National Park Service
Cultural Landscapes Inventory
2011

RCA Point Reyes Receiving Station
Point Reyes National Seashore

RCA Point Reyes Receiving Station
Point Reyes National Seashore

Point Reyes National Seashore concurs with the findings of the CLI, including the management category and condition assessment as identified below:

MANAGEMENT CATEGORY: **B: Should be preserved and maintained**

CONDITION ASSESSMENT: **Fair**

Superintendent, Point Reyes National Seashore — 21 DECEMBER 2010 Date

Please return to:

Amanda Bennett
Cultural Landscapes Inventory Coordinator
National Park Service
Pacific West Regional Office
909 First Ave., Floor 5
Seattle, WA 98104

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
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20 May 2008 Reply To: NPS080215D

Don L Neubacher, Superintendent
Point Reyes National Seashore
Point Reyes, CA 94956

Re: Determinations of Eligibility for six properties within Point Reyes National Seashore, Point Reyes, Marin County, CA

Dear Mr. Neubacher:

Thank you for your letter of 24 April 2008, requesting my comment pursuant to the National Historic Preservation Act as amended and the implementing regulations codified at 36 CFR 800 with regards to the above undertaking. You are requesting concurrence with the NPS' determination of eligibility for six properties within Point Reyes National Seashore.

Four of the properties were determined eligible. These properties are:

- Tocaloma Bridge
- Shafter/Howard Tenant Ranches (Home Ranch, A Ranch, C Ranch, D Ranch. E Ranch, F Ranch, G Ranch, H Ranch, I Ranch, J Ranch, K Ranch, L Ranch, M Ranch, Rogers Ranch, and N Ranch), eligible under Criteria A, C, and D. The period of significance for the ranches is 1857-1956. I am presently unable to concur with the determination of eligibility under Criterion B. The association between Shafter/Howard is obviously strong but it does not seem that the association is strong enough for a Criterion B argument because these ranches were tenant ranches and Shafter and Howard never resided near or on these ranches. Instead a property like their office might better represent that association.
- Olema Valley/Lagunitas Loop Ranches Historic District, eligible under Criterion A and C. The period of significance for the district is 1856-1961.
- Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District, eligible under Criteria A, B, and C. The period of significance for the district is 1913-1959.

The following properties are not eligible:

- Paper Mill Arroyo Subdivision (Tocaloma Recreation Homes), because the district no longer retains sufficient integrity.
- AT&T Point Reyes Receiving Station, because the station does not retain sufficient integrity.

Thank you for considering historic properties as part of your project planning and I look forward to consultation on future projects. If you have any questions, please contact Amanda Blosser of my staff at (916) 654-9010 or e-mail at ablosser@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

MWD:ab

Table of Contents

Inventory Unit Summary & Site Plan

Cultural Landscapes Inventory Overview:

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI), a comprehensive inventory of all cultural landscapes in the national park system, is one of the most ambitious initiatives of the National Park Service (NPS) Park Cultural Landscapes Program. The CLI is an evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing on the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process and in which the NPS has or plans to acquire any legal interest. The CLI identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into a national database. In addition, for landscapes that are not currently listed on the National Register and/or do not have adequate documentation, concurrence is required from the State Historic Preservation Officer or the Keeper of the National Register.

The CLI, like the List of Classified Structures, assists the NPS in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2006), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7)and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or treatment guidelines for the cultural landscape.

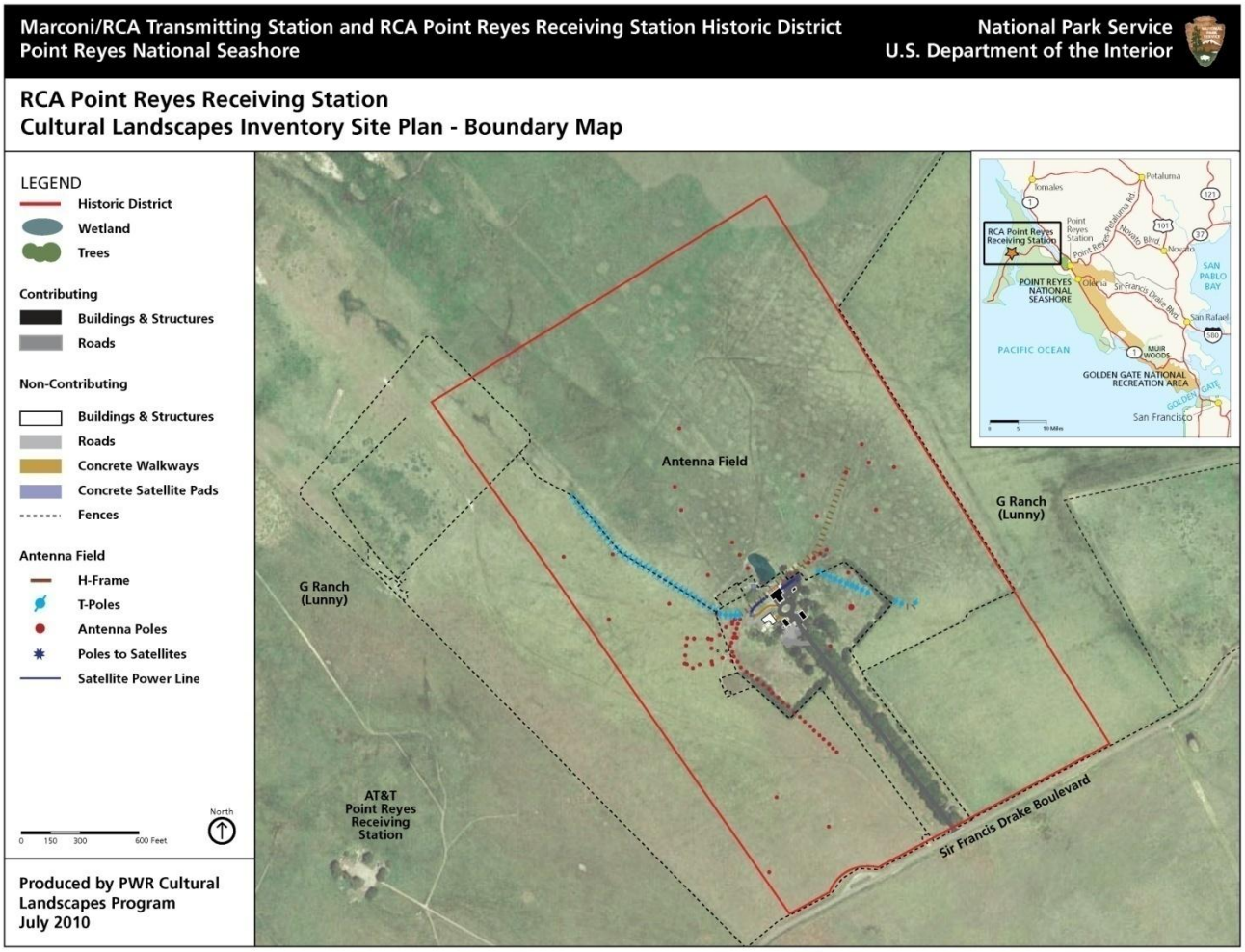
Inventory Unit Description:

The RCA Point Reyes Receiving Station is an approximately 160-acre designed landscape that is located on the northwestern side of the Point Reyes peninsula, almost 10 miles northwest of the city of Point Reyes Station along Sir Francis Drake Boulevard. Located on mostly level terrain at an elevation of roughly 100 feet above sea level, the property historically associated with the station extends from Sir Francis Drake Highway to the Pacific shore with grazing pastures to the northeast and southwest. The area for the receiving station was selected because of its level, low vegetation, elevated topography and its isolated location away from natural and man-made atmospheric signals that could have interfered with reception. The historic district is comprised of improvements dating to the RCA era, including the majority of the buildings and structures.

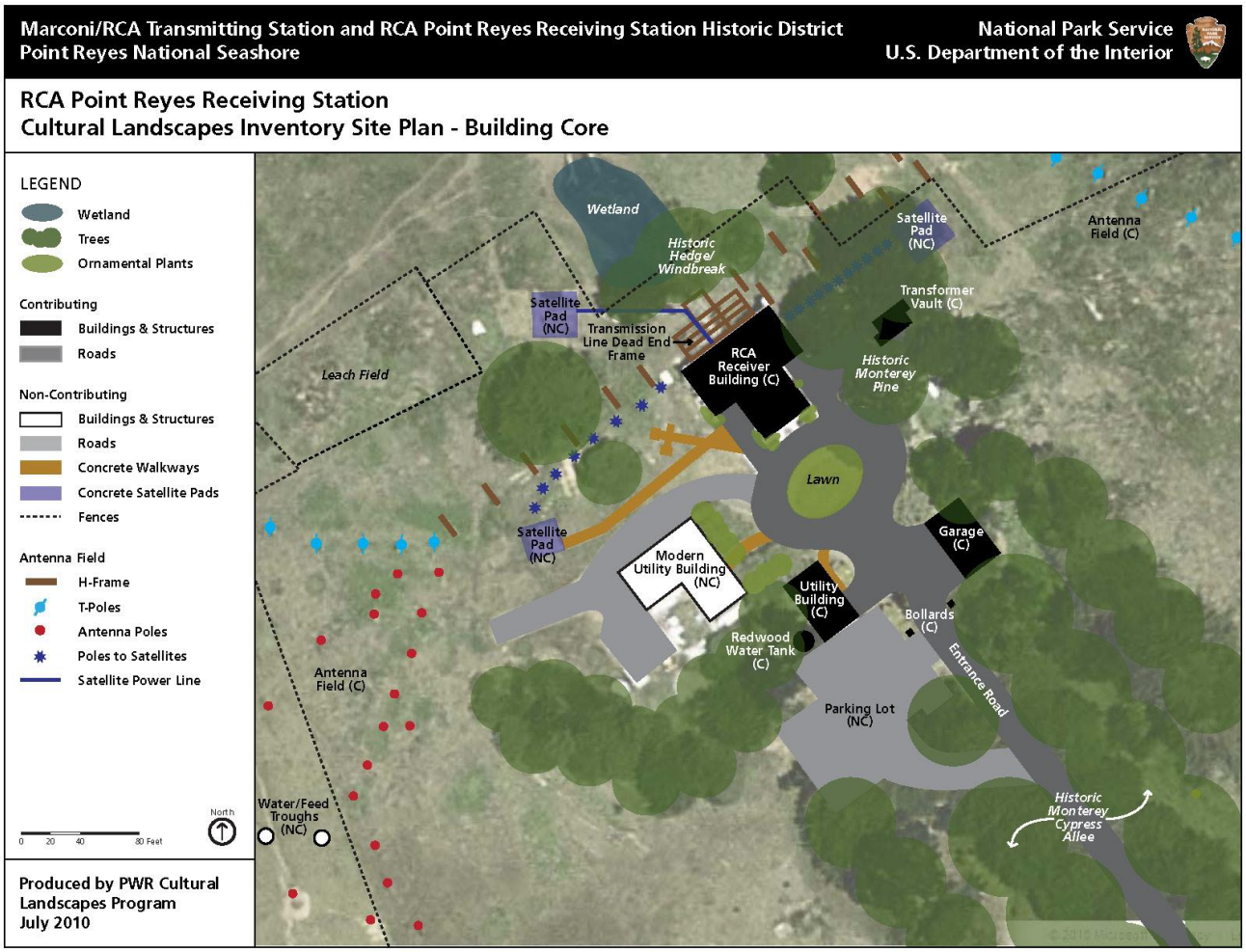
The RCA Point Reyes Receiving Station is within the Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District that was determined eligible for the National Register of Historic Places. The Receiving Station is significant at a national-level under Criteria A and C with a period of significance from 1929 to 1973. Under Criterion A, the district is significant for being the location of events that have greatly contributed to the development of early wireless communications systems throughout the country. Under Criterion C, the district is significant for its highly-designed Art Deco buildings that date from the RCA-era. The period of significance covers just under half a century, beginning with the initial RCA development of the Receiving Station in 1929 and extending to 1973 when point-to-point radio service was discontinued due to advances in satellite-based communications. This period encompasses the major development of the roads, buildings, structures, antenna fields, cypress allee, and fence lines within the station property.

The RCA Point Reyes Receiving Station operated without interruption as a radio receiving station until its closure by MCI in 1997. It appears today much as it did during the period of significance and retains its historical integrity of location, design, setting, materials, workmanship, feeling and association. The Receiving Station complex contains five historic buildings and structures, organized around the central circular driveway. Some of the contributing resources include the Antenna Field, RCA Receiving Building, RCA Garage, RCA Utility Building, RCA Transformer Vault, the RCA Redwood Water Tank, and Bollards. A non-contributing resource is the Modern Utility Building. The historic character of the RCA Point Reyes Receiving Station is still evident in the following landscape characteristics: natural systems and features, spatial organization, land use, buildings and structures, small scale features, circulation, vegetation, and archeological sites. Based on the evaluation of these characteristics, the cultural landscape at the Receiving Station was found to exhibit key patterns, relationships, and features that convey the historical significance of the station. Overall, the landscape is in fair condition.

Site Plans



RCA Point Reyes Receiving Station Boundary. See the Supplemental Information section for a full 8.5 x 11 inch version of site plan.



RCA Point Reyes Receiving Station Building Core. See the Supplemental Information section for a full 8.5 x 11 inch version of site plan.

Property Level and CLI Numbers

Inventory Unit Name:	RCA Point Reyes Receiving Station
Property Level:	Component Landscape
CLI Identification Number:	725188
Parent Cultural Landscape Inventory Name:	Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District
Parent Cultural Landscape Inventory Number:	725162

Park Information

Park Name and Alpha Code:	Point Reyes National Seashore PORE
Park Organization Code:	8530

CLI Hierarchy Description:

The RCA Point Reyes Receiving Station is one of two component landscapes in the Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District parent landscape. The parent landscape is comprised of two separate but historically related properties, commonly referred to as the Marconi/RCA Bolinas Transmitting Station, and the RCA Point Reyes Receiving Station, both of which are now incorporated within the administrative boundaries of Point Reyes National Seashore, Marin County, California.

Both the Transmitting and Receiving Stations still contain their own core of buildings and structures surrounded by pastures (or antenna fields), and stand alone as individual component landscapes. When aggregated, the two component landscapes form the larger non-contiguous parent landscape, the Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District as delineated in the 2008 National Register consensus determination of eligibility.

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

The RCA Point Reyes Receiving Station Cultural Landscapes Inventory (CLI) builds off the previous consensus determination of eligibility completed by Historical Research Associates, Inc./CRCS in July 2008. Fieldwork for the CLI was conducted by Erica Owens, Amanda Bennett, and Cortney Gjesfjeld from the Pacific West Region's Seattle office, and Vida Germano, Jason Biscombe and Bob Hartzler from the Pacific West Region's Oakland office, with help from Debra Suarez and Dan Brown from Point Reyes National Seashore, in May 2010. The CLI data was compiled and completed by Amanda Bennett and Erica Owens.

Concurrence Status:

Park Superintendent Concurrence: Yes

Park Superintendent Date of Concurrence: 12/21/2010

National Register Concurrence: Yes

Date of Concurrence Determination: 5/20/2008

Geographic Information & Location Map

Inventory Unit Boundary Description:

The RCA Point Reyes Receiving Station CLI boundary follows the boundary established by the May 20, 2008 Consensus Determination of Eligibility (DOE). This boundary encompasses a 160-acre portion of the much larger property owned by RCA during the period of significance. In 1929, RCA took possession of the McClure Ranch, a 1,472 acre property that extended to the Pacific Ocean and Abbotts Lagoon. In 1977, RCA sold all but 23 acres to the Trust for Public Land, who sold to the National Park Service shortly thereafter. The remaining 23 acres encompassed the building core, entrance road, and a small portion of the antenna field. The NPS purchased the 23-acre portion in 1999. The historic district boundary encompasses 160 acres, including the 23 acres of the building core and entrance road as well as those portions of the antenna fields that still have antennas and remnants of historic antenna arrays (antenna foundations, guy wire foundations, T-poles, H-frames, wood poles, transmission dead-end line structure, etc.).

