (Courtesy of Kennedy Space Center Archives, Image 116-KSC-74C-939).

Figure 7. 1974 photograph of the Beach House, oblique view of the west (rear) and south elevations, view to the northeast. (Courtesy of Kennedy Space Center Archives, Image 116-KSC-74C-940).

Figure 8. 1993 photograph of Russian Prime Minister Victor Chernomyrdin shaking hands with Robert L. Crippen, Kennedy Space Center Director, during his visit to Kennedy Space Center and the Beach House before renovations in 1997. Photograph shows the Beach House's original interior pine paneling. (Courtesy of Kennedy Space Center Archives, Image KSC-393C-3808).

Figure 9. 1993 photograph of Russian Prime Minister Victor Chernomyrdin's visit to KSC and the Beach House before renovations in 1997. (Courtesy of Kennedy Space Center Archives, Image KSC-393C-3808-04).

Figure 10. 2001 aerial photograph of the Beach House after renovations in 1997. (Courtesy of Kennedy Space Center Archives, Image KSC-01PP-0992).

Figure 11. 2001 aerial photograph of the Beach House after renovations in 1997. (Courtesy of Kennedy Space Center Archives, Image KSC-01PP-0933).

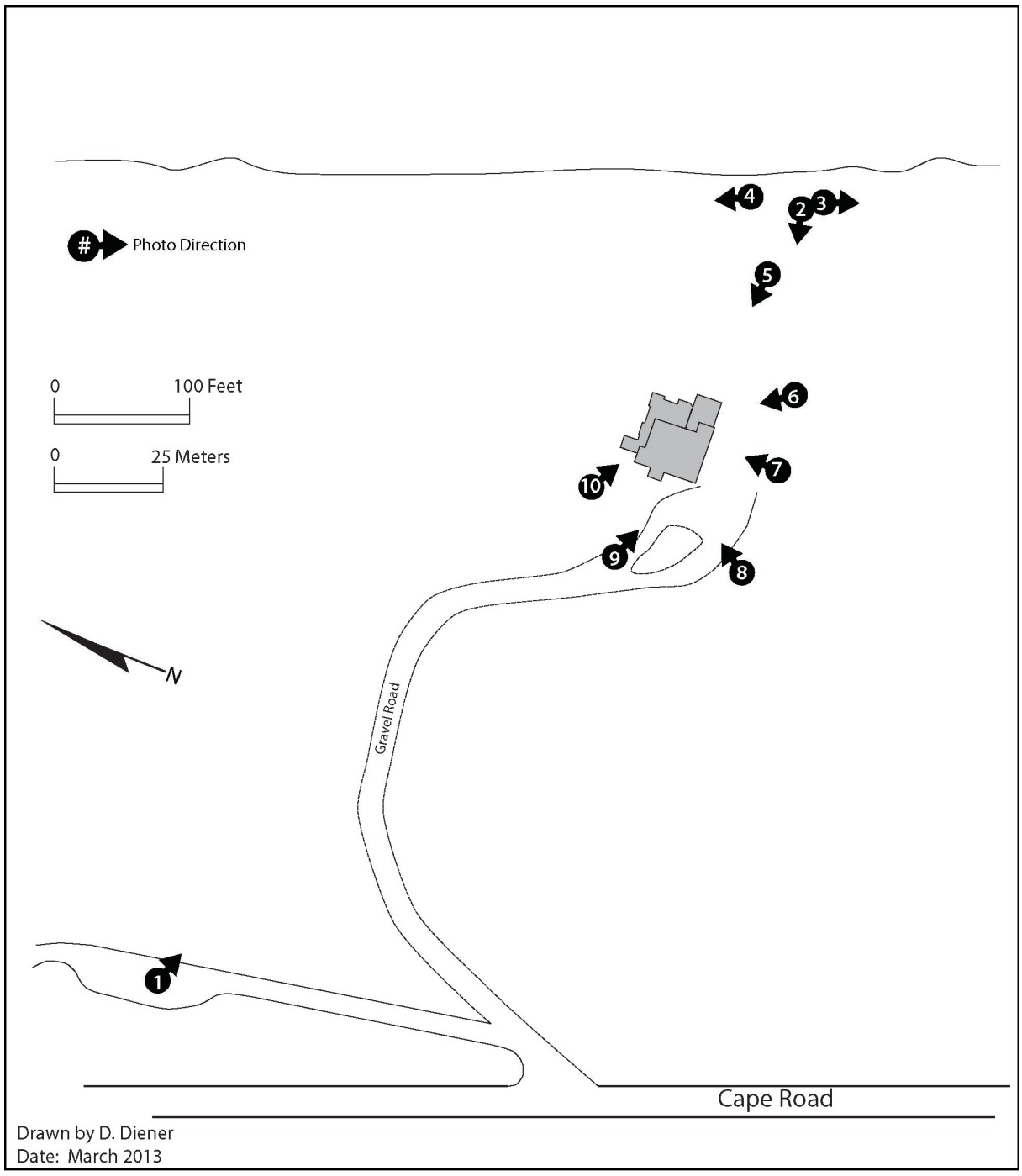

Figure 12. Exterior Photograph Key for HABS NO. FL-583-B.

