

Building 152 (Civilian Quarters)  
NSWCCD  
MIHP # M:29-56  
Montgomery County  
West Bethesda  
1949  
Public

Building 152, Civilian Quarters, is located in the uppermost northwestern portion of the 183.6 acre Naval Surface Warfare Center Carderock Division (NSWCCD). The installation is composed of 116 buildings and structures that function as research laboratories, administration facilities, and operations and utility structures. At the center of the installation is the David Taylor Model Basin (Buildings 1-4), a group of interconnected buildings that include a model basin, administration building, a shop building and laboratory. The David Taylor Model Basin was listed on the NRHP in 1985. In 1996 the NSWCCD Historic District was determined eligible for the NRHP, and 44 of the 116 buildings were recognized as contributing resources in the NSWCCD Historic District. Building 152 is a contributing resource in the NSWCCD Historic District.

Located on the north side of Albacore Road, Building 152 is the only dwelling now extant on the installation. The building was constructed in 1949 at a cost of \$14,692 to house executive officers and their families. The one-story structure has a wood frame, concrete foundation, vinyl siding, one-over-one-light double-hung sash windows flanked by vinyl shutters, and a gable roof covered in asphalt shingles. Building 152 is attached by an enclosed walkway to the adjacent fire station.

# Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. M:29-56

## 1. Name of Property (indicate preferred name)

historic Building 152 (Civilian Quarters)  
other \_\_\_\_\_

## 2. Location

street and number Naval Surface Warfare Center Carderock Division, 9500 MacArthur Boulevard  not for publication  
city, town West Bethesda  vicinity  
county Montgomery

## 3. Owner of Property (give names and mailing addresses of all owners)

name United States Navy  
street and number 9500 MacArthur Blvd. telephone \_\_\_\_\_  
city, town West Bethesda state MD zip code 20817

## 4. Location of Legal Description

courthouse, registry of deeds, etc. Montgomery County Courthouse liber \_\_\_\_\_ folio \_\_\_\_\_  
city, town Rockville tax map \_\_\_\_\_ tax parcel \_\_\_\_\_ tax ID number \_\_\_\_\_

## 5. Primary Location of Additional Data

- Contributing Resource in National Register District
- Contributing Resource in Local Historic District
- Determined Eligible for the National Register/Maryland Register
- Determined Ineligible for the National Register/Maryland Register
- Recorded by HABS/HAER
- Historic Structure Report or Research Report at MHT
- Other: \_\_\_\_\_

## 6. Classification

Category	Ownership	Current Function	Resource Count	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> agriculture	Contributing	Noncontributing
<input checked="" type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> commerce/trade	<u>1</u>	<input type="checkbox"/> buildings
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input checked="" type="checkbox"/> defense	<input type="checkbox"/>	<input type="checkbox"/> sites
<input type="checkbox"/> site		<input type="checkbox"/> domestic	<input type="checkbox"/>	<input type="checkbox"/> structures
<input type="checkbox"/> object		<input type="checkbox"/> education	<input type="checkbox"/>	<input type="checkbox"/> objects
		<input type="checkbox"/> funerary	<u>1</u>	<input type="checkbox"/> Total
		<input type="checkbox"/> government		
		<input type="checkbox"/> health care		
		<input type="checkbox"/> industry		
		<input type="checkbox"/> landscape		
		<input type="checkbox"/> recreation/culture		
		<input type="checkbox"/> religion		
		<input type="checkbox"/> social		
		<input type="checkbox"/> transportation		
		<input type="checkbox"/> work in progress		
		<input type="checkbox"/> unknown		
		<input type="checkbox"/> vacant/not in use		
		<input type="checkbox"/> other:		
			<b>Number of Contributing Resources previously listed in the Inventory</b>	
			<u>1</u>	

---

## 7. Description

Inventory No. M:29-56

---

### Condition

excellent       deteriorated  
 good             ruins  
 fair               altered

---

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Building 152, Civilian Quarters, is located in the uppermost northwestern portion of the 183.6 acre Naval Surface Warfare Center Carderock Division (NSWCCD). Located approximately 12 miles northwest of Washington, DC near Bethesda, Maryland, NSWCCD is situated north of the Potomac River and is bordered by the Clara Barton Parkway to the south and MacArthur Boulevard to the north and east. The installation is composed of 116 buildings and structures that function as research laboratories, administration facilities, and operations and utility structures. At the center of the installation is the David Taylor Model Basin (Buildings 1-4), a group of interconnected buildings that include a model basin, administration building, a shop building and laboratory. The David Taylor Model Basin was listed on the NRHP in 1985. In 1996 the NSWCCD Historic District was determined eligible for the NRHP, and 44 of the 116 buildings were recognized as contributing resources in the NSWCCD Historic District. Building 152 is a contributing resource in the NSWCCD Historic District.