State and County:

State: California
County: Marin

Size (Acres): 160 acres

Boundary UTMS:

Source	Type	Datum	Zone	Easting	Northing
GPS–Differentially Corrected	Area	NAD 83	10N	504,589	4,216,900
GPS–Differentially Corrected	Area	NAD 83	10N	505,160	4,216,215
GPS–Differentially Corrected	Area	NAD 83	10N	504,628	4,215,937
GPS–Differentially Corrected	Area	NAD 83	10N	504,032	4,216,777

Location Map

Management Information

General Management Information

Management Category: B: Should be Preserved and Maintained

Management Category Date: 12/21/2010

Management Category Explanatory Narrative:

The RCA Point Reyes Receiving Station meets all three criteria for Category B – Should Be Preserved and Maintained. As a component of the larger Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District, it meets National Register Criteria A and C. The historic district is compatible with the park's legislated significance "to save and preserve, for purposes of public recreation, benefit, and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped," as stated in Public Law 87-657 designating Point Reyes National Seashore in 1962. Finally, the property's continued use of buildings and grazing of the antenna fields is appropriate to its traditional use as a receiving station.

Management Agreement: Special Use Permit

Management Agreement Explanatory Narrative: Joseph and Joan Lunny hold a Special Use Permit for 5 years on the 1,151 acre parcel surrounding the RCA Point Reyes Receiving Station building core, including most of the antenna fields. The permit allows for Lunny to use the property (known as G Ranch) for a residence as well as grazing land for their cattle operation.

NPS Legal Interest

Type of Interest: Fee Simple Reservation

Public Access

Type of Access: Restricted

Type of Access Explanatory Narrative: A gate at the entrance to the station is locked in the evenings.

Adjacent Lands Information

Do Adjacent Lands Contribute? No

Adjacent Lands Explanatory Narrative: The adjacent ranchlands were historically part of the receiving station operations, but there are no known contributing resources located in these pastures and fields and therefore have not been included in this CLI. However, these lands are included within the boundary of the Shafter/Howard Tenant Ranch Historic District cultural landscape for their association with historic ranching activities on the Point Reyes Peninsula.

National Register Information

Existing National Register Status

National Register Landscape Documentation:

SHPO – Inadequately documented

National Register Explanatory Narrative:

The consensus determination of eligibility (DOE) for the RCA Point Reyes Receiving Station as part of the Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District was prepared by Historical Research Associates, Inc./CRCS and received SHPO concurrence in May 2008. The two sites are documented in the DOE as significant under Criterion A and B, at the national level of significance, for their association with twentieth century development of a worldwide radio network, and with one of the central figures in the history of wireless communications, Guglielmo Marconi. The period of significance established in the DOE is from 1913 to 1959, a time in which the Marconi Company and its successor, RCA, developed and expanded the stations, until advances in satellite-based communications gradually surpassed radio in terms of coverage and reliability.

Based on further analysis, this CLI finds the historic district to be significant under Criteria A and C, noting the distinctive characteristics of the buildings and antenna fields that qualify the site under Criteria C, and the lack of evidence to directly associate Guglielmo Marconi with the Receiving Station to qualify under Criteria B. The CLI also proposes a change in the period of significance for the RCA Point Reyes Receiving Station to differ from that of the greater historic district, as the period of 1929-1973 covers the initial development of the Receiving Station through to the end of the point-to-point service, replaced by emerging satellite communications.

The 2008 DOE did not adequately document the landscape characteristics and features of the station. This CLI expands the description and provides greater details of the station's natural systems and features, spatial organization, land use, buildings and structures, small-scale features, circulation, vegetation and archeological sites.

National Register Eligibility

National Register Concurrence:	Eligible – SHPO Consensus Determination
Contributing/Individual:	Contributing
National Register Classification:	District
Significance Level:	National
Significance Criteria:	A – Associated with events significant to broad patterns of our history C – Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

Criteria Considerations:	None
Period of Significance:	1929-1973
Historic Context Theme:	Developing the American Economy
Subtheme:	Communication
Facet:	Radio
Historic Context Theme:	Expanding Science and Technology
Subtheme:	Technology (Engineering and Invention)
Facet:	Information Processing, Transmission, and Recording
Historic Context Theme:	Transforming the Environment
Subtheme:	The Industrial Revolution
Facet:	Industrial Innovations

Area of Significance:

Area of Significance Category	Communications Industry

Statement of Significance

The following narrative is from the Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District consensus determination of eligibility originally prepared by HRA/CRCS in 2008 and updated by Christy Avery, NPS Historian, in 2011:

The Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District qualifies for listing in the National Register under Criteria A at the national level of significance, and Criteria C at the local level of significance. The district qualifies for listing under Criteria A at the national level of significance for its association with the development of twentieth century wireless communications systems. The district is significant under Criterion C at the local level of significance for its highly-designed Mission Revival and Art Deco buildings. The period of significance of the historic district begins in 1913 and ends in 1973, during which time Marconi Corporation and Radio Corporation of America (RCA) developed the stations. After 1973, point-to-point radio service was discontinued due to advances in satellite-based communications, which lead to a shift in landscape use with less emphasis on the antenna fields.

The historic district, with the Bolinas Transmitting Station and the Point Reyes Receiving Station, is associated with the twentieth century development of a worldwide radio network. Between 1913 and 1919, the Marconi Wireless Telegraph Company of America began developing a system of radio stations across the United States and around the world, and as part of that system built two of three radio stations in the Point Reyes area. These were the Bolinas transmitting station and the Marshall receiving station, built in 1913 and 1914. The company's successor, the Radio Corporation of America RCA), expanded the Marconi Company's operations after World War I. It continued to operate the Bolinas station but phased out the point-to-point operations at the Marshall station, and replaced it with a new receiving station on the Point Reyes Peninsula in the late 1920s and early 1930s. These changes were in response to technological advances, such as the discovery of short-wave radio propagation, as well as market conditions. RCA expanded its operations and facilities at Point Reyes into the late

1950s. Although RCA sold the stations in 1986, the new owners continued to operate them into the late 1990s, functioning as a vital communication conduit for ships at sea.

The radio stations at Point Reyes National Seashore are monuments to twentieth century wireless telegraphy from centralized earth-based transmitting and receiving stations. They reflect the evolution of wireless communications throughout this one-hundred-year period. The era began with Guglielmo Marconi's early innovations and the development of a commercial system of intercontinental transmitting and receiving stations that girdled the globe. The system allowed people to communicate by radio around the world, sending and receiving signals on land and sea. By mid-century, as radio technology evolved, the number of stations shrank, dominated by fewer and more powerful coastal stations with huge transmitters and towering antennas. During this period, the Point Reyes stations remained operational, serving as waypoints where transoceanic and ship-to-shore message traffic passed through electronic filters of the transmitting technology and also a set of human filters, the hands of the operators who transmitted information. Over the latter half of the twentieth century, a more decentralized system incorporating satellites as relay stations and a large number of microwave repeating stations replaced this earlier system.

The stations are also significant at the local level of significance under Criterion C for their highly designed Mission-revival and art deco buildings. At the Bolinas site, the Marconi Transmitter building, Cottage 1 and Cottage 2, and the hotel were built in 1913 and exemplify Mission Revival architecture, with cast-in-place reinforced concrete and shared architectural detailing, including red tile roofing and arched entries with decorative brackets. The RCA-era buildings at both locations date from the late 1920s and early 1930s, and were built in the art deco style. They include the RCA Transmitter Building, switching building, and garage at the Bolinas station, and the main receiving building, garage, utility building at the Point Reyes station. They include symmetrical facades and vertical bays defined by fluted or smooth pilasters, and glazed bricks arranged in a diamond pattern atop the pilasters in the roof parapets. The historic buildings at the receiving station site are arranged symmetrically around a circular automobile court, at the terminus of a long access road flanked with a Cypress tree allee. In general, the building typologies and construction materials were consistent with architectural trends of the Marconi and RCA eras, and were nearly identical in styles of other Marconi or RCA buildings constructed at the same time. Changes to the buildings, which included modifications to support technological advancements, took place mostly on the interior of the buildings and after the period of significance.

Both the transmitting and receiving stations possess all seven aspects of historical integrity. Although the removal of most of the antennas has impacted site integrity, their locations continue to be marked by concrete bases.

The historic district does not need to meet Criteria Consideration G, since the majority of the properties and the most important period of significance are greater than fifty years old.

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National Historic Landmark Information

National Historic Landmark Status: No

World Heritage Site Information

World Heritage Site Status: No

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Historic Designed Landscape

Current and Historic Use/Function

Primary Historic Function-Major Category: Industrial/Processing/Extract

Primary Historic Function-Category: Telecommunication Facility

Primary Historic Function: Telecommunication Facility

Primary Current Function-Major Category: Government

Primary Current Function-Category: Government Office

Primary Current Historic Function: Government Office - Other

Other Current and Historic Uses/Functions

Major Category: Agriculture/Subsistence
Category: Agricultural/Field
Subcategory: Agricultural/Field
Type: Both Current and Historic

Major Category: Industrial/Processing/Extract
Category: Telecommunication Facility
Subcategory Telecommunication Facility
Type: Both Current and Historic

Major Category: Government
Category: Government Office
Subcategory: Interpretation Facility
Type: Current

Major Category: Government
Category: Government Office
Subcategory: Multi-Use Building
Type: Current

Current and Historic Names

Current and Historic Name	Type of Name
RCA Point Reyes Receiving Station	Both Current and Historic
KPH	Both Current and Historic
G Ranch	Current

North District Operations Center (NDOC)	Current
Maritime Radio Historic Society	Current

Ethnographic Information

Ethnographic Study Conducted: No

Ethnographic Explanatory Narrative:

Although no specific ethnographic study has been conducted for Point Reyes National Seashore, numerous anthropological studies associated with Coast Miwok people have been completed.

The Point Reyes National Seashore Cultural Affiliation Report examining Native American affiliation at Point Reyes concluded that the Federated Coast Miwok people have a clear, exclusive affiliation with the lands managed by Point Reyes National Seashore extending back more than 2,000 years. The Federated Coast Miwok are politically recognized by the federal government as the Federated Indians of Graton Rancheria.

Tipon, Nick L., Dowdall, Katherine M. (2006). A Cultural Heritage Survey by the Federated Indians of Graton Rancheria for the Point Reyes National Seashore, Marin County. Submitted by the Federated Indians of Graton Rancheria, Santa Rosa, California. NPS Cooperative Agreement No. 1443-CA-8530-97-017

Miller, Margaret A (2007). Themes in the History of Labor and Work in the Point Reyes Peninsula, Olema Valley, and Tomales Bay Region, 1860-1980: An Introductory Essay. Sonoma State University Department of History.

Emberson, G., S. Thalman, et al. (1999). Point Reyes National Seashore Cultural Affiliation Report. Novato, CA, Submitted by the Federated Coast Miwok Cultural Preservation Association. NPS Cooperative Agreement No. 1443-CA-8530-97-017.

Chronology

Year Begin	Year End	Event	Annotation
1913	1913	Purchased/Sold	Marconi Wireless Telegraph Company of America bought three parcels of ranch land near Bolinas from the Albert Ingermann family. Prior to its purchase, the lands had been grazed, creating an open landscape with little interference of radio waves. Grazing continued in the pastures even as they were developed antenna fields, which helped to maintain the open character.
1913	1914	Developed	The Marconi Company purchased and developed two sites in Marin County to expand their American wireless communications operations; a transmitting station in Bolinas, CA (within current NPS boundaries) and receiving station in Marshall, CA on Tomales Bay (outside of current NPS boundaries). Both sites included a primary operation building, a hotel, two cottages, various outbuildings and antenna fields.
1917	1918	Military Operation	World War I began and the U.S. Navy took control of the two Marconi stations in Marin County to regulate radio communication.
1920	1929	Established	Radio Corporation of America (RCA) purchased the two Marconi stations from Marconi Corporation. They expanded their West Coast operations by expanding the Bolinas transmitting station site to accommodate the technological advancements of short-wave radio.
1929	1929	Purchased/Sold	RCA took possession of the 1,472-acre James McClure Ranch (G Ranch), through condemnation, on the north end of Point Reyes Peninsula to develop a new receiving station. Like the Bolinas property, G Ranch has been grazed prior to RCA possession, creating an open landscape with little interference of radio waves. Grazing continued in the pastures even as they were developed antenna fields, which helped to maintain the open character.
1929	1931	Developed	RCA developed the Point Reyes Receiving Station site, constructing the RCA Receiving Building, RCA Garage, RCA Utility Building and other storage buildings as well as antenna fields on all sides. The building core was accessed via a long road through an allee of Monterey cypress trees.
1930	1939	Altered	RCA improved its station with technological advancements; replacing older antennas with newer types and replacing Morse code communication devices with teletype printers.

1941	1945	Abandoned	During World War II, the government reserved exclusive use of the RCA stations. They closed down the Marshall receiving station. They closed down the Marshall receiving station in 1943. RCA employees remained at Bolinas Station and Point Reyes Station with military presence.
1941	1945	Military Operation	The Army setup a command post at the Point Reyes Receiving Station and built barracks and a cooks shack for Coast Guard beach patrol.
1946	1946	Altered	RCA's Radiomarine Division moved the equipment for the ship-to-shore service (known by call sign KPH) from the Marshall receiving station to the Point Reyes Receiving Station.
1959	1959	Altered	RCA made alterations to its transmitting and receiving sites to accommodate increased traffic across the Pacific. Antennas were erected at both sites for signals coming to and from Tahiti.
1962	1962	Established	Congress established Point Reyes National Seashore, while RCA retained its receiving station as an inholding within park boundaries.
1964	1964	Expanded	RCA's Marin stations had 65 point-to-point circuits, with more than 45 of them serving countries in East Asia.
1973	1975	Altered	Due to advancements in satellite technology, RCA phased out the Point Reyes point-to-point system, removed all circuits, and replaced receivers on the upper floor with more modern equipment. The company either removed the rhombic antennas or switched them over for use by KPH. Three satellite dishes were installed over several years in the yard surrounding the main building and the Modern Utility Building was constructed.
1977	1978	Purchased/Sold	RCA, operating as RCA Globcom, sold all of the Bolinas Transmitting Station property and all but the 23-acre core of the Point Reyes Receiving Station property to the Trust for Public Land. The Trust sold the land to the federal government for inclusion in Point Reyes National Seashore.
1978	1978	Land Transfer	RCA leased 100 acres of the Point Reyes KPH antenna fields from the NPS.
1985	1988	Purchased/Sold	RCA was purchased by General Electric (GE) then by MCI International, Inc., which operated the Bolinas Transmitting Stations and the Point Reyes Receiving Station under the Western Union International subsidiary name. MCI invested around two million dollars in the KPH operations.
1992	1992	Altered	MCI turned over the operation of their station in Chatham, MA to be operated remotely by the Point Reyes Receiving Station.
1995	1997	Purchased/Sold	MCI put KPH up for sale in 1995 and then announced the stations closure. On June 30, 1997 the last KPH message was sent. The transmitters at Bolinas were turned off and receivers at Point Reyes were abandoned, but left on to keep a symbolic watch over the airwaves.

1999	1999	Purchased/Sold	The NPS purchased the remaining 23 acres of the Receiving Station building core for inclusion in Point Reyes National Seashore.
1999	2010	Preserved	The non-profit Maritime Radio Historical Society was formed and began to document, preserve and restore the Bolinas and Point Reyes stations under agreement with the NPS. The Marin stations are the only commercial Morse code coast stations still operating in the western hemisphere, under call letters KSM. They continue to receive and transmit messages.
1999	2011	Ranched/Grazed	Joseph and Joan Lunny currently hold a special use permit for the grazing lands of the receiving station antenna fields for their beef cattle operation. (Note: Grazing is a historic land use that has occurred since the 1800s throughout the peninsula.)