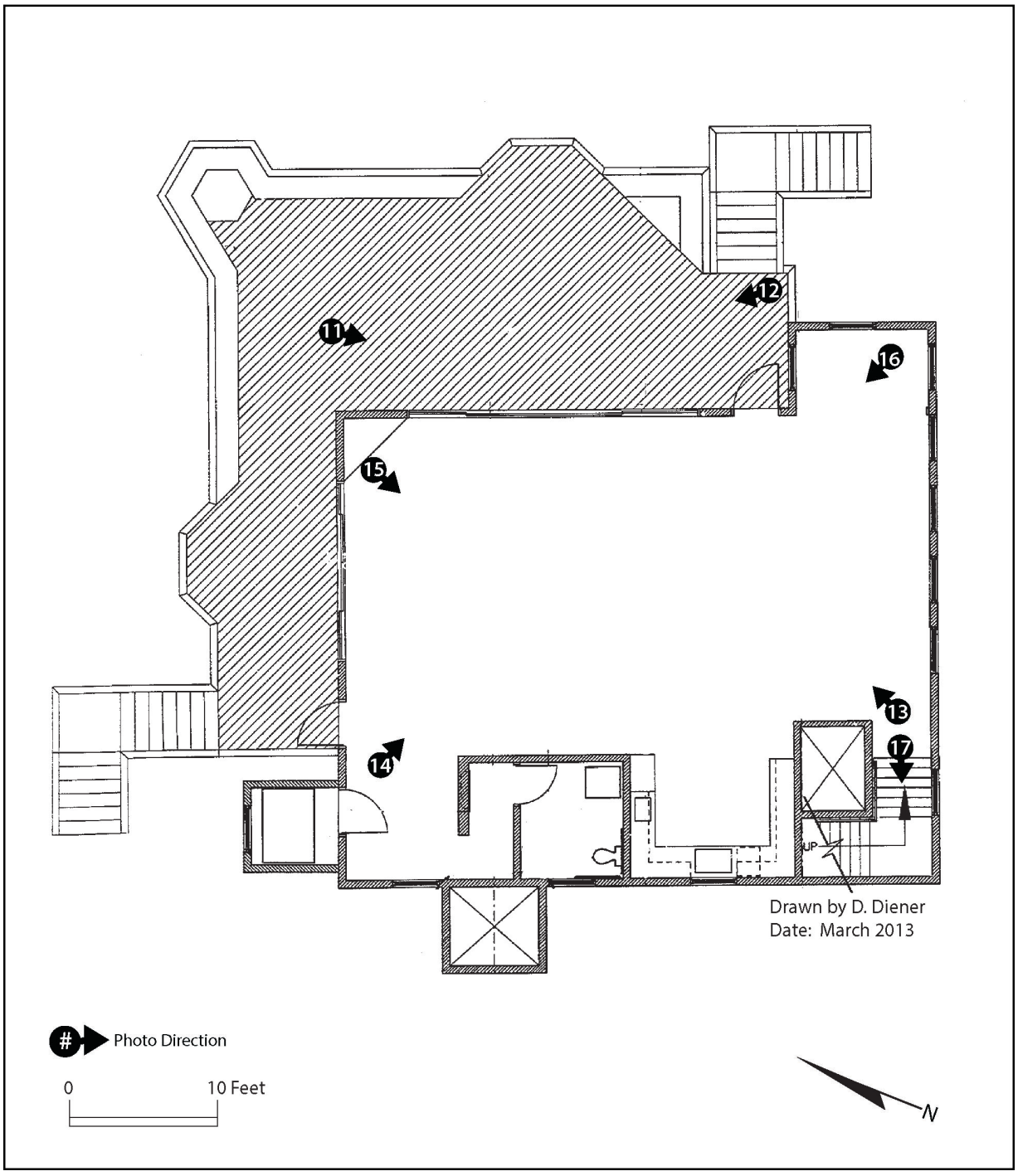

Figure 13. Top Floor Photograph Key for HABS NO. FL-8-583-B.