Located on the north side of Albacore Road, Building 152 is the only dwelling now extant on the installation. The building was constructed in 1949 at a cost of \$14,692 to house executive officers and their families. Originally, an identical building, Building 151, was located opposite Building 152 with a drive leading to Albacore Road between the dwellings. The primary facades of Buildings 151 and 152 originally fronted the drive. Today, the principal façade of Building 152 is located at the south gable-end and faces Albacore Road, and the west façade is connected to the adjacent fire station by an enclosed walkway. The one-story quarters has a wood frame, concrete foundation, vinyl siding, one-over-one-light double-hung sash windows flanked by vinyl shutters, and a gable roof covered in asphalt shingles.

The south façade, which is three bays wide, features a wood entrance door flanked on either side by two one-over-one-light double-hung sash windows. A screen porch extends one bay from the southwest corner of the front façade to east of the door. The screen porch is wood frame with a roof covered in asphalt shingles. The facades of the screen porch have wood panels located on the bottom half and one-over-one-light double-hung sash windows located on the top half. A door is located at the easternmost bay.

The east and west facades of the dwelling are four bays deep. The west façade has a single door that connects with the adjoining fire station. One window is located south of the door, and two windows are located north of the door. The north façade has two evenly spaced windows. The east façade has a centrally placed entrance with pair of windows located south of the door and a single window located north of the door. These one-over-one-light double-hung sash windows are smaller than all the other windows. Two full-size windows are located at the southernmost and northernmost bays.

The house has one main room with several small rooms leading off a central hall. The main room has parquet floors. The bedrooms and hallway are carpeted. One bedroom is located off the main room in the southeast corner of the dwelling. North of the bedroom is an office space, followed by a utility room and bathroom. The rooms are accessed from the hall. A bedroom is located opposite the utility room, and two bedrooms are located in the northwest and northeast corners of the dwelling.

Building 152 had undergone numerous alterations. A plan of Building 152 from c. 1961 depicts the original floor plan of the dwelling. The main entrance was situated on the west façade. A dining room, currently functioning as a bedroom, was located off the living room in the southeast corner of the dwelling, and a door located on the north wall of the dining room led into a kitchen. In 1977 the exterior wood clapboard siding was covered in vinyl siding, and at a later date, the original eight-over-eight-light double-hung sash windows were replaced with the existing windows.

# 8. Significance

Inventory No. M:29-56

Period	Areas of Significance	Check and justify below		
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> health/medicine	<input type="checkbox"/> performing arts
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> archeology	<input type="checkbox"/> education	<input type="checkbox"/> industry	<input type="checkbox"/> philosophy
<input type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> architecture	<input type="checkbox"/> engineering	<input type="checkbox"/> invention	<input type="checkbox"/> politics/government
<input checked="" type="checkbox"/> 1900-1999	<input type="checkbox"/> art	<input type="checkbox"/> entertainment/ recreation	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 2000-	<input type="checkbox"/> commerce	<input type="checkbox"/> ethnic heritage	<input type="checkbox"/> law	<input type="checkbox"/> science
	<input type="checkbox"/> communications	<input type="checkbox"/> exploration/ settlement	<input type="checkbox"/> literature	<input type="checkbox"/> social history
	<input type="checkbox"/> community planning		<input type="checkbox"/> maritime history	<input type="checkbox"/> transportation
	<input type="checkbox"/> conservation		<input checked="" type="checkbox"/> military	<input type="checkbox"/> other: _____

**Specific dates** 1949-1958 **Architect/Builder** U. S. Navy, Bureau of Yards and Docks

**Construction dates** 1949

Evaluation for:

National Register  Maryland Register  not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

Summary

Building 152 is considered a contributing element in the National Register eligible NSWCCD Historic District. In 1996 the NSWCCD Historic District was found to possess the qualities of exceptional importance defined under National Register Criterion Consideration G with the historic context of Military research, design, testing, and evaluation. NSWCCD also meets eligibility criteria A and C. NSWCCD is associated with events that have made a significant contribution to the broad patterns of military technology (Criterion A) and retains an intact collection of research, design, testing, and evaluation buildings and facilities (Criterion C).