Physical History

The following narrative is from the Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District consensus determination of eligibility originally prepared by HRA/CRCS in 2008 and updated by Christy Avery, NPS Historian, in 2011 [1]:

Historic Context

In 1914, when the Bolinas transmitting station was completed, it was the first Pacific Coast radio station built by the Marconi Wireless Telegraph Company of America. It was one of many stations that would span the globe as part of the Marconi Company's operations, and one that would help fulfill the vision of company founder Guglielmo Marconi for transoceanic wireless communication. Guglielmo Marconi, born in Italy in 1874, was one of the prominent figures in the development of wireless radio technology in the late nineteenth and early twentieth centuries. Marconi benefited from the work of noted scientists such as Heinrich Hertz, Mahlon Loomis, Thomas Alva Edison, Sir Oliver Lodge, and Nikola Tesla, as well as his own experimentation with sending messages without wires. Although Marconi's claims to inventive originality are open to debate, his organizational efforts are not. Marconi successfully drove the emerging knowledge about radio waves to practical and profitable commercial use worldwide. Based upon an astute use of the patent systems of several countries, a powerful business model of leasing equipment and services—rather than selling technology and education—and a policy of exclusive communication among Marconi operators, the Marconi Company was a stunning business success.

Marconi embarked upon his commercial enterprise in 1897, when he established the Wireless Telegraph and Signaling Company in England. By that time, he had successfully transmitted signals a distance of one mile, patented his technology, and set his sights on transoceanic wireless communication. In 1899, he pressed forward with this goal when he incorporated the New Jersey–based Marconi Wireless Telegraph Company of America. Within two years, he was transmitting faint signals from Poldhu, England, to St. John, Newfoundland. He registered a patent for his famous principle of selective tuning in 1901, which improved on the work of Lodge and Tesla, who had demonstrated the principle of tuning electrical "radio" waves a decade earlier. Advancing the prospects of intercontinental transmissions, the Marconi Wireless Telegraph Company of America built a transatlantic radio facility at South Wellfleet, Massachusetts. Here, on January 18, 1903, President Theodore Roosevelt and King Edward VII exchanged the first radio message from the United States to Europe. For his work in advancing wireless—or radio—communications, Marconi won awards from many countries and received the Nobel Prize in physics in 1909 with co-recipient Carl Ferdinand Braun.

After achieving his initial goal of proving the possibility of long-distance communications, Marconi looked to the Pacific Ocean as the next gap to bridge. Until this time, the Commercial Cable Company had a monopoly in transpacific communications. The rates were high because of the costs and maintenance of a lengthy cable across the Pacific. Marconi knew that wireless transmission would be much cheaper. In 1910, Marconi took over station PH, founded by the American DeForest Wireless Telegraph Company in the Palace Hotel and later purchased by United Wireless Telegraph Company, which moved the station to Russian Hill after the earthquake and fire destroyed the Palace Hotel, and then to Hillcrest in Daly City. The Marconi Company could now concentrate on its Pacific-area operations. However, Marconi was not alone in this venture. The advent of commercial wireless long anticipated the arrival of Marconi. As the Pacific Coast center of maritime activity, San Francisco attracted a large volume of wireless business as soon as the equipment became available. The United States Lighthouse Service installed its first wireless set on the San Francisco Lightship around 1899, and soon many Pacific Coast steamers had wireless capability. The U.S. Navy built twelve coastal stations and the Army had at least nine in Alaska. Between 1900 and 1910, four wireless companies installed dozens of ship-to-shore stations along the coast from Seattle to San Diego.

Although there were a number of wireless operations along the Pacific Coast and in San Francisco, the market for wireless was still in its infancy. Shipping was expanding, creating a greater need for shore stations, and the Pacific Ocean remained without a solid point-to-point (land station-to-land station) service. More important, the Marconi Company, which began as a small venture, was gaining a virtual monopoly of the wireless business in America around the time it arrived in San Francisco. The company's monopoly was both in name recognition and organizational power. The Titanic disaster of 1912 demonstrated to the world the importance of wireless and made Marconi's wireless system—which broadcast the word of the disaster to nearby ships and the public—a household name. When it took over station PH, the Marconi Company did so by acquiring United Wireless, the station owner and Marconi's main competitor in the Pacific. The merger allowed Marconi to capitalize on United's shore-station business and to pursue his goal of bringing wireless to the Pacific region.

From the new office in San Francisco, Marconi executives continued to operate and improve the ship-to-shore operations of station KPH.[2] Their greater objective, however, was to expand the company's American operations and complete a global wireless network by making the connection between the Pacific Coast and Japan by way of Hawaii. By 1913, the company was constructing high-power stations in Belmar, New Jersey, and Carnarvon, Wales (developed by the British Marconi Company), in addition to stations in California and Hawaii. Around this same time, the Japanese government began construction of a station to connect with the Marconi system. In 1915, Marconi expanded still further, building high-power stations at Marion, Massachusetts, and Chatham on Cape Cod (also in Massachusetts) to communicate with Stavanger, Norway.

As part of its Pacific operations, the Marconi Company purchased property at four locations. Two were in Hawaii, where the receiving site would be at Koko Head, east of Honolulu, while the transmitting site would be at Kahuku, northeast of Honolulu. And two were in Marin County, California, where the receiving site would be located near the small community of Marshall on the eastern shore of Tomales Bay, while the transmitting site would be on farmland just north of Bolinas. The company constructed similar facilities at both locations. The design of the buildings and antennas in Hawaii was practically identical to those constructed in Marin County, except for the transmitting powerhouse at Kahuku, which needed to be larger in order to accommodate a steam plant for generating the tremendous amount of electricity needed to relay messages to Asia. (These facilities also bore a distinct resemblance to other Marconi facilities of the time.)

The Marconi Company selected the sites for its stations in the Point Reyes area for a number of reasons. They liked it because it was the "cleanest" site that the engineers—and evidently Marconi himself—had discovered. Their instruments measured little if any interference occurring either naturally or from competing commercial frequencies. They also liked the area because it was close to the ocean, largely undeveloped, and near the company's western headquarters in San Francisco.

In May 1913, the Marconi Wireless Telegraph Company of America bought three parcels of Bolinas ranch land, totaling 643 acres, from the Albert Ingermann family. The land overlooked the Pacific Ocean and was relatively flat and open. It included parcels for the transmitting station and support buildings, the vast antennas, and a reliable water supply. Easements for transmission lines, which would bring commercial power from Mill Valley and separate telegraph lines owned by the Marconi Company and connected to Marshall and San Francisco, stretched over the hills.

Shortly afterward, the J. G. White Engineering Company drew up plans for the buildings and began construction of the station's four major buildings: the transmitter building, a hotel, and two cottages. All were made of steel and concrete with fireproof tile roofs. Other structures included wood-frame outbuildings such as a garage cottage, and storage shacks, as well as the towering antenna masts. The station's largest structure was the transmitter building. It was two stories high, with massive reinforced concrete walls, large multi-light wood-frame windows, and a bi-level roof with tiled hipped-roof clerestory units. The concrete foundation required additional piers and foundations for huge motor generators, disc dischargers, and other machinery. A cooling tower with a massive concrete foundation stood west of the powerhouse overlooking the ocean bluff.

Referred to as a "commodious clubhouse" by the San Francisco Chronicle at the time it opened, the hotel served visiting technicians and dignitaries, as well as some of the operating staff as needed. The hotel was two stories high with a tile roof, eighteen sleeping rooms, a kitchen, and a common area. It featured landscaped grounds and a tennis court located nearby. The two matching concrete cottages, also with tile roofs, housed the station's chief and assistant engineers; one cottage was located adjacent to the hotel and the other closer to the powerhouse.

The Marconi antenna was an imposing structure. Located in the fields east and northeast of the huge transmitting station were nine 300-foot steel masts supporting a 2,000-foot by 600-foot rectangular antenna composed of 32 wires. Another 32-wire antenna was located at ground level, and a copper "earth plate" was buried in the ocean below the low-water level.

The isolated site proved to be a challenge for the J. G. White Engineering Company. Based in New York City, the company had the construction materials and equipment manufactured on the East Coast and sent to Bolinas via the Isthmus of Panama. No rail lines passed within twenty miles of the Bolinas site, and shipping by schooner was difficult because of the shallow bar at Bolinas. Nonetheless, with the help of twenty-horse teams and intensive labor, the engineering company managed to secure its supplies of massive steel beams, tons of concrete, and finally the operating equipment.

The Bolinas station required tremendous amounts of electricity in order to throw electromagnetic waves across the ocean. To power its 300-kilowatt transmitters, the Marconi Company bought its power from Pacific Gas & Electric; PG&E provided two 11,000-volt lines from its substation at Alto near Mill Valley, stringing the line on poles stretching across twenty miles of mountainous terrain. The establishment of this power system had the added public benefit of providing electrical service to the communities of Willow Camp (Stinson Beach) and Bolinas. (Nearby coastal towns waited up to another twenty years for electric service.) The Bolinas station, however, was the only one that received commercial power. Since the commercial line ended just north of Bolinas, the Marconi Company ran its own line the last mile to the station.

Meanwhile, the Marconi Company forged ahead with construction at its other sites. The Marshall receiving station, the sister station to the Bolinas transmitting station, was located twenty miles north, on a hillside overlooking Tomales Bay. The distance between the two stations was necessary because the great power of the transmitting facility would blur the reception of its counterpart without a sizeable separation. (The stations were connected by a landline over which station operators sent messages.) Construction began in mid-1913 and by the end of that year, the entire station was nearly completed, including the antenna masts. The structures here mirrored some at the transmitting station: an operating building, a thirty-five-room hotel, two cottages, a powerhouse, and various wood-frame outbuildings. The major structures were also built of reinforced concrete with tile roofs. The stations in Hawaii were going up around the same time and, as noted above, were practically identical to their California counterparts.

By 1914, all of these stations were finished, and on September 24th of that year, the Bolinas transmitting station began operation. The Bolinas station was one of the largest in the world at the time, along with its counterpart at Kahuku and the new Marconi station at Belmar, New Jersey. The station at Bolinas opened to great fanfare, with a ceremony inaugurating commercial transpacific wireless. President Woodrow Wilson provided a message that operators sent to Hawaii governor Lucius E. Pinkham; San Francisco mayor James Rolph of San Francisco exchanged greetings with Honolulu mayor Joseph James Fern. Other dignitaries attended the event. Among the guests were presidents of steamship lines and prominent industrialists. A similar party was going on at Kahuku. One writer, inspired by the moment, characterized the event as "a victory over place and time the like of which only the living generation has experienced, and it is doubtful whether our sons or yet our grandsons will witness another triumph on so gigantic a scale."[3]

In 1916, the Marconi stations (KET in California and KIE in Hawaii) began commercial radio service with Japan, opening a new era in radio communications on the Pacific Rim. The Marconi Company established service between Bolinas and Funabishi, a government owned station ten miles from Tokyo. Messages traveled about 5,400 miles between the Bolinas station and Japan, a considerable distance for the time. At one point that year, the Marshall receiving station picked up messages from Hanover, Germany, a distance of around 7,000 miles.

Advancements such as these and improvements in wireless technology kept the Marconi Company busy. It operated the facilities day and night to handle as much traffic as possible and to provide uninterrupted service. To make this possible, Marconi designed a duplex system requiring two stations at each geographic location. In California, the Marshall station received Morse code messages. To avoid interference by incoming radio waves, outgoing messages originated with Marshall operators, who sent them by landline to Bolinas where they were transmitted by spark transmission to the receiving station at Koko Head. In reverse, the transmitting station at Kahuku on the north shore of Oahu sent messages to Marshall with its mile-long land antenna. The most popular form of communication was the Marconigram, and other services such as the Week-End Letter, Cable Letter, and Press Service were available.

By 1917, Marconi had achieved his goal of spanning the Atlantic and Pacific and creating a commercial radio network that could transmit messages around the world. That year, however, the United States entered World War I and the federal government closed all private wireless stations and placed the U.S. Navy in charge of regulating radio communications. The Navy assumed control of fifty-three American Marconi stations, including those in Marin County and Hawaii, and closed twenty-eight. Although the Marconi Company was effectively out of the communications business during the war, it produced a large amount of radio equipment for the federal government. Marconi technology also aided the war effort through use of its facilities, equipment, and skilled personnel.

After the war's end in 1918, commercial radio would not be the same. The number of stations declined for example, when the Navy purchased forty-five of the coastal stations it had taken over from Marconi. Because there were so many advances made in radio during the war, however, many of the lower-power coastal stations were, or would soon be, out-of-date and scrapped. Perhaps the greatest change was that many Americans in industry and government, including Navy officials, believed that the British-owned Marconi Company should not have a monopoly over American wireless communications; that is, they believed that communications systems should be American owned. In 1919, this sentiment led to the formation of the Radio Corporation of America, and that year the Marconi Wireless Telegraph Company of America sold its stock to Radio Corporation, as it was then commonly known (the phrase "of America" was attached in very small letters for about five years, until it was incorporated into the longer name). The high-power stations at Marin, as well as those in Hawaii and New Brunswick, were part of this transfer. Marconi sold the properties at Bolinas and Marshall to RCA in March 1920; in April, his company was dissolved.

Like its predecessor, RCA was a radio communications monopoly, this time with the blessing of the U.S. government. The original merger was between the General Electric Company (GE) and Marconi Wireless, with GE having the controlling share of stock. But in order to be competitive, RCA needed a consortium of other large companies to build the patent pool. RCA approached its competitors, American Telephone and Telegraph Company (AT&T) and Westinghouse Electric Company, both of which agreed to support the Americanization of wireless communications. Another business, the United Fruit Company, joined the deal, since its fleet of banana boats relied on wireless. These companies exchanged their patents for preferred stock, and were the major shareholders of the new corporation. Together they owned more than 70 percent of RCA and almost 2,000 patents; most important was the vacuum tube.

Although RCA began to experiment with bringing radio to a mass audience, it returned its attention to upgrading its wireless stations and expanding the wireless network. RCA engineers drew upon the company's many resources and rapidly developed and installed the latest technology in the shore stations. Two Alexanderson

alternators, developed by GE during the war, were installed at Bolinas in 1920, as well as its East Coast counterparts. The company later replaced this long-wave equipment with the more efficient short-wave technology characterized in part by smaller dipole antennas.

In the 1920s, RCA was able to make these and other advancements—and dominate the international communications field—because it owned most of the important patents in radio technology. Using such new devices as vacuum tube transmitters and improved antenna design, it set speed and efficiency records in the transmission and handling of international messages. By the early 1920s, for example, the company's traffic increased from 18 to 23 million messages and increased the company's gross income by 50 percent. Its ship-to-shore operations experienced similar growth. Given RCA's powerful place in the Pacific Rim, U.S. Navy Secretary Josephus Daniels exclaimed that the United States held a stronger position in the Pacific; radio made surprise attacks "impossible"—a fateful statement.

In 1929, RCA embarked on a major expansion of its West Coast operations in response to an increased demand for communications with Asia and the South Seas. The primary goal was to expand the transpacific circuits to include China, Manchuria, Siberia, Java, French Indochina (Vietnam), Manila, New Zealand, and Australia. The new technology enabled messages to travel greater distances; the Java circuit reached an unprecedented 8,646 miles.

As part of this expansion, RCA enlarged the transmitting station at Bolinas to accommodate twenty short-wave circuits. The new circuits required a larger antenna field, for which the company purchased a 120-acre ranch directly to the south of the station in 1928. The new parcel brought the station's land holdings up to 1,049 acres. The new circuits also required the construction of a new transmitter building the following year. The building was a reinforced concrete structure, designed with an Art Deco façade. The company's name, set in large letters near the top of the building, could be seen from Mesa Road. A circuit switch house, five-bay garage, and cooling system for the transmitters stood adjacent to the new transmitter building. Roads connected the new complex with the old Marconi powerhouse. One feature of the new road system was a formal entrance gate and a circular drive in front of the new transmitter building. Trees, plants, and lawns—planted for windbreaks and to beautify the grounds—were also features of the new complex.