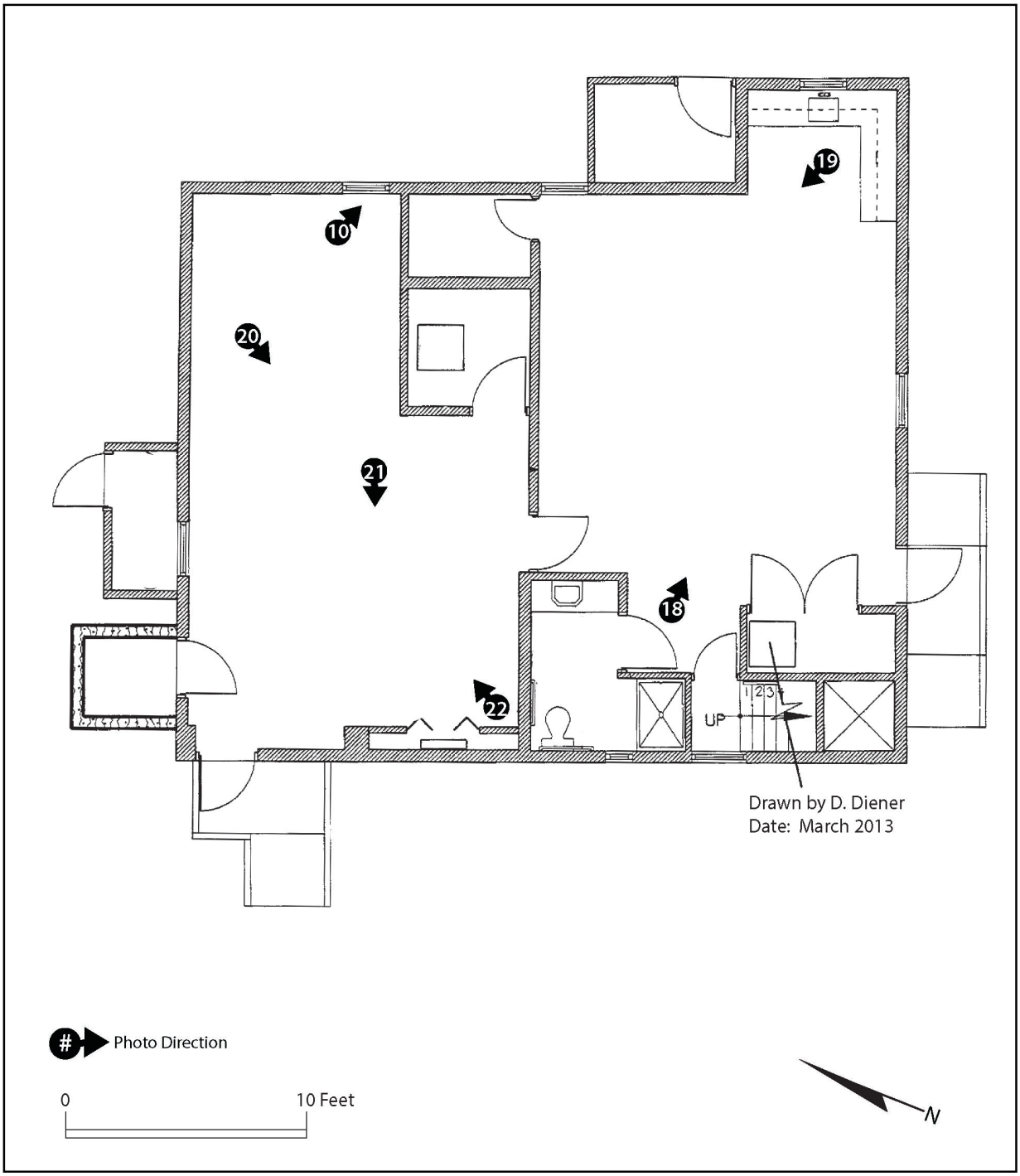

Figure 14. Ground Floor Photograph Key for HABS NO. FL-8-583-B.

HISTORIC AMERICAN BUILDINGS SURVEY

INDEX TO PHOTOGRAPHS

JOHN F. KENNEDY SPACE CENTER, HABS No. FL-583-B
BEACH HOUSE
(KSC Center Director's Conference Center)
Cape Canaveral
Brevard County
Florida

David Diener, Photographer March, 2013

FL-583-B-1 EXTERIOR OBLIQUE VIEW OF THE BEACH HOUSE AND SETTING FROM LAUNCH CAMERA PAD LOCATED NEXT TO BEACH HOUSE ENTRANCE DRIVE, VIEW SOUTHEAST.

FL-583-B-2 EXTERIOR FAÇADE VIEW FROM BEACH ACCESS TRAIL, VIEW SOUTHWEST.

FL-583-B-3 VIEWSHED SOUTH ALONG THE BEACH IN FRONT OF THE BEACH HOUSE, VIEW SOUTH.

FL-583-B-4 VIEWSHED NORTH ALONG THE BEACH IN FRONT OF THE BEACH HOUSE, VIEW NORTH.