Historic Context

The U. S. Navy’s first laboratory for studying ship behavior was the United States Experimental Basin (EMB). Constructed in 1898 under the leadership of Rear Admiral David Watson Taylor, the EMB was located at the Washington Navy Yard. Designed for the testing of ship hulls, propeller studies, and rudder developments, the basin contained a carriage that towed wooden ship models and carried cameras to allow engineers to study how eddy and wave making resistance were generated (Melhuish 1996). In 1912, due to advancements in aviation, the Navy expanded its laboratory facilities to include a wind tunnel. Designed by aeronautical engineers, Holden C. Richardson and William W. McEntree, the Navy’s first wind tunnel was completed in 1913 and was used to test the resistance of shapes in air to improve the aerodynamics of airfoils, body shapes, and windshield design (Carlise 1998: 78).

The facilities at the Washington Navy Yard soon proved inadequate. The basin was resting on an unsteady foundation undermined by springs, and it had become technically insufficient to meet the demands of both commercial users and the rapidly modernizing Navy (Carlise 1998: 132). In 1936 Congress authorized funding for the construction of a new basin, and in 1937, 107 acres in Carderock, Maryland was chosen for the new installation due to the presence of bedrock, level terrain, nearby water supply, and accessibility to downtown Washington (Carlise 1998: 144).

Commander Ben Moreell is credited with the design of the new basin. His architectural plans called for a long rectangular basin building running east and west, covered by a barrel arch roof with a 110-foot span and a three-story combination office-laboratory that would connect with the basin structure (Carlise 1998: 143-44). Designed in the Art Moderne style of architecture, the office-laboratory won Moreell an Association of Federal Architects’ award. Construction at Carderock began in 1937, and the official dedication was held on November 4, 1939 for the David Taylor Model Basin, named in honor of David W. Taylor. In 1985 the David Taylor Model Basin (DTMB) and associated buildings were listed on the National Register of Historic Places.

The primary mission of the DTMB, as defined by Congress, was to investigate and determine the most suitable and desirable shapes and forms for naval vessels and aircraft (Melhuish 1996). During its first year of operation, the DTMB was mostly involved in design work, but at the outset of World War II, activities at the DTMB were focused on war-related topics. Research became a major

# Maryland Historical Trust

## Maryland Inventory of Historic Properties Form

Inventory No. M:29-56

Name  
**Continuation Sheet**

Number 8 Page 1

---

directive, and new facilities and staff were added to support research activities. New facilities added to the installation included a research pit for explosion testing (1941), wind tunnels and associated buildings (1942), a pentagonal test pond to test underwater explosives (1943), Circulating Water Channel to test the angles and drag of submerged towed devices (1944), and two supersonic wind tunnels that had been dismantled in Germany and installed at Carderock (1946) (Melhuish 1996).

During this rapid expansion, careful consideration was given to the overall physical planning and growth of the installation. Under the direction of Captain H. S. Howard, the installation grew with the addition of 47 acres in 1943 and 55 acres in 1946. Howard wrote in 1945, "Having in mind the architecture of the main building, I visualize something in the nature of a college campus or graduate school grown up around and in front of the main building. A row of buildings might well grow to the east and to the west of the main building toward the south but the central area should be kept free of building so that eventually a U-shaped group is formed with the open end toward the Highway," (Carlise 1998: 192). The campus of buildings created at Carderock during this period was determined eligible for the National Register as the Naval Surface Warfare Center Carderock Division Historic District in 1996.

During the second half of the twentieth century, NSWCCD research grew to incorporate the use of computers. The Applied Mathematics Laboratory was established in 1952, and the first computer used at the facility was the Universal Automatic Computer. A second addition was the Livermore Atomic Research computer acquired in 1960. Research in calculation, forming solutions on specific engineering research problems, and handling operation, maintenance and design improvements for naval vehicles was conducted on the computers (Melhuish 1996). Today, both the experimental and computer facilities play a key role in the operations taking place at NSWCCD, and the installation has retained its campus-like setting, with a mixture of old and new structures.

Originally constructed as Civilian Quarters to house executive officers and their families, Building 152 is associated with the day-to-day operations of NSWCCD. Building 152 and an identical structure, Building 151, were constructed during the period of rapid expansion at NSWCCD and represent the increased need for on-site housing. In 1995 Building 151 was demolished and replaced with the NSWCCD firehouse, and Building 152 was withdrawn from the Navy housing list and is currently used as a berthing house for the fire department personnel.

---

## 9. Major Bibliographical References

---

Inventory No. M:29-56

See Continuation Sheet.

---

## 10. Geographical Data

---

Acreage of surveyed property less than 0.5 acres  
Acreage of historical setting less than 0.5 acres  
Quadrangle name Falls Church

Quadrangle scale: 1:24000

---

### Verbal boundary description and justification

The boundary of the property occupies the footprint of the building within the Naval Surface Warfare Center, Carderock Division located in West Bethesda.