Meanwhile, RCA also planned the development of a new short-wave receiving station on the Point Reyes Peninsula. Company officials determined that the James McClure Ranch, a 1,472-acre parcel overlooking the Pacific Ocean, would be the perfect receiving site. Tests revealed that the site had little background interference, making it an ideal location for receiving short-wave signals. Since short-wave signals were more effective for long distance, and since the new location had superior short-wave reception, it would replace the long-wave receiving station at Marshall. RCA took possession of the McClure property in 1929 and began construction of its new receiving station. [4] RCA continued to lease the ranch operational buildings and grazing pastures to various ranchers, including Joseph Lunny Sr. in 1947, father of the current lessee, Jospeph Lunny Jr.

Like its counterpart in Bolinas, the new station was a two-story, reinforced concrete structure with an Art Deco façade of fluted columns adorned with brick details. The T-shaped building required a special foundation system because it was located in an area with a high water table and sandy soil. The company's name—RCA COMMUNICATIONS, INC—appeared in large letters across the front of the building. Two white spherical fixtures stood on pillars at either side of the entrance stairs. The company also constructed a four-bay garage, and utility and storage buildings in the same architectural style nearby, and erected an antenna field that stretched from all sides of the transmitter building. A long entry road with two columns of Monterey cypress trees were planted along the road that led from Sir Francis Drake Highway to the station complex. The entrance road passed through a formal gateway, ending in a landscaped circle.

The new RCA plants at Bolinas and Point Reyes went into operation in 1931. RCA continued to use the Marshall Station for its marine or ship-to-shore service, station KPH until America joined World War II in 1941. (RCA had

moved KPH from Hillcrest [Daly City] to Marshall in 1920). As part of the new operations, the Bolinas station mothballed its massive Alexanderson alternators and commenced sending signals through new, water-cooled vacuum-tube transmitters located in the new building. Power-switching equipment, a machine shop, storeroom, and bathroom occupied the first floor of Building 2, while the transmitters and offices were housed on the second floor. Line feeds exited the building through insulators embedded in the wall to the antenna fields. These consisted of separate broadside curtain antennas aimed at the various destinations around the Pacific. Later, there were fishbone-type antennas, so named for their distinctive shape, appearing as huge vertically mounted fish, as well as rhombics, which comprised the majority of antennas at the site. The KPH transmitters remained in Building 1 (the old Marconi powerhouse) and served as part of the ship-to-shore service. Like the Bolinas station, the Point Reyes receiving station housed on its lower floor generating equipment, battery banks, a lunchroom, locker rooms, restroom, and boiler room/distillery for pure water. The point-to-point station, with its receivers, tuning apparatus, and office, filled the second floor.

Although the Great Depression slowed profits at RCA, the corporation survived and thrived, most likely because of the dedicated leadership of its chairman. David Sarnoff. At the Marin County stations, operations under RCA continued and improved with new technology. In the 1930s, for example, older antennas were replaced with newer types for increased efficiency. And teletype with printers replaced much of the time-consuming Morse code communications. By 1936, RCA communicated with forty-seven countries out of its Marin stations, from where operators could relay messages to just about anywhere on the earth.

In 1941, America's entrance into World War II altered the course of operations for RCA. David Sarnoff, a patriot long interested in military and domestic intelligence and other government affairs, immediately pledged his company's service to the nation in a telegram to President Franklin D. Roosevelt. Roosevelt took Sarnoff up on his offer. RCA went into fulltime production toward the war effort, producing equipment and components for walkie-talkies, radar, sonar, and navigation systems such as Loran and Shoran. The corporation also made available to the war effort its coastal stations and personnel. RCA provided the Army with coded Japanese messages it received at its coastal stations, which were decoded and distributed to high military command. Sarnoff himself advised the president on strategic communications issues. General Dwight Eisenhower called on Sarnoff to create the radio infrastructure for the decisive D-Day allied assault on Normandy in 1944; Sarnoff led the rebuilding of the French Communications systems after the occupation. To facilitate his wartime service, the Army conferred upon Sarnoff the rank of colonel. He later attained the rank of brigadier general, and thereafter insisted upon being referred to as "General Sarnoff."

The war also affected the operations of RCA's Point Reyes stations. Although the government did not take over the station as it had in World War I, it did have exclusive use of them. Apparently for security reasons, the government required RCA to shut down the Marshall station, through which news of the attack on Pearl Harbor was relayed, a day after the attack. The station never reopened. At its other facilities, RCA made adjustments for the war effort. Military officials were especially concerned about the security of the stations. RCA monitored Japanese transmissions and reported daily to the Federal Bureau of Investigation (FBI) on half-inch paper tapes with inked dots and dashes. Because it considered the Point Reyes Peninsula a crucial and vulnerable setting for possible enemy attack, the Army set up a command post in the Point Reyes facility and built a barracks and cooks' shack for the Coast Guard beach patrol. At Bolinas, RCA restarted the Alexanderson alternator in Building 1. With so much high radio frequency being emitted in the antenna field, soldiers' rifles got hot to the touch.

At war's end, David Sarnoff and his RCA were national heroes and positioned well for the new postwar economy. Sarnoff's wartime efforts won him the Medal of Merit, awarded by President Harry S. Truman, and put his company on the receiving end of lucrative government contracts. RCA was one of the top fifteen government contractors during the 1950s, and an integral part of what would become known as the military-industrial complex. The company also continued to participate in national defense activities. As part of the intelligence operations during the Cold War, RCA intercepted messages out of Russia and Eastern Europe and provided their

contents to the National Security Agency and the FBI. Moreover, the company benefited from the extensive technological advances developed as part of the war effort.

The company's Point Reyes stations went back into operation after the war. In 1945, RCA's Radiomarine division moved the KPH equipment from Marshall to the Point Reyes receiving plant; the station was back on the air January 1, 1946. A year later, the company sold the Marshall property. The ship-to-shore station occupied a small corner of the receiving station's lower floor, while the point-to-point operation used the rest of the facility. The sending operation for KPH was at the Bolinas station using transmitters in the old Marconi transmitter building (Building 1) operated remotely from the receiving plant.

During the 1950s, RCA began to restore and expand its global communications network. It built a new marine transmitting station after the war at South Chatham, Massachusetts, to replace the old Marconi-era station at Marion. (The Cape Cod style brick structure housed WCC until the late 1990s, when it was still being operated by remote control from the KPH operating room at Point Reyes.) On the East Coast, point-to-point stations were located at Riverhead (the receiving site) and Rocky Point (the transmitting site, also known as "radio central"), on Long Island in New York. These eastern stations handled communications with Europe, Africa, and South America.

Meanwhile, RCA modified its stations on the Marin coastline in response to its renewed operations and to expand communications with the Pacific Rim. Certainly, the company, in part, wanted to revise modifications it had made as part of the wartime effort. It shut down the Alexanderson alternator at Bolinas, which it had returned to action for the Navy. RCA also removed some of the 300-foot antenna masts, built during the Marconi era, that were part of this system (those that remained were used by RCA's Radiomarine operation in the 1960s).

But RCA needed to enlarge its facility at Bolinas, too, in order to handle the increased traffic across the Pacific. In 1959, the company added on to the transmitter building. The cinderblock and steel addition, with a low gable roof of corrugated transite, doubled the facility's size. RCA expanded its land base as well for transmitting purposes, purchasing 470 acres of ranch land directly northeast and northwest of the station in the late 1940s and early 1950s. (It was here that the company erected one of two antennas for sending signals to Tahiti in the early 1960s; the receiving antenna was located at Point Reyes.) By 1964, RCA's Marin stations had sixty-five point-to-point circuits. More than forty of these circuits served countries in East Asia, Southeast Asia, and the South Pacific, including China, Korea, Japan, Taiwan, the Philippines, Tahiti, Australia, and New Zealand.

The company's expansion in the 1960s, however, was the extent of its point-to-point operations. By 1970, advances in wireless engineering threatened RCA's historic point-to-point service. Satellite technology, developed mainly during the Cold War, became available for commercial use and the communications industry. RCA held patents on this technology and intended to become a leader in commercial satellite communications. It phased out the point-to-point system at Point Reyes in 1973 and removed all of the circuits by 1974. That year, it replaced the archaic receivers on the upper floor of the station with modern equipment for satellite communications, leaving behind the heavy copper doors and classic RCA logo imprinted on the linoleum floor. As part of this change, the company either removed the rhombic antennas or switched them over for use by KPH. Technicians installed three large satellite antennas (dishes) in the yard, as well as a modern standby power plant in a new cinderblock building. The dishes stood 33- to 44-feet high, presenting a new image of wireless communications in a landscape dominated by antenna masts. A new logo for a new age appeared on the building: RCA Americom.

RCA's improvements brought mixed results. The satellite business went well during its first two years of operation, handling various communications, including live television feeds from around the world. However, competition soon began to outpace RCA. The company had the best technology available, but apparently mismanaged its new venture. The company's maritime radio business, on the other hand, continued to function well, adding SITOR technology and new receivers featuring digital tuning (which made finding and changing frequencies similar to operating a car radio) to its existing Morse code operation.

In the late 1970s, RCA began to downsize its operations in Marin County. The conversion to satellite communications—a decentralized system that incorporated satellites as relay stations and a large number of microwave repeating stations—meant that the company no longer needed its vast antenna fields for transmitting and receiving messages. Moreover, land use around the stations had changed in 1962 with the creation of Point Reyes National Seashore. RCA retained its Point Reyes receiving station property as an inholding within authorized park boundaries; the Bolinas station would be part of a later addition to the seashore. In 1977, with the end of the point-to-point system and the end of KPH marine service looming on the horizon, RCA sold most of its Point Reyes and all of its Bolinas properties to the Trust for Public Land, a conservation organization. One official at RCA observed that the sale reflected changes in communications technology and that transferring the land to the trust presented the "best opportunity of preserving a unique coastal area." [5]

RCA Glōbcom, RCA's subsidiary in charge of the remaining Marin facilities, retained 23 acres surrounding the Point Reyes receiving station buildings and driveway. The Trust sold the remaining land, around 1,191 acres, to the federal government in 1978. The land was now part of Point Reyes National Seashore and managed by the National Park Service. RCA leased 100 acres of KPH antenna lands from the Park Service. RCA believed that the term of the lease would be short. Company officials anticipated that they would phase out the marine service within ten years. Around this same time, Congress was going to expand the national seashore, including RCA's facility at Bolinas. The Trust purchased the property, 1,049 acres, in 1977, and as in its other transaction, resold the property to the Park Service the following year.

At Bolinas, however, a slightly different situation presented itself. Commonweal, a nonprofit health- and environmental-research organization founded in 1976, approached RCA about buying or leasing the transmitting station for its headquarters. Although Commonweal's negotiations fell through when RCA sold its holdings to the trust, the trust afterward gave Commonweal a fifty-year lease on most of the buildings and much of the property. The Park Service inherited and honored the Commonweal lease, with some amendments, when it purchased the property.

The fortunes of RCA slid downhill in the 1970s, transforming one of the nation's most successful and well-managed corporations into one of the worst. In 1985, company leaders announced the sale of RCA to General Electric, its old nemesis and "mother company." The purchase price, more than six billion dollars, made it the largest non–oil company merger in industry history. The sale became official in 1986. The new owners seemed interested in making changes in name only, renaming the facility GE Americom while retaining RCA Glōbcom. Two years later, GE sold RCA Glōbcom to MCI International, Inc., which operated the station under its subsidiary, Western Union International.

Although MCI invested approximately two million dollars in the operations at KPH, as well as in its ship-to-shore systems, the investment was not enough to return the business to its former stature. In a cost cutting move, MCI turned over operation of WCC at Chatham to Point Reyes by remote control in 1992. An operator handled Atlantic traffic in the KPH operating room, making the place a true "around-the-world-station." But business continued to shrink, especially as cellular phones replaced marine radio for ships close to shore. MCI cut back its operations further, turning off the old transmitter in Building 1 (known as BL-10), disconnecting the power to the building, and relinquishing its ownership to the National Park Service.

MCI continued to operate KPH and WCC until 1997, but put KPH up for sale in 1995. Two years later, after attempting a merger with British Telecom, MCI announced the station's closure. On June 30, 1997, KPH sent out its last message and turned off its transmitters and receivers at Bolinas and Point Reyes. The station continued to operate using Morse code and SITOR for two more years under the ownership of Globe Wireless.

The National Park Service purchased the remaining 23 acres of the Point Reyes Receiving Station building core for inclusion in Point Reyes National Seashore on October, 29, 1999. That same year, the non-profit Maritime

Radio Historical Society (MRHS) was formed with the “goals of documenting, preserving and restoring the artifacts of maritime radio history” the foundation for the preservation of the skills, traditions and culture of the professional radiotelegraphers who operated the stations during the period of significance. Their largest project to-date has been the restoration of the Bolinas and Point Reyes stations. Through an agreement with the NPS, they run the only commercial Morse code coast station still operating in the hemisphere, under call KSM. Under an agreement with Globe Wireless MRHS re-activates KPH from the original Point Reyes and Bolinas stations on its original frequencies once a year on July 12 for their annual "Night of Nights" event to “acknowledge and honor the history of Morse communications and the men and women who were part of that profession”. The MRHS volunteers and park staff continue to restore and preserve both the operational equipment and the antenna fields, while MRHS continues to receive and transmit messages through two of the last remaining in-tact coast stations in the United States. [6]

Today, William Niman currently holds a Special Use Permit for grazing on 575 acres of the antenna field. Commonweal continues to lease the Transmitting Station buildings and sixty surrounding acres for their organization headquarters, research facility, and retreat center. They mow some portions of the property that are not grazed by the Niman cattle. The southwest addition of the RCA Transmitting Building is used by the museum staff for temporary storage while the MRHS volunteers operate and help maintain the radio equipment. Park staff and MRHS volunteers maintain the antenna poles and wires in the antenna field.

The Marconi/RCA Bolinas Transmitting Station maintains its feeling and association of a coastal wireless communication station through the relationship of its intact buildings and antenna fields with its rural setting.. The relationship of the open pasture and antenna fields with the developed building core continues to reflect the long-term manipulation of the natural environment for industrial purposes.

Endnotes

[1] Much of the following narrative was originally written by D. S. (Dewey) Livingston and incorporated into the 2008 consensus determination of eligibility form. For a more detailed history of wireless transmissions at Point Reyes, see Livingston's unpublished, "Wireless Giant of the Pacific: A History of the Marconi and RCA Radio Stations on the Point Reyes Peninsula," available at the Point Reyes National Seashore Archive.

[2] A 1911 international agreement added a K to shore station call letters on the West Coast and a W to stations on the East Coast.

[3] "Trans-Pacific Wireless Station," Wireless World (January 1915): 664.

[4] RCA originally offered to buy 500 acres of ranch, but the McClures rejected the offer. The company responded by suing to condemn the property. The McClures lost the suit, and the entire ranch was condemned and sold to RCA.

[5] RCA Relay 37, no. 1 (January–February 1977): 10–11.

[6] Maritime Radio Historical Society website: http://www.radiomarine.org

1940s-era photo showing the RCA receiving building and surrounding antennas, looking northwest. (Courtesy of PORE).

Historic photo showing the antenna fields and grazing land extending west from the Receiving Station, looking northeast. (Courtesy of PORE).

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The RCA Point Reyes Receiving Station is a 160-acre historic site located in the northwestern portion of the Point Reyes Peninsula surrounded by the historic G Ranch property. The Receiving Station together with the Marconi/RCA Transmitting Station make up the "Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District" that has been determined eligible for the National Register of Historic Places, and received concurrence by the California State Historic Preservation Office in 2008. The district is significant under Criterion A for its association with the development of 20th century wireless communications systems and under Criterion C for the distinctive architectural styles of the Mission Revival Marconi-era buildings and Art Deco RCA-era buildings. The period of significance of the historic district spans from 1913 to 1973, during which the Marconi Company and its successor, RCA, developed and expanded the stations until advances in satellite-based communications gradually surpassed radio in terms of coverage and reliability and ended the ship-to-shore communication services, which altered how the landscape, specifically the antenna fields, were used.