FL-583-B-5 FAÇADE VIEW FROM BEACH ACCESS TRAIL, VIEW WEST.

FL-583-B-6 EXTERIOR OBLIQUE SHOWING FRONT DECK, VIEW NORTHWEST.

FL-583-B-7 SOUTH ELEVATION, VIEW NORTH.

FL-583-B-8 EXTERIOR OBLIQUE SHOWING SOUTH AND WEST ELEVATIONS, VIEW NORTHEAST.

FL-583-B-9 WEST ELEVATION, VIEW EAST.

FL-583-B-10 EXTERIOR OBLIQUE SHOWING NORTH AND WEST ELEVATIONS AND SIDE DECK, VIEW SOUTH.

FL-583-B-11 DECK VIEW AND FAÇADE, VIEW SOUTH.

FL-583-B-12 DECK VIEW TOWARD ADJACENT LAUNCH PAD, VIEW NORTHWEST.

FL-583-B-13 SECOND FLOOR CONFERENCE ROOM, VIEW NORTHEAST.

FL-583-B-14 SECOND FLOOR CONFERENCE ROOM, VIEW SOUTHEAST.

FL-583-B-15 SECOND FLOOR CONFERENCE ROOM, VIEW SOUTHWEST.

FL-583-B-16 SECOND FLOOR CONFERENCE ROOM, VIEW NORTHWEST.

FL-583-B-17 LOOKING DOWN STAIRCASE THAT LEADS TO FIRST FLOOR, VIEW WEST.

FL-583-B-18 FIRST FLOOR COMMON AREA LOOKING TOWARD KITCHEN, VIEW EAST.

FL-583-B-19 FIRST FLOOR COMMON AREA LOOKING TOWARD STAIRCASE FROM KITCHEN, VIEW WEST.

FL-583-B-20 FIRST FLOOR ROOM LOOKING TOWARD SPACE SHUTTLE CREW BOTTLE DISPLAY CASES, VIEW SOUTHWEST.

FL-583-B-21 DETAIL VIEW OF SPACE SHUTTLE CREW BOTTLE DISPLAY CASES, VIEW WEST.

FL-583-B-22 FIRST FLOOR ROOM LOOKING TOWARD BATHROOM FROM SPACE SHUTTLE CREW BOTTLE DISPLAY CASES.

FL-583-B-23 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; MAY 6, 1974 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "ASTRONAUT TRAINING FACILITY, BUILDING K8-1699 – REHABILITATION, TITLE, INDEX AND MAPS."

FL-583-B-24 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; MAY 6, 1974 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "ASTRONAUT TRAINING FACILITY, BUILDING K8-1699 – REHABILITATION PLANS AND SCHEDULES."

FL-583-B-25 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; MAY 6, 1974 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "ASTRONAUT TRAINING FACILITY, BUILDING K8-1699 – REHABILITATION PLAN, DET, SECT AND SCHED."

FL-583-B-26 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; MAY 6, 1974 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "ASTRONAUT TRAINING FACILITY, BUILDING K8-1699 – REHABILITATION PIPING PLAN AND SECTIONS."

FL-583-B-27 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; APRIL 25, 1988 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "ASTRONAUT TRAINING FACILITY, BUILDING K8-1699 – MODIFY BEACH HOUSE ROOF, PLANS AND DETAILS."

FL-583-B-28 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; SEPTEMBER 9, 1996 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "VERTICAL LIFT AT CENTER DIRECTOR'S CONFERENCE CENTER K8-1699."

FL-583-B-29 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; SEPTEMBER 11, 1996 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "VERTICAL LIFT AT CENTER DIRECTOR'S CONFERENCE CENTER K8-1699."

FL-583-B-30 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; SEPTEMBER 13, 1996 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "VERTICAL LIFT AT CENTER DIRECTOR'S CONFERENCE CENTER K8-1699."

FL-583-B-31 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; JULY 1, 1997 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "HVAC MODIFICATIONS TO THE CENTER DIRECTOR'S CONFERENCE CENTER – TITLE, INDEX, VICINITY & LOCATION MAPS."

FL-583-B-32 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; APRIL 4, 1997 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "HVAC MODIFICATIONS TO THE CENTER DIRECTOR'S CONFERENCE CENTER – LOCATION AND ENLARGED FLOOR PLANS."

FL-583-B-33 PHOTOCOPY OF ENGINEERING DRAWINGS (8" X 10" PHOTO OF SCANNED ORIGINAL; JULY 1, 1997 BY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION; DRAWINGS IN POSSESSION OF KENNEDY SPACE CENTER) "HVAC MODIFICATIONS TO THE CENTER DIRECTOR'S CONFERENCE CENTER – DEMOLITION AND INSTALLATION PLANS, TASK INSTRUCTIONS AND SCOPE."