---

## 11. Form Prepared by

---

name/title	Megan Rupnik, Architectural Historian		
organization	Louis Berger Group	date	October 2003
street & number	2300 N Street, NW	telephone	(202) 912-0200
city or town	Washington	state	DC

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust  
DHCD/DHCP  
100 Community Place  
Crownsville, MD 21032-2023  
410-514-7600

# Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. M:29-56

Name  
**Continuation Sheet**

Number 9 Page 1

---

Allison, David K

1984 David W. Taylor Model Basin, National Register of Historic Places Inventory, Nomination Form. Ms. On file at the Maryland Historical Trust, Crownsville.

Allison, David K, Ben G. Keppel, and C. Elizabeth Nowicke

1988 *David W. Taylor*. U. S. Government Printing Press, Washington DC.

Carlise, Rodney

1998 *Where the Fleet Begins: A History of the David Taylor Research Center*. U. S. Government Printing Office, Washington, DC.

Giglio, W. Patrick

1999 Subsonic Wind Tunnel Complex at NSWCCD, Maryland Historical Trust State Historic Site Inventory Form. On file at the Maryland Historical Trust, Crownsville.

Kuranda, Katherin M., April L. Fehr, and Brook V. Best

2000 Integrated Cultural Resource Management Plan: Naval Surface Warfare Center, Carderock Division. On file at the Naval Surface Warfare Center, Carderock Division, West Bethesda, MD.

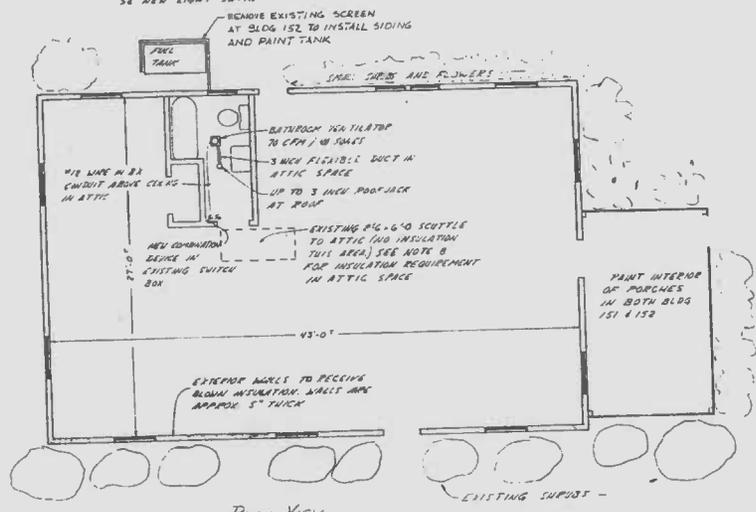
Melhuish, Geoffrey E.

1996 Naval Surface Warfare Center Carderock District, Maryland Historical Trust State Historic Sites Inventory Form. On file at the Maryland Historical Trust, Crownsville.

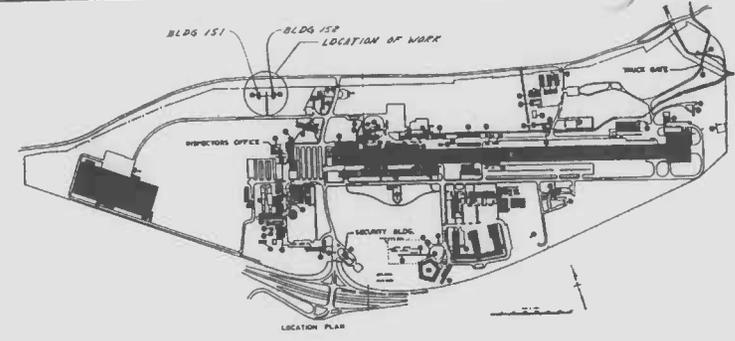
## Unpublished Materials

Naval Surface Warfare Center, Carderock Division, Public Works Office. West Bethesda, Md. Floor plans.