This inventory is specific to the documentation of the receiving station, which has undergone little change since 1973 and continues to reflect its historic significance through features associated with the following and landscape characteristics: natural systems and features, spatial organization, land use, buildings and structures, circulation, small scale features, vegetation and archeological sites.

The organization and location of the site reflects the primary historic use as a wireless communications receiving station. Natural features that influenced the development of the Point Reyes Receiving Station include topography, climate, and vegetation. In addition to the site's proximity to the Pacific Ocean, the gentle slope of the natural topography and the low-growing, native vegetation made this site an ideal location for the antenna fields. The maritime climate, which is characterized by strong winds, led to the planting of trees to protect buildings and roads during the period of significance.

Important aspects of spatial organization are reflected in the relationship of working buildings to the surrounding antenna fields, the formal entrance through the tree-lined main entrance road, and the formal arrangement of the buildings, roads, and vegetation within the developed core. The site was organized with a cluster of operational buildings and access roads, surrounded by the antenna fields that were kept clear of vegetation in order to produce an unobstructed area for reception of radio waves from across the Pacific Ocean.

A vehicular entrance road and turnaround provides a formal axis around which the buildings and vegetation were historically arranged. Three buildings and two structures were constructed during the period of significance and contribute to the receiving station. The three historic-era Art Deco buildings and two historic bollards date to a two-year period between 1929 and 1930, when RCA constructed the receiving station. One non-contributing building and three structures were constructed after the period of significance. These non-historic features include a utility building and its access road and walkways which were constructed in the 1970s.

The Receiving Building still houses the functional marine receivers of the KPH operation that are maintained by the Maritime Radio Historical Society. The buildings have been adapted for new uses, such as office space and storage for park operations. Historically, the antenna fields were grazed by the cows of local dairy ranchers which helped to maintain the vegetation in the fields, a use which continues in most of the antenna fields today.

Historic vegetation at the receiving station includes an allee of Monterey cypress (*Cupressus macrocarpa*) along the entrance road from Sir Francis Drake Boulevard, an oval-shaped planting bed at the terminus of the entrance road filled with lawn, and remnants of a windbreak and hedge northwest of the RCA Receiving Building. Clipped

shrubs and hedges and symmetrical plant beds around the RCA Receiving Building have been replaced after the period of significance with different species of vegetation, but the overall planting plan is still reflected in the symmetrical, formal plan for the site. Grasses in the surrounding antenna fields was predominantly managed by ranchers who used the area to graze their dairy herds. Today, the antenna fields continue to be grazed as part of a beef cattle operation that that helps to maintain the historic character of the fields.

Although no archeological survey has been completed within the antenna fields, potential archeological features are located throughout the receiving station property. Many of these features are artifacts from the historical occupation and use of the site by Radio Corporation of America (RCA) from 1929 to the early 1970s, including buried concrete antenna bases, anchors, weights, and grounding wires; discarded insulators, stakes and electrical debris; and downed H-frames and antenna poles.

Together, the features and patterns associated with these landscape characteristics help to convey the historic character of the receiving station.

Integrity Discussion

The RCA Point Reyes Receiving Station retains all seven aspects of integrity, including location, design, materials, workmanship, setting, feeling, and association. The historic buildings, structures, and circulation routes are in their original location. The setting is defined by the topography and coastal grasslands of the northwestern portion of the Point Reyes Peninsula, which create a wide, open landscape that gently slopes toward Abbots Lagoon and the Pacific Ocean to the north and northwest. Historic design, materials, and workmanship are still evident in the historic buildings, structures, circulation features, ornamental vegetation, and antenna fields. The Art Deco architecture of the buildings has been largely unaltered. The organization of the buildings at the end of the long, straight entrance road lined by a historic allee of trees continues to provide a formal entrance to the building core. The surrounding historic antenna fields still include functional antennas as well as the wooden H-frames that support power lines to them and carry the antenna wires to the Transmission Line Dead-End Structure (or Termination Frame) and into the receiving station. In addition, numerous concrete antenna bases and guy wire supports are still in the antenna field and help to convey the historic antenna arrays and reflect changing communication technologies throughout the site's history. Together, these remaining built features and landscape patterns continue to convey the historic feeling and association of an early 20th century wireless communications station.

Natural Systems and Features

Natural systems and features are defined as natural aspects that have influenced the development and physical form of the landscape. Natural systems that have significantly influenced the development of the RCA Point Reyes Receiving Station include topography, climate, and native vegetation. In addition to the site's proximity to the Pacific Ocean, the gentle slope of the natural topography and the low-growing, native vegetation made this site an ideal location for the antenna fields. The maritime climate, which is characterized by strong winds, led to the planting of trees to protect buildings and roads during the period of significance. These natural systems and features continue to convey the historic character of the site as a whole.

Topography

The RCA Point Reyes Receiving Station is located in one of the flatter areas in the northwest portion of the Point Reyes Peninsula. The building cluster is situated at approximately 90 feet above sea level and the landscape gently slopes north and northwest down toward Abbot's Lagoon and the Pacific Ocean. The relatively even terrain made installation of the numerous antennas feasible and provided unobstructed reception of radio waves.

Climate

The Point Reyes Peninsula is part of a marine system, which typically results in short wet winters and long dry summers. Because the peninsula physically juts out into the Pacific Ocean, it typically receives more fog than most other areas along the coast. These summer fogs provide a constant source of moisture along the coastline keeping grasses greener than areas further inland. Following heavy winter rains, strong spring winds develop that can persist until April or May. The winds coming in off the ocean create a harsh environment that has historically led to the establishment of windbreaks to protect building and roads.

Native Vegetation

The primary plant community found within the boundaries of the historic district is coastal grassland, but coastal scrub is beginning to encroach in areas that are no longer grazed or farmed. The coastal grassland community is a mixture of low-growing, native and non-native species that are the result of human activity on the land, especially the historic dairy operations which introduced non-native grasses to support grazing on the peninsula. Coastal scrub vegetation consists of low-growing, woody shrubs. The low-growing plants associated with coastal grasslands and scrub combined with the gentle topography of the land creates an open landscape. This vegetation community was ideal for the antenna field because it did not obstruct radio reception. The grasses also supported grazing by local ranches which helped to maintain the open character of the landscape. The following description of the coastal grassland and coastal scrub communities are summarized from the Point Reyes National Seashore website:

Coastal grassland (or Coastal Prairie) is dominated by long lived perennial bunchgrasses, such as Purple needle grass (*Nasella pulchra*), California fescue (*Festuca californica*), and California oatgrass (*Danthonia californica*) all of which can stay green year round with the moisture provided in the fog belt. Ranching activities that began in the area by 1850 introduced non-native grasses, many of which are invasive. Invasive, non-native grasses include velvet grass (*Holcus lanatus*), harding grass (*Phalaris aquatica*), and tall fescue (*Festuca arundinacea*). Common, non-invasive introduced species include Italian ryegrass (*Lolium multiflorum*) and clover (*Trifolium sp.*).

Coastal scrub is one of the most widespread plant community types within the park. Areas of the antenna fields that have been fenced off from grazing are beginning to transition from pasture to scrub. Predominant species in

this community is coyote brush (*Baccharis pilularis*). Other common plants throughout the peninsula are California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), coffeeberry (*Rhamnus californica*), thimbleberry (*Rubus parviflorus*), yellow bush lupine (*Lupinus arboreus*), monkey flowers (*Mimulus aurantiacus*), salal (*Gaultheria shallon*) and blue blossom (*Ceanothus thrysiflorus*). Non-native and native grasses include sedges (*Carex* spp.) and rushes (*Juncus* spp.). Some coastal sage species are also present including California sagebrush (*Artemisia californica*) and buckwheat (*Eriogonum fasciculatum*).

Rare native species in the area include fragrant fritillary (*Fritillaria liliaceae*), Point Reyes ceanothus (*Ceanothus gloriosus ssp. gloriosus*), short-leaved evax (*Hesperevax sparsiflora var. breviflora*), and large-flowered leptosiphon (*Leptosiphon grandiflorus*).

Invasive species found around the site include cape ivy (*Delairea odorata*), watsonia (*Watsonia sp.*), and myoporum (*Myoporum sp.*).

Hydrology
A small wetland is located behind, northwest, of the RCA Receiver Building.

Endangered Wildlife

Over fifty species of animals at Point Reyes are listed by the state or federal government as threatened, rare, or endangered some of which may be found within the cultural landscape. See list of endangered species in the Supplemental Information section. One endangered amphibian that may be found in the area is the California red-legged frog (*Rana draytoni*) found near sheltered ponds and other water sources, such as the wetland behind the RCA Receiver Building. They travel over land between water sources. One endangered insect is Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*).

Spatial Organization

Spatial organization is defined as the three-dimensional organization of physical forms and visual associations in the landscape. Historically established in 1929, the RCA Point Reyes Receiving Station was located on the northwest side of the Point Reyes peninsula. Organization of the site reflects the needs of a receiving station to efficiently receive short-wave signals from across the Pacific Ocean. Important aspects of spatial organization are reflected in the location of the station at a level, isolated area away from natural and man-made atmospheric signals that could interfere with reception. The layout and site design effectively utilized the natural topography and proximity to the ocean, the spatial relationship of working buildings to the surrounding antenna field, the formal entrance through the tree-lined main entrance road, and the formal arrangement of the buildings, roads, and vegetation within the developed core. The spatial organization of the site has not changed significantly since the period of significance and continues to convey its historic character.

The receiving station is a 160-acre property located in an open plain along the northwest coast of the peninsula along Sir Francis Drake Boulevard. The majority of the property was dedicated to the antenna field with a small core of buildings sited approximately a quarter-mile off the boulevard. The building core consists of a tight cluster of buildings where the station's offices, garages, repair shop, and receiving equipment were located.

Developed Core
The core developed area is a 23-acre area with buildings and vegetation organized fairly symmetrically along the central axis of the entrance road. The entrance road is approximately a quarter-mile long, beginning at Sir Francis Drake Boulevard and ending at a turnaround in front of the Receiving Building. The road is lined with a mature allee of trees that creates a tunnel-like experience when entering the property. The main building is centered at the end of the entrance road and is framed by the opening at the end of the allee. This arrangement creates a formal and fairly dramatic approach to the building cluster. The Garage and Utility Building face the turnaround on either side. This cluster of buildings is organized for efficiency of pedestrian and vehicular access rather than as a result of any physical constraints of the natural topography.

Four non-contributing features can also be found within the core that were constructed after the period of significance as a result continued use of the property and incorporating emerging technologies associated with satellite communication. These include a utility building, an access road, the expanded parking lot, and a group of satellite foundation pads and poles. The Modern Utility Building, constructed in 1974-75 and expanded in 1985-86, is located between the original Utility Building and the Receiving Building. The addition was constructed to house generator equipment needed for the satellites. An access road was constructed off the historic turnaround to provide access to the Modern Utility Building. The building is set back from the turnaround and is not immediately visible as the developed core is approached from the main entrance road.

Antenna Field (Contributing Site)
Surrounding the core developed area is the antenna field, which is connected to the core through wooden frames that support lines for sending power and receiving signals between the buildings and the antennas. A series of historic wooden H-Frames stretch long distances from the Receiving Building to the north, east, and west connecting to antennas located throughout the property. Historically, the antennas radiated from the building core and included various arrays of antenna poles with arrangement patterns that changed over time according to where signals were originating from and to accommodate new technologies representing the Marconi, RCA, and MCI ownership periods. Today, these arrays are evident in the existing poles, antenna foundations, downed poles, wires, and other industrial artifacts found within the historic district boundaries. A variety of antenna configurations are discernable in the antenna fields, including the 1930s rhombic antenna formation created by four tall poles in the field southwest of the building core, a v-wire antenna formation of three tall poles northwest of the building core and a t-wire formation of three tall poles northeast of the core. These antenna formations were typically connected to the building core through wires supported by shorter T-poles leading between the two or to the H-Frames. Behind the Receiving Building, the H-Frames line up with a large wooden structure known as the

Transmission Line Dead End Structure (or Termination Frame). This is where the lines and signals enter the building to connect to receiving equipment. The structure is still intact with ongoing restoration efforts by the Maritime Radio Historical Society and park preservation crew to repair damaged portions for interpretive use.

The antenna field changed constantly throughout the period of significance, with antennas continuously being relocated, removed, added or altered according to technological advances and desired signal locations around the world. As the site was transitioned to satellite-based communications in the 1970s and early 1980s, the antenna fields were no longer needed. New satellites and equipment were installed in the building core in order to adapt to the new technology. Today, associated features found at the site include segments of sidewalks that were constructed to provide access to the concrete bases that supported the now non-extant satellite dishes, standing galvanized steel poles, wooden crates, concrete pads with metal footings and other various metal objects and devices that supported these operations. In addition, the large1980s metal aeronautical radio antenna tower that occupies the field due east of the building core is still in use today, but does not overshadow the historic antenna formations that are still present, dating from the 1920s to the 1970s. The wooden poles, support structures and antenna remnants that remain in the antenna field and around the building core today provide evidence of the types of configurations that were historically used to receive wireless signals from specific locations around the Pacific Ocean. The antenna field and its associated historic features, including the Transmission Line Dead End Structure (or Termination Frame), is counted as a contributing site.

Contributing Feature:

Antenna Field (Site)
Feature Identification Number: 152721
Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:

View of the building core that shows the symmetrical layout of the buildings and the foundation plantings around the Receiving Building (center). (PORE 2010)

Antenna Field with T-Poles, short poles and long poles as well as fences. (PWRO 2010)

H-Frames leading to the Transmission Line Dead End Structure (Termination Frame) at the back of the Receiving Building. (PWRO 2010)

Northeastern half of the Transmission Line Dead End Structure (Termination Frame). This structure supported a pulley system that had weights used to keep the power lines and transmission lines pulled taught. (PWRO 2010)

Examples of an H-Frame (left) and T-Poles (right) in the antenna field. (PWRO 2010)

Land Use

Land use is defined as the principal activities in the landscape that have formed, shaped, or organized the landscape as a result of human activity. The historic landscape has been shaped by radio receiving activities by RCA. The antenna fields were also used for grazing dairy cattle. Today, most of the land is still used for grazing, and the buildings have been adapted to new uses, such as office space and storage for park operations, however a portion of the Receiving Building still houses the marine receivers of KPH that are maintained and operated by the Maritime Radio Historical Society. The antenna fields still support functional antennas and their associated features. Although the site is no longer a commercial communications station, it still possesses the ability to function as such and the landscape continues to reflect its historic function through the remaining buildings and structures.

The primary historic use of the site as a radio receiving station is evident through the remaining equipment and configuration of the buildings and structure configuration, even though the site is no longer an active commercial wireless station. Industrial land use is evident in the style and material of the buildings and antenna arrays connected to the main Receiving Building. Historically, the land around the developed area was so thick with antennas before World War II that the ocean could not be seen from the Receiving Building. Although there are not nearly as many antenna arrays on site today, the existing antennas and numerous antenna foundations, H-frames, and T-frames continue to convey the configurations of the antenna fields during the period of significance.

Prior to the arrival of RCA in 1929, the property was part of the Shafter/Howard-era G Ranch, operated by James McClure as a dairy ranch. The grazing lands were developed by RCA to include a small cluster of operational buildings while the remaining open pastures would be converted to antenna fields. The industrial antenna fields continued to be used as grazing land for cattle by adjacent ranchers. The two land uses were compatible with one another as grazing was an effective way to keep the vegetation clear in the antenna field. Grazing was historically and currently excluded from core building area by fencing that surrounds the building core and main entrance road. Grazing continues in the antenna fields today and is a historic land use. In addition to grazing, a field in the southeastern portion of the property, defined by the building core, main entrance road, and Sir Francis Drake Boulevard, is used for silage. This area is fenced off from grazing and does not contain any antenna poles or foundations. Joseph Lunny holds a Special Use Permit for the ranching activity and use of the land surrounding the RCA Point Reyes Receiving Station building core.