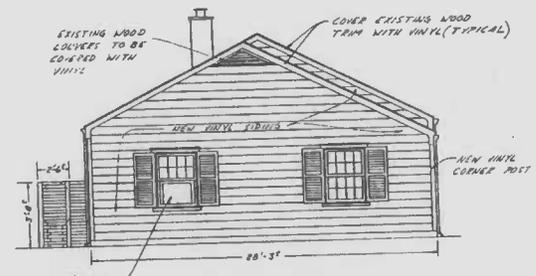
SYMBOLS  
SA NEW VENTILATOR SWITCH  
SA NEW LIGHT SWITCH



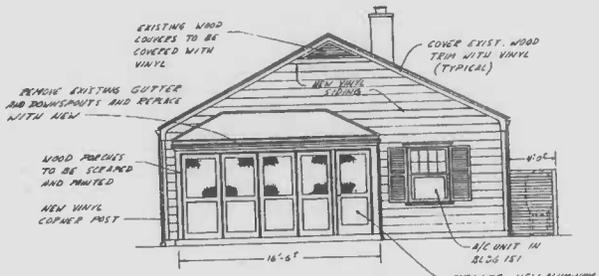
PLAN VIEW



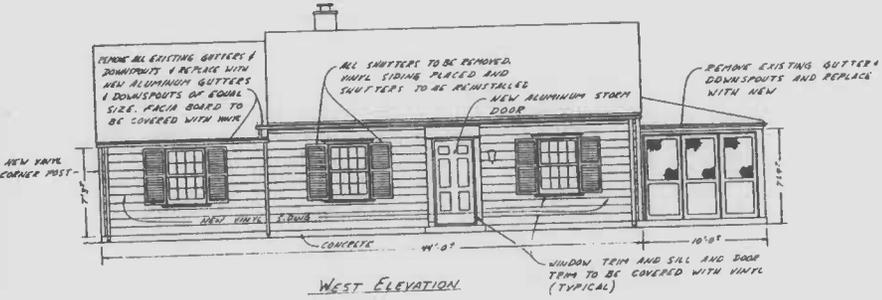
LOCATION PLAN



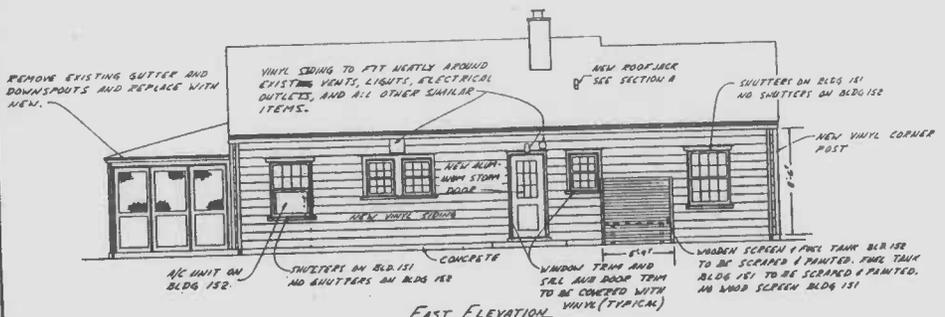
NORTH ELEVATION



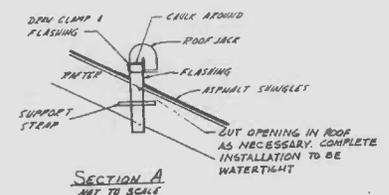
SOUTH ELEVATION



WEST ELEVATION



EAST ELEVATION



SECTION A  
NOT TO SCALE

NOTES

1. PROVIDE BATHROOM VENTILATOR FOR EACH HOUSE. MOUNT AT CEILING WHERE DOWN. UNITS SHALL BE TO CFM / 4.0 SONES SUPPLIED BY HS VOLT, 80 HERTZ.
2. CONNECT VENTILATOR TO NEW ROOF JACK WITH 3 INCH DIAMETER ROUND FLEXIBLE DUCT IN ATTIC SPACE.
3. REMOVE EXISTING LIGHT SWITCH AND PROVIDE NEW COMBINATION DEVICE WITH TWO SINGLE POLE SWITCHES IN SAME BOX ONE SWITCH TO CONTROL EXISTING LIGHT, AND ONE SWITCH TO CONTROL VENTILATOR. CONNECT VENTILATOR FAN TO BOTTOM SWITCH.
4. OPENINGS IN CEILING AND ROOF SHALL BE PATCHED TO MATCH ADJACENT SURFACES. ROOF JACK FLASHING SHALL BE SEALED WATER TIGHT.
5. PLAN AND ELEVATIONS OF BUILDING ARE SHOWN. BLDG 151 IS SIMILAR EXCEPT AS NOTED.
6. THREE (3) ALUMINUM COMBINATION STORM & SCREEN DOOR & ELEVEN (11) ALUMINUM COMBINATION STORM & SCREEN WINDOWS SHALL BE PROVIDED FOR EACH QUARTER. EXISTING DOORS AND SCREENS SHALL BE REMOVED.
7. ALL SHUTTERS TO BE SCRAPED & PAINTED.
8. IN BLDG 151, ENTIRE UNCOVERED AREA ABOVE CEILING (APPROXIMATELY 100 SQ FT) SHALL BE COVERED WITH 4\"/>

Project	Location	Date	Drawn	Checked
BLD 152	BLD 152	10/11/01		
<p>DEPARTMENT OF THE GOVT            PUBLIC WORKS AND DEVELOPMENT CENTER            1000 N. W. 11th St., Ft. Lauderdale, FL 33304            TEL: (954) 351-1100 FAX: (954) 351-1101</p>				
<p>BLDG 151 152 FAMILY QUARTERS</p>				
<p>VINYL SIDING, INSULATION, STORM SCREENS, LOUVERS &amp; VENTILATION FANS ARCHITECTURAL</p>				
<p>DATE: 10/11/01</p>				
<p>SCALE: 1/8\"/&gt; </p>				

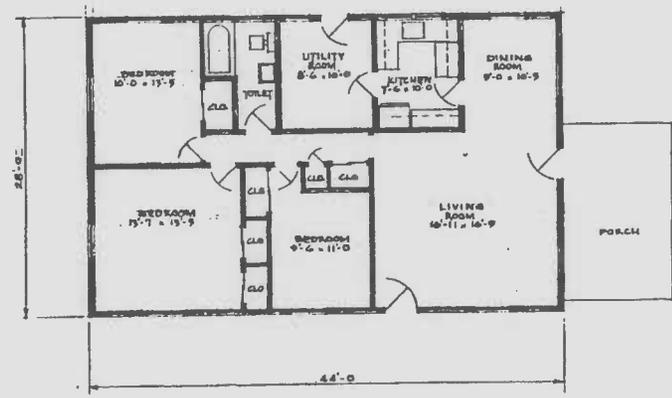
M/HP# M:29-56  
 BLDG 152 (1977)  
 NSWCCO, CARPEROCK  
 MONTGOMERY COUNTY

LIST OF MATERIAL			
PART NO.	QUANTITY	NAME OF PART	SOURCE

BUILDING MATERIAL

FLOOR- CONCRETE SLAB 7/4 ASPHALT TILE  
 EXTERIOR WALL- WOOD FRAMING & SIDING  
 INTERIOR WALL- WALLBOARD 7/4 TAPED JOINTS  
 ON 2-4 STUDS

ACTUAL CONSTRUCTION COST 1949 \$ 14,692  
 CONSTRUCTION COST ESTIMATE 1961  
 INCLUDING 60% COST RISE  
 FROM 1949 TO 1961 \$ 25,507  
 SQUARE FOOT COST \$ 19.00