Changes in technology affected the configuration of the antennas in the grazing fields and the equipment inside the buildings, but the primary function of the site has remained consistent throughout the period of significance. Beginning in 1929, the receiving station was used to receive point-to-point messages sent in Morse code from around the world. After World War II, ship-to-shore service was added to the station. By 1970s, communication technologies began to shift and in 1973, the ship-to-shore service was replaced by satellite technology. The point-to-point service continued until 1997 when the station's doors closed with its equipment still in operation. In 1999, the Maritime Radio Historical Society was formed and has since worked to maintain and repair the receiving equipment and some of the antennas. Through their efforts, the receiving station still retains its ability to receive messages. Today it is used for demonstrations by the historical society every weekend and for the annual "Night of Nights" event that commemorates the last official commercial Morse code message sent on July 12, 1999.

For a short time during World War II, the RCA Point Reyes Receiving Station property was also used for temporary military activity when the federal government held exclusive use of the station. The US Army set up a command post on the site to monitor the security of the coast and local communications stations. They constructed two barracks as well as a mess hall, shower room and store room in the early 1940s. All of these additional structures were removed by the early 1950s. No above-ground remnants of these structures remain.

Since the period of significance, some changes in land use have included the conversion of RCA communication technologies to satellite, followed by the addition of NPS uses on site. Buildings and structures added to support satellite operations included the Modern Utility Building and three concrete satellite pads, but these buildings and structures are not prominent features and are screened by vegetation. NPS uses have been incorporated into the existing buildings to support park operations including office space, storage, and maintenance shops, however, these uses have required little modification to the historic property to accommodate them. As a result, although the receiving station has been commercially inactive for a decade, the historic land uses have not been compromised and they continue to convey the significance of the site to wireless communication operations on the west coast.

Landscape Characteristic Graphics:

The Antenna Field was historically and continues today to be used for grazing livestock. (PORE 2010)

Buildings and Structures

Buildings are defined as those features that are built primarily for sheltering any form of human activity. Structures are defined as features constructed for purposes other than sheltering human activities. Three buildings and two structures (not counting the circulation system) contribute to the receiving station and one non-contributing buildings was constructed after the period of significance. The three historic-era buildings all date to a two-year period between 1929 and 1930, when RCA constructed the station. All are built of cast-in-place reinforced concrete and have the same Art Deco styling as the contemporaneous buildings at the Marconi/RCA Bolinas Transmitting Station, namely symmetrical facades with vertical bays defined by fluted or smooth pilasters, and glazed bricks arranged in a diamond pattern atop the pilasters in the roof parapets.

RCA Receiving Building (LCS 750255, FMSS Location 12352) (Contributing)

The RCA Receiving Building is two stories tall, cast concrete, with a flat parapet roof and a front-facing T-shaped plan measuring 68' x 66'. Like the transmitting building at Bolinas, full-height fluted pilasters divide the southeast facing façade into three bays. The central, ground floor entrance is also similar, defined by fluted pilasters that rise from the level of the concrete foundation to the top of the first story. The building is painted white. Glazed bricks, set in a diamond pattern, adorn the top of the concrete pilasters on all facades. The bricks are painted black. The metal one-light door has a transom light above, but lacks the sidelights of its Bolinas counterpart. The metal letters spelling "RCA COMMUNICATIONS INC" have been removed from the front of the building. Metal lamp standards with spherical globes are set on either side of the concrete stairs leading to the entrance. Windows in the Receiving Building are centered within the bays on the first and second stories and contain one-over-one double-hung wooden sashes. Members of the Maritime Radio Historical Society keep much of the equipment in this building in working order, although it is no longer used commercially.

RCA Garage (LCS 750256, FMSS Location tbd) (Contributing)

The garage is located southeast of the receiving building at the northeast edge of the paved parking area, just inside the entrance bollards. Identified in the National Register nomination as a cast-in-place concrete building, this one-story flat-parapet-roof building, approx. 22' x 40', is built of brick, plastered with concrete, with smooth concrete pilasters dividing the building into four bays on the front (southwest) side. The building is painted white. Three of the four original wooden sliding doors have been covered with plywood on the exterior. (All of the sliding doors are extant.) The brick diamond pattern adorns the top of the pilasters. The building has a 12-light sash centered in the rear of each bay and one at each end. The National Park Service has converted this garage into workshop space.

RCA Utility Building (LCS 750257, FMSS Location 8691) (Contributing)

The 22' x 45' utility building, which originally housed the diesel generator and the controls for the station's water system, is located southwest of the garage, across the entrance road and paved parking area. This one-story, flat-parapet-roof, four-bay structure is primarily composed of cast concrete, with smooth pilasters displaying the diamond motif separating the bays. The building is painted white. The northernmost bay is constructed of brick, with concrete plaster applied to the exterior. The northwest end has a 12-light wood window, multiple cable outlets and a large metal vent. The rear of the building has two 12-light wood windows, and a smaller one-light window has been cut into the wall on the south end. The building is currently used for storage.

RCA Redwood Water Tank (LCS 750258, FMSS Location/Asset tbd) (Contributing)

A cylindrical redwood stave water tank, approx. 8' tall and 8' in diameter, is located immediately behind the original utility building. The tank sets on a concrete foundation and is secured with steel bands around its circumference. A wooden ladder provides access to the top, which has a metal cover. The tank is believed to be part of the station's original utility system.

RCA Transformer Vault (LCS 811809, FMSS Location/Asset tbd) (Contributing)

Listed on a 1948 engineering drawing of the receiving station, this concrete pad and vault is labeled the Transformer Vault. It is irregular in shape, measuring 12' x 24' overall with two circular openings to a subterranean space or spaces below. An iron manhole cover protects one opening, the other is covered with plywood. Iron bolts protrude from the slab surrounding the manhole cover; coiled cables are visible in the hole coved with plywood. Except for the missing opening cover, the structure appears to be in good condition.

RCA Modern Utility Building (Non-Contributing)

Located between the RCA Utility Building and the RCA Receiving Building is a concrete block structure built after the period of significance, in two phases. The first section of the building (known as Building 3) was a 20' x 30' structure constructed at the end of the POS, approx. 1974-1975, as an emergency generator building, supplanting the original RCA Utility Building for this purpose. This was at the beginning of the satellite communication phase of RCA's operation. In 1985-1986 a 26' x 50' concrete block addition was added. The structure no longer contains generation equipment, and has been modified over time. Part of the structure was converted to garages and currently houses NPS emergency response vehicles. The rest of the structure is used for other NPS operations activities.

Contributing Features:

RCA Receiving Building
Feature Identification Number: 152723
Type of Feature Contribution: Contributing
LCS Structure Name: RCA Receiving Station Receiving Building
IDLCS Number: 750255

RCA Garage
Feature Identification Number: 152725
Type of Feature Contribution: Contributing
LCS Structure Name: RCA Receiving Station Garage
IDLCS Number: 750256

RCA Utility Building
Feature Identification Number: 152727
Type of Feature Contribution: Contributing
LCS Structure Name: RCA Receiving Station Utility Building
IDLCS Number: 750257

RCA Redwood Water Tank
Feature Identification Number: 152729

Type of Feature Contribution: Contributing
LCS Structure Name: RCA Receiving Station Redwood Water Tank
IDLCS Number: 750258

RCA Transformer Vault
Feature Identification Number: 152731
Type of Feature Contribution: Contributing
LCS Structure Name: RCA Receiving Station Transformer Vault
IDLCS Number: 811809

Non-Contributing Feature:

RCA Modern Utility Building
Feature Identification Number: 152733
Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

RCA Receiving Building, looking north. (PORE 2010)

RCA Garage, looking northeast. (PWRO 2010)

RCA Utility Building, looking south. (PORE 2010)

RCA Redwood Water Tank, looking northwest. (PWRO 2010)

RCA Transformer Vault, looking northwest. (PWRO 2010)

Small Scale Features

Small scale features are the elements that provide detail and diversity for both functional needs and aesthetic concerns in the landscape. Small-scale features at the RCA Point Reyes Receiving Station historically consisted of two bollards along the entrance road, as well as fences and signs throughout the site. The bollards still remain in their original locations and are contributing features. Fences were historically used to keep cattle out of the main building core. Since the period of significance, fencelines have been replaced, moved, and added to support changing uses and operational needs at the site. As a result of continual modification, fences are not considered contributing features, but in general, they have always played an important utilitarian role in managing the site. Newer directional signs have been added after the period of significance as well and are not contributing.

RCA Bollards (2) (LCS 811807, FMSS Location/Asset tbd) (Contributing)
Two concrete bollards are set on either side of the entrance road, just before the Utility Building and Garage. The bollards are approximately 2 feet square in section, 4 feet 6 inches tall, with a sculpted concrete cap. Painted white, they are cement-plastered concrete, with the diamond-shaped brick ornamentation set into all four sides. Each bollard has an iron ring protruding on the entrance road side, presumably a fastening point for a chain or cable used to close the entrance drive.

Fences and Gates (Non-Contributing, Compatible)
Fenclines were important utilitarian structures used to exclude cattle from sensitive areas of the RCA Receiving Station and, as a result, were constantly being altered and updated to meet changing needs throughout the period of significance and beyond. Historically, fences were installed along the entrance road and around the building core, but these fencelines moved several times. Several fences exist on the property today, many of which were installed after 1973. Portions may follow historic fencelines, but it is difficult to determine if the materials are original or not. Because fences were often repaired and moved to support changes in the antenna fields up until the station's closure in 1997, they are not counted as contributing features, but are compatible with the historic character of the landscape.

Two fences parallel either side of the entrance road. This fenceline was established during the period of significance, probably to keep livestock off the entrance road, but it has likely been altered since the period of significance. The fence is generally constructed with contemporary materials including wood fence posts and attached barbed wire. Some reuse of materials appears to have taken place along the fenceline, with some tall and thick posts intermittently located amongst the very uniform contemporary posts. Another irregular-shaped fenceline was constructed around the building cluster. The construction date is unclear, but based on site plans it was likely in 1985-1986 at the time the original Utility Building addition was constructed. The existing fence materials are contemporary wood posts and wire.

Fences are typically 4' high. Most have three strands of barbed wire, though some have five. The majority of the wood posts are 6" in diameter with angled tops with some thinner wood and metal posts intermixed. Occasionally, some older, taller, or thicker fence posts are reused in the contemporary fence or gates.

Several traces of older fencelines exist throughout the site. These old traces are marked with remnant fence materials, such as single or fallen wood fence posts, collapsed gates, and pieces of barbed wire.

Gates are found throughout the site, and like the fences, are difficult to date, but likely were replaced or added as fencelines changed. They are found along the fencelines to provide access to the antenna fields. Some are constructed of wood posts and barbed wire, very simple in design, without hinges. Others are constructed of wood boards with two horizontal boards, two vertical boards, and one angled board and have hinges.

A metal gate is located at the southernmost end of the entrance road used to control access into the site. It is constructed of metal pipes, with six horizontal and five vertical pipes. The installation date of this gate is unknown.

Satellite Pads (3) (Non-Contributing)
Three satellite pads are located within the building core, situated around the Receiving Building. They are constructed of concrete and still have bolts protruding from the top where satellites were attached in the 1970s and 80s. One measures 25'x30', another measures 20'x16', and the third is buried under vegetation and duff and was not be measured. These were installed in the 1970s and 80s after the period of significance.

Signs and Sign Posts (Non-Contributing)
Modern directional signs have been implemented since the period of significance. They are typically metal, painted brown with white text, and mounted on wood posts.

Three posts are located in the oval lawn in front of RCA Receiving Building. Photos from 1980 show these posts supported a sign for "RCA Global Communications" which was established in the early 1980s. The sign has since been removed and is stored off-site at the Transmitting Station in Bolinas, but the posts remain. The posts are made of aluminum, approximately 3' high and 2" square.

Water Troughs (Non-Contributing)
At least two water troughs are located in the antenna fields in support of cattle grazing activities. They are circular and constructed of concrete or metal. The date these troughs were added is unknown and they may or may not be historic. However, they are not directly related to the significance of the site.

Contributing Feature:

RCA Receiving Station Bollards (2)
Feature Identification Number: 152763
Type of Feature Contribution: Contributing
IDLCS Number: 811807
LCS Structure Name: RCA Receiving Station Bollards

Non-Contributing Features:

Fences and Gates
Feature Identification Number: 152765
Type of Feature Contribution: Non Contributing

Satellite Pads (3)
Feature Identification Number: 152767
Type of Feature Contribution: Non Contributing

Signs and Sign Posts
Feature Identification Number: 152769
Type of Feature Contribution: Non Contributing

Water Troughs
Feature Identification Number: 15283
Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

Historic bollard located on the northeast side of the entrance road, looking southeast. (PWRO 2010)

Circulation

Circulation is defined as spaces and features which constitute systems of movement within a landscape. The historic circulation system associated with the RCA Point Reyes Receiving Station is defined primarily by a prominent entrance road and turnaround that also provides a formal axis around which the buildings and vegetation were historically arranged. Branching from the entrance road and turnaround, several driveways, walkways, and a parking lot provide access to the buildings. Non-historic circulation routes, including the main parking lot, all walkways, the Modern Utility Building access road and Antenna Field Roads, have been added or modified since the period of significance.

Historic Road Network (Contributing)
The Historic Road Network consists of the entrance road, loop drive, driveways, and parking areas that were designed and constructed during the period of significance.

Entrance Road & Loop Drive: The primary access to the receiving station from Sir Francis Drake Boulevard is a quarter-mile long road that serves as a central axis for the site's layout. The straight, fifteen-foot wide road terminates in an oval loop drive at the main entrance to the Receiving Building. An oval-shaped island at the center of the loop is approximately 40'x50'. The road is currently paved with asphalt that is in good condition with a few degraded areas. Historic photos from the 1940s and 1960s indicate that the road and loop drive were originally gravel, while site plans from the 1980s show asphalt paving. It is unclear when the road was paved. Both the road and the loop drive maintain their original alignment from Sir Francis Drake Boulevard to the building core according to site plans from early in the period of significance. A 6" concrete curb defines the inside edge of the loop drive, but not the outer edge. A historic photo from the 1960s indicates that a curb was once present on both sides of the steps in front of the Receiving Building, helping to define the planting beds and most likely helped to contain the gravel within the road bed.

Driveways and Parking Areas: A number of smaller driveways and parking areas branch from the central axis road and loop drive to provide access to the buildings and structures adjacent to the main Receiving Building. The asphalt driveway/parking area in front of the garage is as wide as the building itself, providing parking for four vehicles. The size and configuration of this drive corresponds with historic site plans as it needed to allow vehicle access into each of the four garage bays

Two driveways/parking spaces can also be found on both sides of the Receiving Building extending from the entrance road and loop drive to the building's side entry doors. The driveway on the northeastern side is paved with asphalt that continues from the loop drive to the building door and then turns northeast to provide an additional parking space situated ninety-degrees from the axis of the entrance road, near the Transformer Vault. The driveway on the southwestern side of the building is paved with concrete and provides access to the building's other side access door. It is lined with a six-inch concrete curb on one side that defines the building's foundation plant bed, similar to the curbing seen in historic photos lining the building's front plant beds. Both of these driveways were present in historic plans and photos. Their width indicates that they have always been used for vehicle access, possibly for loading equipment. Historic photos also show that these drives were once gravel surfaced. They were most likely paved at the same time as the entrance road. It is unclear why one was surfaced with asphalt and the other with concrete.

Parking Lots (Non-Contributing)
The parking lot on the southwest side of the entrance road is an irregular rectangle measuring 108'x87' at its widest points. In plan view, the layout of the parking lot appears to be two overlapping, offset rectangles with two access points at the northeastern and southeastern ends. Historic site plans indicate that the northernmost rectangular portion of the lot dates to the late 1940s or early 1950s and includes the northwestern entrance which

runs perpendicular between the lot and the entrance road. The addition was added at a later time likely after 1988 as a 1988 site plan shows the parking lot in its historic size and form. This site plan also depicts the southeastern entrance that runs at an angle between the lot and the entrance road, which reflects the existing angled entrance configuration today. The parking lot's location is consistent with the historic organization of the receiving station, however, because it has been nearly doubled in size and its shape and access significantly altered, the current parking lot no longer has integrity and does not contribute to the historic road network.