FIRST FLOOR PLAN

REVISION	DATE	DESCRIPTION	BY

NAVY DEPARTMENT WASHINGTON, D. C.  
**DAVID W. TAYLOR MODEL BASIN**

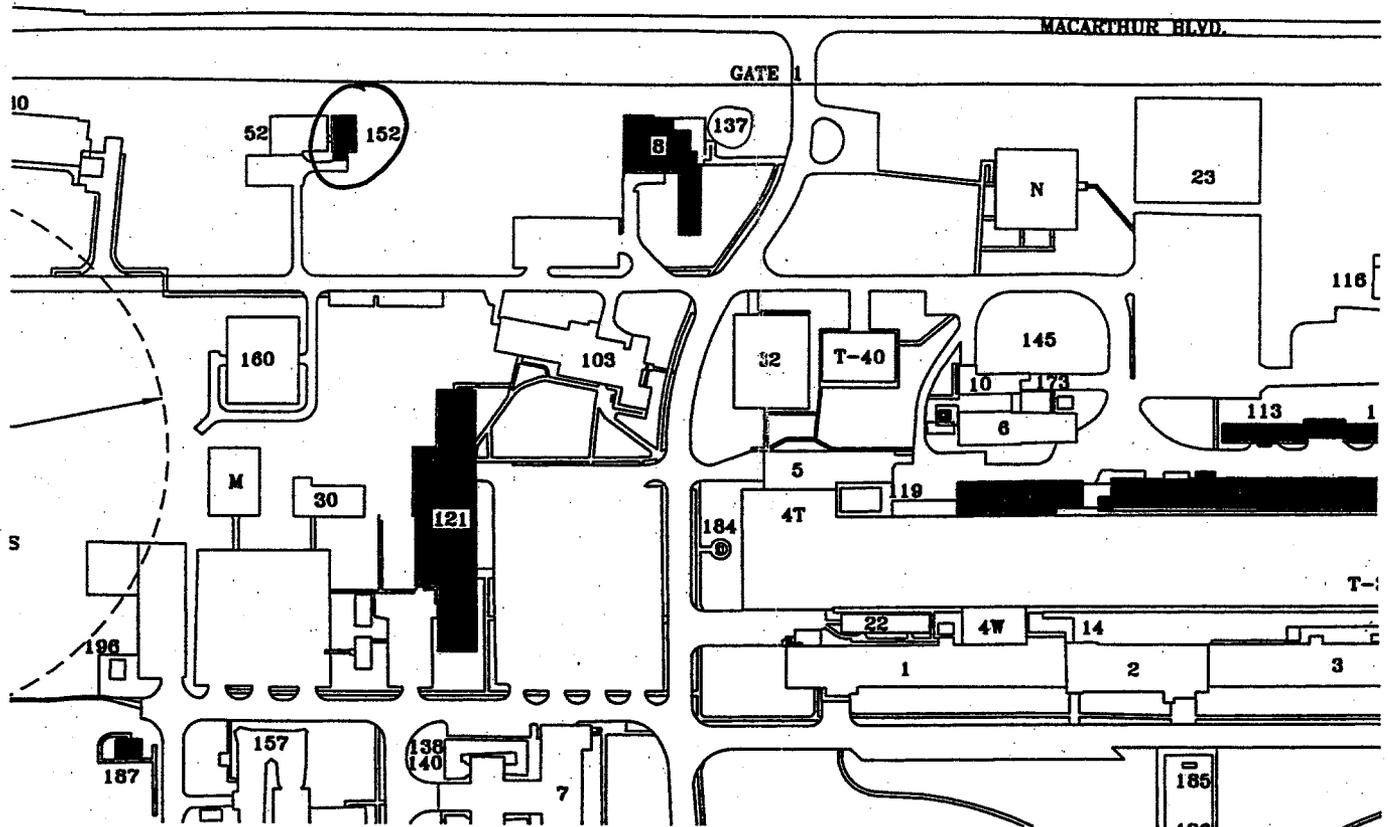
DESIGNED \_\_\_\_\_  
 DRAWN RG  
 CHECKED \_\_\_\_\_  
 SEC. HEAD \_\_\_\_\_  
 DIV. CHIEF \_\_\_\_\_  
 APPROVED FOR \_\_\_\_\_  
 J. O.

BUILDING 152  
 EXISTING CIVILIAN QUARTER  
 DAVID TAYLOR MODEL BASIN  
 CARDEROCK, MARYLAND

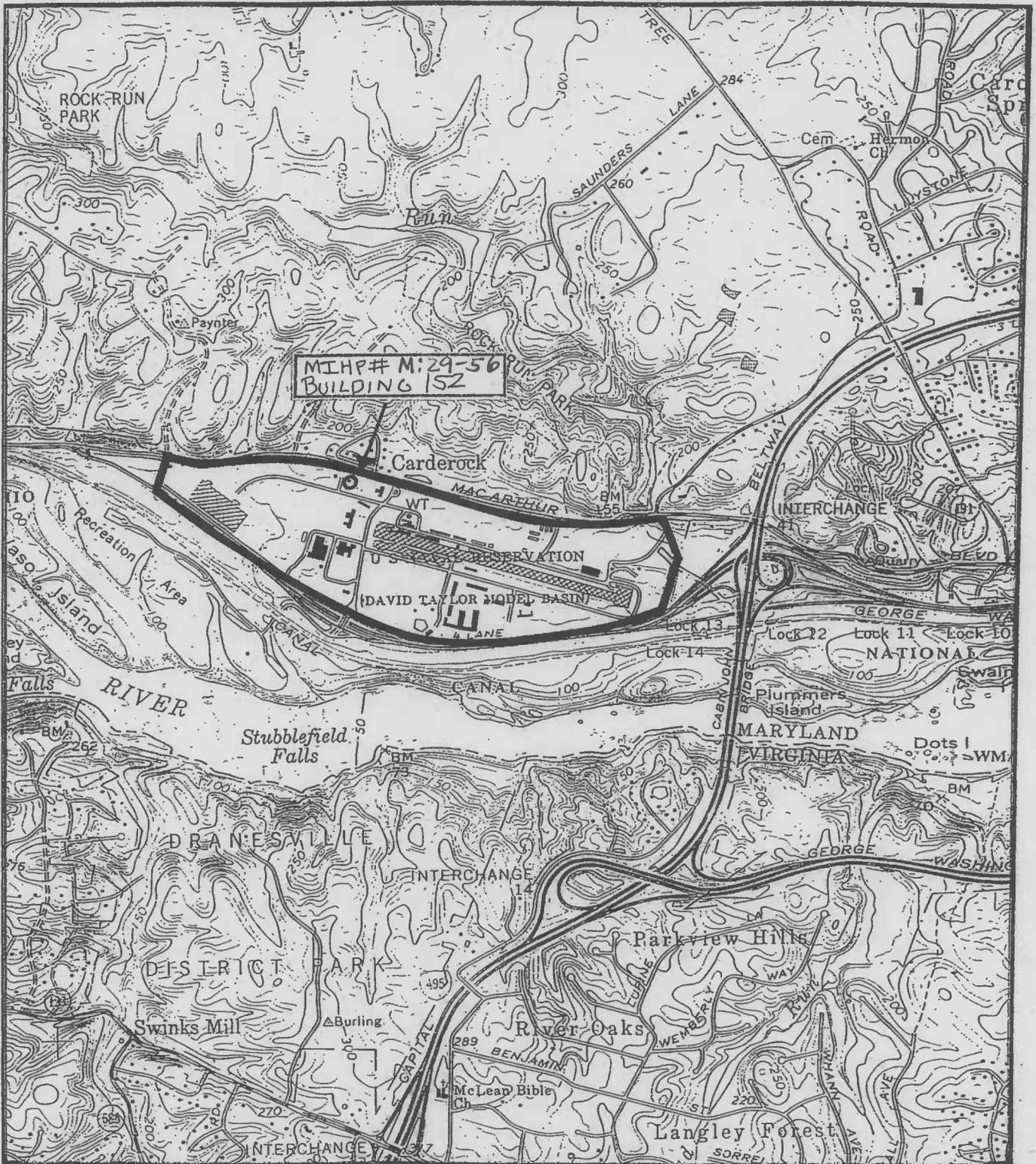
APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE: 1/8" = 1'-0" P.W. NO. 1791  
 S-14002-3 ALT.

PRINT RECORD				SHOP WORK REQUEST			
SENT TO	NO.	DATE	SENT TO	NO.	DATE		

MIHP# M:29-56  
 BLDG 152 (ND)  
 NSWCCD, CARDEROCK  
 MONTGOMERY COUNTY

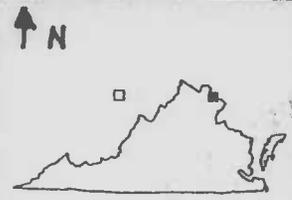
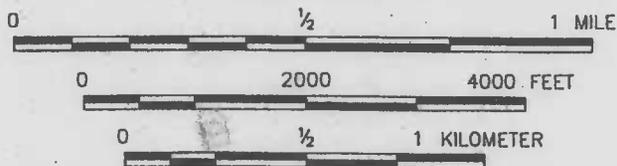


Resource Sketch Map  
MIHP# M:29-56  
Building 152  
NSWCCD, Carderock  
Montgomery County



MIHP# M:29-56  
 BUILDING 152  
 NSWCCD,  
 CARDEROCK  
 MONTGOMERY  
 COUNTY

SCALE 1:24000



Resource Location Map  
 Source: USGS 7.5' Falls Church, VA (1965, revised 1984)

VIRGINIA  
 QUADRANGLE LOCATION



MIHP# M:29-56

BUILDING 152, NSWCCD HISTORIC DISTRICT (M:29-52)  
MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPG

SOUTH FACADE + ADJOINING FIREHOUSE

1/7



MIHP # M:29-56

BUILDING 152, NSWCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

SOUTH FACADE

217



MIHP# M:29-56

BUILDING 152, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-62

NEG. LOCATION: MD SHPO

SOUTHEAST FACADE

3/7



MIHP# M:29-56

BUILDING 152, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

9-5-02

NEG. LOCATION: MD SHPO

EAST FACADE

4/7



MIHP# M.29-56

BUILDING 152, NSUCCD HISTORIC DISTRICT (M.29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

4-5-02

NEG LOCATION: MD SHPO

NORTH FACADE

5/7



MIHP# M:29-56

BUILDING 152, NSWCCD HISTORIC DISTRICT (M:29-52)

MONTGOMERY COUNTY, MD

M. RUPNIK

4-5-02

NEG. LOCATION: MD SHPO

INTERIOR - MAIN ROOM

6/7



MIHP# M:29-56  
BUILDING 152, NSWCCD HISTORIC DISTRICT (M:29-52)  
MONTGOMERY COUNTY, MD  
M. RUPNIK  
9-5-02  
NEG. LOCATION: MD SHPO  
INTERIOR  
7/7