A smaller asphalt parking area is located in front of the Utility Building. The space is only one-quarter the width of the building, providing parking for one vehicle. The Utility Building had three garage bays early in the period of significance with a parking area as wide as the three bays. When the bays were no longer used for vehicles, the driveway was reduced, removing one space, and turning one into a ramped landing, while leaving the southernmost space as it is today. It is unclear as to when these modifications were made to the early parking spaces.

Modern Utility Building Access Road (Non-Contributing)
An additional road and parking area has been added west of the loop drive in front the Receiving Building to provide access and parking for the Modern Utility building. The asphalt road is 20' wide and extends 87' from the loop drive past the Modern Utility building to a parking/utility area behind the building. The road is simple in design, with no curbing, shoulders, or striping. This access road appears in the 1985-1986 As-Built construction drawings for the Modern Utility Building.

Antenna Field Roads (Non-Contributing)
A dirt-road network weaves throughout the antenna field and is connected to the building core through a gate located northeast of the Receiving Building and also by a road that begins at the southern end of the antenna field, southwest of the main entrance to the property. This road network continuously changed throughout the period of significance as antennas were installed, removed, and relocated. Dirt roads continue to be used by the park, ranchers, and Maritime Radio Historical Society to access the antenna fields and pastures. Although this road system was critical to the maintenance of the antennas, due to the constantly changing nature of the road system and the growth of vegetation over older road traces, the roads are difficult to identify and date.

Pedestrian Walkways (Non-Contributing)
Because all of the pedestrian walkways have been modified since, or added after, the period of significance, they are non-contributing resources.

A short pedestrian walkway is located in front of the Utility Building. It is a 3' wide, concrete walk that starts at the southwest side of the loop drive, angles toward the building, and then runs along the front of the building and steps up to a landing in front of the southern door. The landing can also be accessed by a short ramp next to the asphalt parking area. Historically, this walkway was shorter, occupying only the northwestern quarter of the length of the building when there were three parking spaces in front of the building. According to a 1948 site plan, it also followed a straight path from the building to the loop drive rather than an angled path. It is unclear as to when the walkway was lengthened and realigned.

A concrete walkway wraps around the southeastern wing and northeastern façade of the Modern Utility Building. Another concrete walkway extends to the southeastern corner of this building from the loop drive. These walkways vary in width from 3' to 5' wide. They were constructed in conjunction with the two construction phases of the Modern Utility Building in 1974 and 1985 and therefore post-date the period of significance.

A concrete walkway extends southwest from the southwest corner of the Receiving Building toward a satellite pad. The walkway is 3' wide and was constructed after the period of significance in the mid-to-late 1970s when the concrete satellite dish foundation pad was installed.

Traces of walkways can be found around the Receiving Building and near the Transformer Vault. Partially exposed concrete pads are visible at the western corner of the Receiving Building that may be a remnant of the original walkway that once surrounded the entire building. Small fragments of concrete are visible between the northeast parking space and Transformer Vault. This is likely the remnant of the walkway that once led between the two. It is possible that additional segments of both walkways are present and buried under a thick layer of ice plant and duff that have covered much of the area surrounding the building.

Contributing Features:

RCA Historic Road Network
Feature Identification Number: 152785
Type of Feature Contribution: Contributing
IDLCS Number: 750259
LCS Structure Name: RCA Receiving Station Road Network

Non-Contributing Features:

RCA Point Reyes Receiving Station Parking Lot
Feature Identification Number: 152787
Type of Feature Contribution: Non Contributing

RCA Point Reyes Receiving Station Utility Building Parking Area
Feature Identification Number: 152789
Type of Feature Contribution: Non Contributing

RCA Point Reyes Receiving Station Modern Utility Building Access Road
Feature Identification Number: 152791
Type of Feature Contribution: Non Contributing

RCA Point Reyes Receiving Station Pedestrian Walkways
Feature Identification Number: 152793
Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

Entrance Road to the RCA Point Reyes Receiving Station, looking southeast. Entrance to the parking lot is on the right. (PWRO 2010).

Looped drive at terminus of entrance road in front of the RCA Receiving Building, looking northwest. (PWRO 2010).

Vegetation

The Vegetation section documents human manipulated vegetation: deciduous and evergreen trees, shrubs, vines, ground covers and herbaceous plants, and plant communities. Vegetation historically planted at the RCA Point Reyes Receiving Station loosely followed a historic planting plan developed for the site which proposed a formal, symmetrical design around the building core. While most of the formal geometric patterns were established as planned, the actual plant species that were used did not completely follow the plan, as evident in historic photos. The plan included an allee of Monterey cypress (*Cupressus macrocarpa*) along the entrance road, an oval planting bed at the center of the loop drive filled with lawn and trimmed shrubs at the main road's terminus, clipped shrubs and hedges and symmetrical plant beds around the RCA Receiving Building, and a windbreak and hedge northwest of the RCA Receiving Building. The historic formal character of the site, with symmetrical plantings and clipped hedges around the main building, remains intact even if some of the plants from the period of significance have been lost and/or replaced. The general character of the vegetation, rather than the individual plant species, contributes to the historic character of the property. Plants that do not reflect the historic character of the formal and symmetric landscape design for the site and do not contribute to the historic character of the site.

Historic ornamental trees and shrubs found at the station can be typically be characterized as hardy, evergreen plants that are resistant to deer, elk, and cows. Common trees include Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*), while shrubs species include *Myoprium laetum, Pittosporum hypericum, Leptospermum laevigatum,* yew (*Taxus fastigiata*), and acacia (*Acacia melanoxylon*). Perennials also tend to be resistant to grazing animals, including watsonia (*Watsonia borbonica*) and calla lily (*Zantedeschia aethiopica*). Many of these species are fast growing and reseed themselves or spread, but can be contained in designated areas through pruning and removal of young starts.

Beyond the building core, vegetation in the surrounding antenna field was predominantly managed by the ranchers who concurrently used the area to graze their dairy cattle herds. The pasture grass and coastal scrub species that are present today are discussed in more detail in the Natural Systems and Features section.

Cypress Allee (Historic)
The most visually prominent and impressive vegetation features at the site is the allee along the quarter-mile-long entrance road. The allee consists of mature Monterey cypress (*Cupressus macrocarpa*) trees planted on either side of the entrance road, the upper limbs meeting to form a canopy over the road, creating a strong, formal arrival to the site. Each row on either side of the road is offset from the road's edge by 15 feet. The trees are planted in close proximity to one another, approximately 40 feet apart. The allee still exists, however, planted circa 1930, the trees are reaching the peak of their average lifespan, which is typically 100 to 150 years. Due to both their age and close proximity to one another, they are starting to lose large limbs and the canopies are beginning to die back. Work has been done to clean out dead and broken limbs, but additional work is necessary to ensure the trees are balanced to prevent falling over. It appears that two or three trees were removed at the northern end of the allee when the parking lot on the southwestern side of the entrance road was expanded in 1988 or later, after the period of significance. Two or three trees have also been lost at the southeastern end of the allee due to wind damage.

Remaining Historic Vegetation within Building Core
At the terminus of the main entrance road is an oval-shaped island that was historically planted with lawn. Evergreen shrubs were planted at the ends of the long axis of the oval, framing the front entrance of the Receiving Building as visitors approached the building from the main entrance road. The shrubs were trimmed into rounded forms. Lawn is still maintained in the plant bed, but the shrubs have since been removed.

On the outer edge of the looped road, the historic plan called for symmetrical groupings of Monterey pine (*Pinus radiata*) and *Pittosporum crassifolium, Acacia latifolia, Leptospermum laevigatum, Escalonia rubra, Cistus sp.,* Moneterey pine and many herbaceous perennials. Today, large Monterey pine, *Myroporum laetum,* and *Pittosporum crassifolium* are found east of the turnaround in areas indicated in the planting plan, however, only *Myoporum* shrubs exist on the southwest side of the turnaround, despite not being on the historic plan. It is likely that the Monterey pine on the southwest side (which are evident in historic photos) and other plants were removed or modified in 1974/75 when the he Modern Utility Building was constructed. At this time, the Monterey pines were likely removed and a line of *Myoporum* added to screen the added building. There are three much older *Myoporum* specimens northwest of the historic Utility Building that may date to the period of significance, but their exact age is unknown.

Behind the Receiving Station Building, one acacia shrub (*Acacia latifolia*), remnants of a tea tree (*Leptospermum laevigatum*) hedge, and remnants of a Monterey cypress windbreak still remain in the locations indicated on the historic planting plan. It appears that some of the hedge and windbreak trees at the southwestern end of the row, including a second acacia and a few leptospermum shrubs, were removed for construction of a satellite pad in the 1970s.

RCA Receiving Building Plant Beds (Non-historic)

A comparison of historic photos from the 1920s to the present indicates that the foundation plantings, those plantings along the exterior walls, have changed over time. Historic photos show clipped, small-leaved, evergreen shrubs of multiple heights that had a layered and symmetrical character. They are trimmed into box-like shapes varying from approximately 4’ tall to 9’tall. The shrubs at the corners may have been yews (*Taxus fastigiata*). Today the front door is flanked by escallonia (*Escallonia rubra*) and yew hedge trimmed to approximately 4’ high by 2.5’ deep. The escallonia-yew hedge is clipped with uniform height (unlike the historic shrubs), but retains a symmetrical character at the front entrance to the building. A low, spreading *Juniperus sp.* is planted in front of the hedge.

Windbreaks (Non-historic)

Aerial photos and site plans indicate the Monterey cypress windbreaks that extend perpendicular to the allee in either direction were added in the late 1970s or early 80s. By 1977, RCA sold most of their property except for 23 acres that encompassed the building core and entrance road. These trees were planted along a portion of the newly established boundary. The line of trees begins about two-thirds of the way up the historic allee, extending northeast and southwest then turning northwesterly. The height and trunk diameter of these trees is significantly smaller than the allee of trees along the entrance road. Because they were planted after the period of significance, they are not considered historic vegetation.

There are two lines of Monterey cypress trees that parallel the original allee along its the outer edges. It is unknown when or for what purpose these trees were planted. They are younger and smaller than the original trees in the allee.

Other Vegetation

Interspersed throughout the site are many other plant species, some of which may have been planted historically and naturalized overtime; others were planted after the period of significance and do not appear in historic photos. These plants typically do not reflect the historic character of the formal and symmetric landscape design for the site and do not contribute to the historic character of the site. Examples of these species include: calla lily (*Zantedeschia aethiopica*), ice plant *(Carpobrotus edulis),* St. Johnswort (*Hypericum calycinum*), watsonia (*Watsonia borbonica*), and leptospermum. There is one large mature spruce tree, located north of the garage, with ivy covering its trunk. One small olive tree (*olea* sp.) is located east of the RCA Receiving Building. Bottlebrush

trees (*Callestemon* sp.) are also present near the parking lot. Two invasive species found on site are Himalayan blackberry (*Rubus discolor*) and English ivy (*Hedera helix*). It is unknown if the ivy is historic as it does not appear historic photos available from the period of significance, however it is currently found within the vicinity of the building core and may have been used as a ground cover.

Many Monterey pine and Monterey cypress are dispersed throughout the site in an informal manner and have likely spread naturally. Some may have been intentionally planted, but it is difficult to confirm their ages with the historic documentation available to date. Two magnolias (*Magnolia grandiflora*) planted near the front of the Utility Building were not part of the original planting plan and, based on photos and size of the trees, were likely planted after the period of significance and are not compatible with the historic character of the site.

Landscape Characteristic Graphics:

Monterey cypress allee flanking the entrance road, looking southeast. (PWRO 2010)

Historic oval lawn in front of the RCA Receiving Building, looking southwest. (PWRO 2010)

Clipped hedges and juniper groundcover on front side of RCA Receiving Building. The vegetation is non-historic, but the symmetrical plantings and formal clipped evergreen hedges are compatible with the historic character of the site. (PWRO 2009)

Remnant Monterey cypress windbreak behind the RCA Receiving Building, looking northeast. (PWRO 2010)

Archeological Sites

Archeological sites inventoried in the CLI include the location of ruins, traces, or deposited artifacts in the landscape that are associated with the period of significance and are evidenced by the presence of either surface or subsurface features. The CLI takes every precaution not to disclose the location of sensitive archeological sites to preserve the resources.

While archeological sites and associated features at the RCA Point Reyes Receiving Station may be potentially eligible for listing on the National Register of Historic Places under Criterion D for their potential to reveal archeological information important to history, the evaluation of these features is outside the scope of this Cultural Landscape Inventory (CLI). In the future, the property should be surveyed and identified archeological resources should be evaluated for National Register eligibility under Criterion D by a professional archeologist. Archeological features and sites at the RCA Point Reyes Receiving Station may yield additional information related to location, use, and sequence of construction of antenna fields and their associated features and may also answer questions about the social and economic conditions at the site during the period of significance.

Potential Archeological Sites

Numerous undocumented archeological features are scattered across the RCA Point Reyes Receiving Station site. Many of these features are artifacts associated with the historical use of the site by Radio Corporation of America (RCA) from 1929 to the early 1970s. The antenna fields and areas immediately adjacent to the primary building complex contain a number of features that may have the potential to yield additional information in the future. Buried concrete antenna bases, anchors, weights, and grounding wires; discarded insulators, stakes and electrical debris; downed H-frames and antenna poles, as well as various trenches, are located throughout the site illustrating the historical development or evolution of radio communications equipment through time (Livingston, 1998, 82). (It should be noted that the above ground, intact resources are described in Spatial Organization section as landscape elements of the contributing Antenna Field Site.)

The majority of these artifacts are located in close proximity to the buildings as opposed to the Marconi/RCA Bolinas Transmitting Station site where the principal archeological features associated with the period of significance are located in the antenna fields. Today, many downed features are lying on the surface and are subject to vandalism, theft, and structural deterioration by exposure to elements.

Condition

Condition Assessment and Impacts

Condition Assessment: Fair

Assessment Date: 7/1/2010

Condition Assessment Explanatory Narrative:

Through the analysis and evaluation of landscape characteristics and features, it has been determined that the RCA Receiving Station is in "fair" condition. The landscape shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the landscape characteristics will cause the inventory unit to degrade to poor condition.

Impacts

Type of Impact: Exposure to Elements
External or Internal: Internal
Impact Description: Exposure to elements has resulted in negative impacts to historic built features at the site. Several features, including fence lines, H-frames, concrete antenna bases, antennas and associated radio and satellite communications equipment are deteriorating as a result of exposure to wind, fog, and rain. Of great concern are the wood cross members on the antenna poles, T-poles and H-frames, where bolts have rusted and have split the wood. In some cases the cross members and/or metal fasteners have detached and either fallen to the ground or are dangling.

Type of Impact: Vegetation/Invasive Plants
External or Internal Internal
Impact Description: In several locations, small plants and woody vegetation are encroaching upon buildings, structures, and mature trees at the site. The vegetation is promoting deterioration of historic features such as foundation pads and antenna bases by allowing plants to grow on them, introducing moisture and producing cracks from roots, etc. English ivy is growing up mature tree trunks, which can negatively impact the health of the trees. Furthermore, the vegetation is obscuring the visibility of historic features, making it difficult to find them on the ground.

Type of Impact: Vegetation
External or Internal: Internal
The areas adjacent to the core fenced land are no longer grazed, which has allowed vegetation such as coyote brush to encroach, changing the historic character of these once open areas.

Type of Impact:	Pests/Diseases
External or Internal:	Internal
Impact Description:	Pests and diseases are causing dieback in pine trees at the site, causing harm to potentially significant trees that contribute to the historic character of the station grounds.

Type of Impact:	Pruning Practices
External or Internal:	Internal
Impact Description:	Due to insufficient funds, only the interior branches of the Monterey cypress allee were trimmed to remove hazardous limbs and branches. As a result, the trees are unbalanced, which could cause instability if not completed in the near future.

Type of Impact:	Vegetation
External or Internal:	Internal
Impact Description:	Effects of age on the Monterey cypress allee is becoming apparent. As trees age, large limbs or entire trees must be removed, resulting in gaps in the tree canopy of the allee.

Stabilization Measures:

The following stabilization measures have been identified for the Marconi/RCA Receiving Station:

1. In several locations, small plants and woody vegetation are encroaching upon historic features such as foundation pads and antenna bases by allowing plants to grow on them, introducing moisture and producing cracks from roots, etc. Furthermore, the vegetation is obscuring their visibility, making it difficult to find features on the ground. In order to stabilize these features, remove vegetation such as ice plant, hypericum, and coyote brush from concrete building and structure pads and concrete walkways.

2. Ivy is growing on the trunks of Monterey Pine and spruce trees at the site. Ivy competes with its host tree for soil nutrients and water, weigh down branches potentially leading to broken limbs, and can prevent sunlight from reaching the tree's leaves. In order to alleviate these stressors, the ivy should be removed from the tree trunks using the least invasive methods possible.

3. Stabilize portions of antenna poles, T-poles, H-frames, and wires that are loose or dangling.

4. Due to insufficient funds, only the interior branches of the Monterey cypress allee were trimmed to remove hazardous limbs and branches and as a result, the trees are unbalanced which could eventually cause if not completed in the near future. In order to stabilize these trees and protect their infrastructure, the pruning project should be completed.

Treatment

Treatment

Approved Treatment: Undetermined

Approved Treatment Description Narrative:
Point Reyes National Seashore has contracted with Architectural Resources Group, Inc. (ARG) to complete a Cultural Landscapes Report (CLR) for the RCA Point Reyes Receiving Station. Upon completion, the findings of the CLR will become the approved treatment document.

An updated Point Reyes National Seashore General Management Plan and Environmental Impact Statement (GMP/EIS) is nearing completion. The GMP will provide management guidance for the Point Reyes National Seashore, including the RCA Point Reyes Receiving Station.

Bibliography and Supplemental Information

Bibliography

Evans, Jules G. *The Natural History of the Point Reyes Peninsula*. Point Reyes, California, Point Reyes National Seashore Association, 1993.

Livingston, D. S. (Dewey). *Ranching on the Point Reyes Peninsula: A History of the Dairy and Beef Ranches within Point Reyes National Seashore*. San Francisco: National Park Service, 1994.

Livingston, D. S. (Dewey). *Wireless Giant of the Pacific: A History of the Marconi and RCA Radio Stations on the Point Reyes Peninsula*. Document available at Point Reyes National Seashore Archive.

MATEC Engineering and Consulting, Inc. Archeological Treatment Plan and Evaluation Report for Debris Areas at the Bolinas Transmitting Station, Marin County, California. Prepared for the National Park Service on behalf of General Electric Corporation Environmental Programs. May 24, 2004. (Located on file at Point Reyes National Seashore)

Marine Radio Historical Society Website: www.marineradio.org

National Park Service. *Final Fire Management Plan, Environmental Impact Statement, Point Reyes National Seashore and North District of Golden Gate National Recreation Area.* Department. of the Interior, National Park Service, 2004.

National Park Service. *Marconi/RCA Bolinas Transmitting Station and RCA Point Reyes Receiving Station Historic District National Register of Historic Places Nomination*. Point Reyes National Seashore, Department of Interior, National Park Service, 2008.

National Park Service. *Point Reyes National Seashore General Management Plan.* Point Reyes National Seashore, Department of Interior, National Park Service, 1980.

Radio Corp of America. Approximate Map of Bolinas Station, 1913 – 1946. (Located in the Point Reyes National Seashore archives.)

Point Reyes Website: www.nps.gov/pore

Supplemental Information

Title: Full-sized Site Plans

Description:

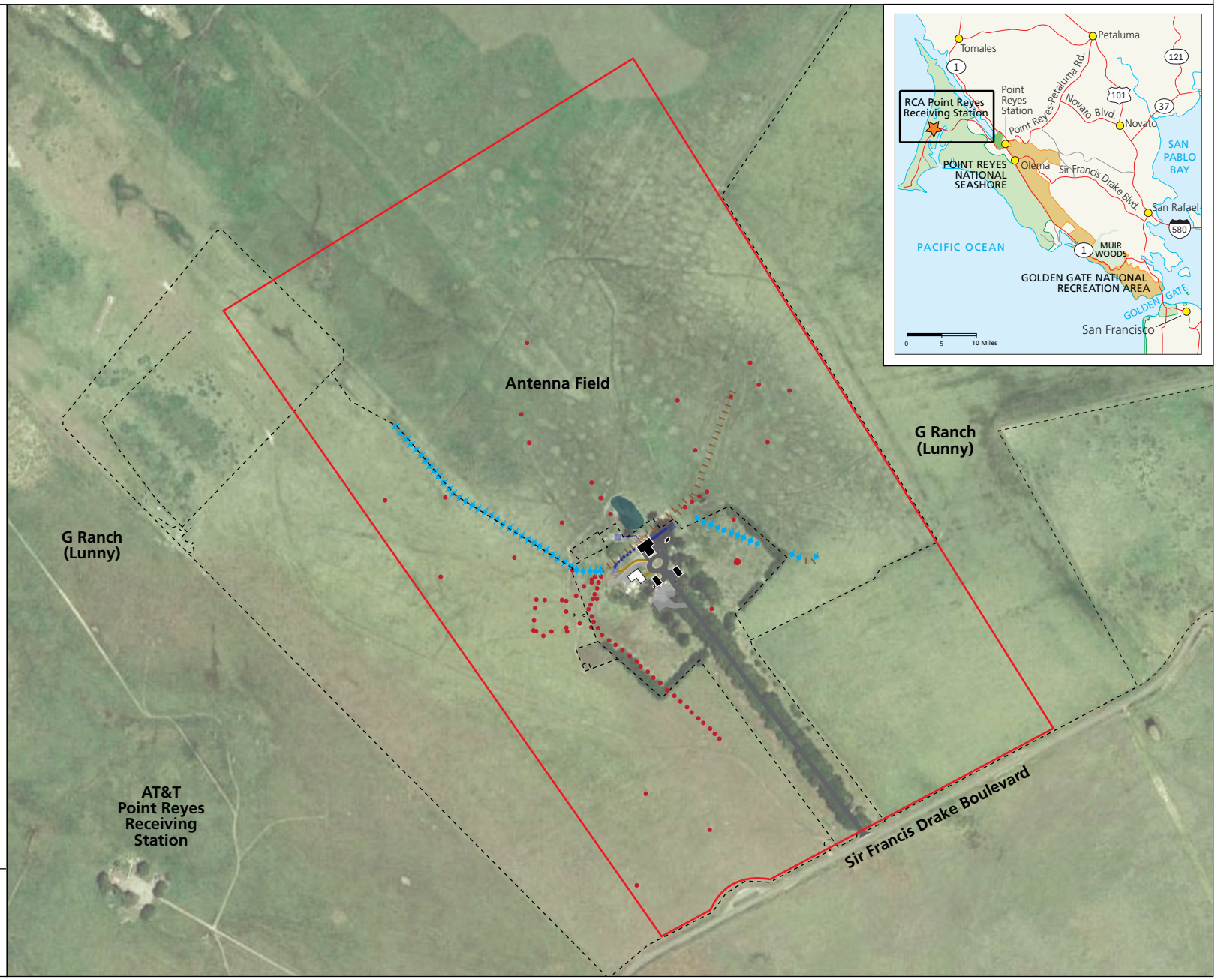
Full-sized, 8.5x11 versions of the site plans are available from the regional CLI coordinator or the cultural resources manager at the park.

Title: Threatened & Endangered Animal Species of Point Reyes

Description:

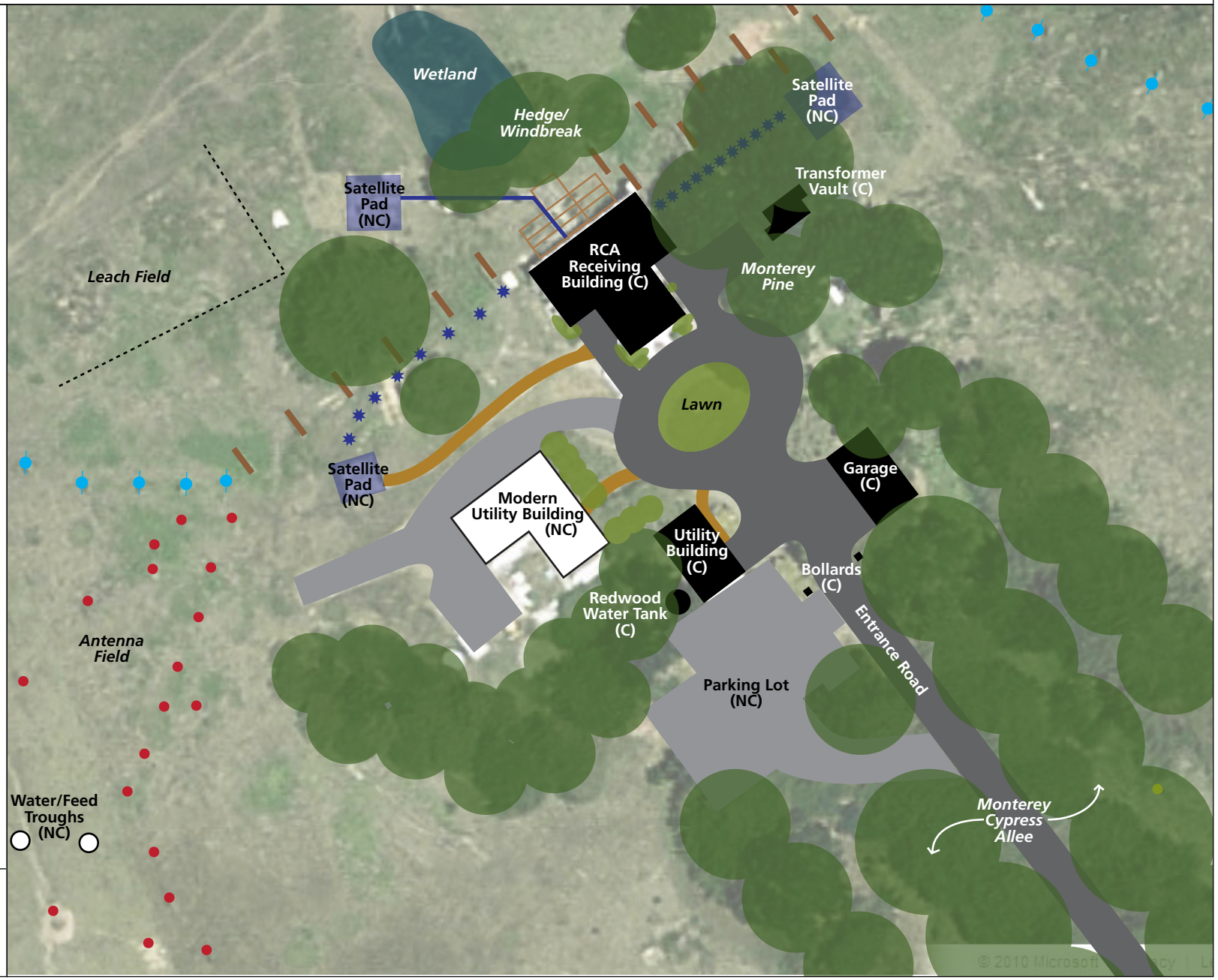
A list of Threatened & Endangered Animal Species of Point Reyes is available from the regional CLI coordinator or the cultural resources manager at the park.

RCA Point Reyes Receiving Station
Cultural Landscapes Inventory Site Plan - Boundary Map



Produced by PWR Cultural Landscapes Program
July 2010

RCA Point Reyes Receiving Station
Cultural Landscapes Inventory Site Plan - Building Core



LEGEND

- Wetland
- Trees
- Ornamental Plants

Contributing

- Buildings & Structures
- Roads

Non-Contributing

- Buildings & Structures
- Roads
- Concrete Walkways
- Concrete Satellite Pads
- Fences

Antenna Field

- H-Frame
- T-Poles
- Antenna Poles
- Poles to Satellites
- Satellite Power Line

0 20 40 80 Feet

North

Produced by PWR Cultural Landscapes Program
July 2010

Threatened & Endangered Animal Species of Point Reyes

	Genus/Species	Common Name	Federal Status	State Status
Invertebrates	*Syncaris pacifica*	California Freshwater Shrimp	E	E
	Speyeria zerene myrtleae	Myrtle's Silverspot	E	
	Haliotes cracherodii	Black abalone	C	
Fish	*Eucyclogobius newberry*	Tidewater Goby	E	
	Gasterosteus aculeatus williamsoni	Threespine Stickleback	E	
	Oncorhynchus kisutch	Coho salmon	T	
	Oncorhynchus mykiss	Steelhead	T	
	Pogonichthys macrolepidotus	Sacramento splittail	T	
	Oncorhynchus tshawytscha	Chinook salmon	T	
	Acipenser medirostris	Green sturgeon	T	
Reptiles	*Caretta caretta*	Loggerhead sea turtle	T	
	Dermochelys coriacea	Leatherback sea turtle	E	
	Chelonia mydas	Green sea turtle	T	
	Clemmys marmorata marmorata	Western Pond Turtle		SC
Amphibians	*Rana draytoni*	California Red-legged Frog	T	
Mammals	*Aplodontia rufa phaea*	Point Reyes Mountain Beaver		SC
	Zapus trinotatus orarius	Point Reyes Jumping Mouse		SC
	Reithrodontomys raviventris	Salt-marsh harvest mouse	E	E
	Arborimus pomo	Red tree vole		SC
	Myotis subulatus leibii	Small-footed bat		SC
	Corynorhinus townsendii	Townsend's Western Big-eared Bat		SC
	Myotis evotis	Long-eared bat		SC
	Myotis thysanodes	Fringed myotis		SC
	Myotis volunas	Long-legged bat		SC
	Myotis yumanennsis	Yuma myotis		SC
	Arctocephalus townsendi	Guadalupe Fur Seal	T	
	Eumetopias jubatus	Steller Sea Lion	T	
	Callorhinus ursinus	Northern fur seal		SC
cont. on next page	*Balaenoptera borealis*	Sei Whale	E	

	Genus/Species	Common Name	Federal Status	State Status
Mammals cont.	*Balaenoptera musculus*	Blue Whale	E	
	Balaenoptera physalus	Finback Whale	E	
	Eschrichtius robustus	Gray Whale	D	
	Megaptera novaeangliae	Humpback whale	E	
	Physeter catodon	Sperm whale	E	
	Enhydra lutris nereis	Southern Sea Otter	T	
Birds	*Agelaius tricolor*	Tricolored Blackbird		SC
	Brachyramphus marmoratus	Marbled Murrelet	T	
	Buteo swainsoni	Swainson's hawk		T
	Branta canadensis	Aleutian Canada Goose	D	
	Buteo regalis	Ferruginous Hawk		SC
	Charadrius alexandrinus nivosus	Western Snowy Plover	T	
	Diomedea albatrus	Short-tailed Albatross	E	
	Falco peregrinus anatum	American Peregrine Falcon	D	
	Geothlypis trichas sinuosa	Saltmarsh Common Yellowthroat		SC
	Grus canadensis tabida	Greater Sandhill Crane		T
	Haliaeetus leucocephalus	Bald Eagle	D	
	Oceanodroma homochroa	Ashy storm-petrel		SC
	Pelecanus occidentalis	Brown Pelican	E	E
	Rallus longirostris obsoletus	California Clapper Rail	E	
	Sterna antillarum	Least Tern	E	E
	Strix occidentalis	Northern Spotted Owl	T	
	Empidonax traillii	Willow flycatcher	E	

Status Code:
E = Endangered
T = Threatened
SC = Species of Concern
C = Candidate
D = Delisted

This list is for educational purposes only.
Last updated 8/29/07. Changes will be made as we discover new information about threatened and endangered species. Check our web site periodically for updated lists.