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AN UNDERWATER ARCHAEOLOGICAL SURVEY
OF THE
SCHOONER REEF WRECK (Bisc UW-8)

Prepared for the
National Park Service
U.S. Department of the Interior
Biscayne National Park, Florida

by
The Maritime Archaeological
and Historical Society
Arlington, VA

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Larry Murphy, Underwater Archaeologist, Submerged Cultural Resources Unit, National Park Service, without whose help and guidance the project would not have been undertaken.

And to Roger C. Smith, Underwater Archaeologist for the State of Florida, who deserves our special thanks for an invitation to work in Florida.

We also wish to express our appreciation to Richard Curry, Resource Manager, Biscayne National Park; the staff of the Park; and members of the Maritime Archaeological and Historical Society, formerly the Nautical Archaeology Division of the Capital Divers Association, Washington, DC: Bill Eddy, Unit Director; J. Sanderson Stevens, Unit Archaeologist; Steven Anthony, Ned Madden, Lorna Larson, and Joanne Klieger.

1.0 Introduction

The Maritime Archaeological and Historical Society (MAHS)* was invited by the Department of the Interior and the National Park Service (NPS) to participate in an underwater archaeological survey within the boundaries of Biscayne National Park (Figure 1). The following report discusses the underwater archaeological investigations conducted by a six-member MAHS unit at Biscayne National Park on August 2, 1988. The site chosen for the survey, the Schooner Reef Wreck (Bisc UW-8), was selected by Larry Murphy, Underwater Archaeologist for the NPS, and Richard Curry, Resource Manager of Biscayne National Park. Roger C. Smith, Underwater Archaeologist for the State of Florida, also assisted in the survey.

The site has been known for some 16 years, but no detailed investigations have been undertaken. The purposes of the archaeological survey were to map and record the site dimensions; to identify, map, and photograph the features; and to locate and record diagnostic artifacts.

*The Nautical Archaeology Division (NAD) of the Capital Divers Association formally changed its name to Maritime Archaeological and Historical Society on September 8, 1988.

very least, this vessel should be protected. Furthermore, this wreck and other sites in the Biscayne National Park should be integrated into a management plan for submerged cultural resources.

7.0 References Cited

Curry, Richard

1988 Resource Manager, Biscayne National Park, Florida, personal communication.

Meylach, Martin

1971 Diving to a Flash of Gold, Florida Classics Library, Port Salerno, Florida.

Murphy, Larry

1988 Underwater Archaeologist, Submerged Cultural Resources Unit, National Park Service. U.S. Department of the Interior, P.O. Box 728, Santa Fe, New Mexico, personal communication.

Smith, Roger C.

1988 Underwater Archaeologist, Bureau of Archaeological Research, Tallahassee, Florida, personal communication.

Table 1. Trilateration Measurements of the Schooner Reef Wreck.

Items	Feature Numbers	Base-line Position	Reference Point	Distance
Edge of Ballast	A-1	L	55	10-0
	A-1	L	48	07-5
Edge of Ballast	B-1	L	50	21-9
	B-1	L	58	18-8
Edge of Ballast	D-1	L	60	18-0
	D-1	L	75	18-0
Edge of Ballast	E-1	L	92	08-0
	E-1	L	86	09-0
Edge of Ballast	G-1	R	75	06-5
	G-1	R	64	08-0
Keel	J-1	R	100	02-0
	J-1	R	97	02-1
Chain Plate	K-1	R	30	06-4
	K-1	R	43	02-1
Rigging Hardware	L-1	R	17	06-8
	L-1	R	23	03-7
	L-2	R	23	05-1
	L-2	R	30	06-0
Chain Links	M-1	R	No	No
	M-1	R	measure-ments	measure-ments
Keel	N-1	L	A-1	05-4
	N-1	L	K	22-6

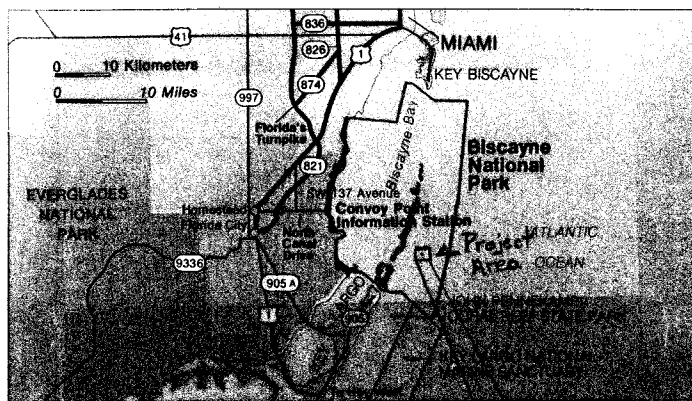
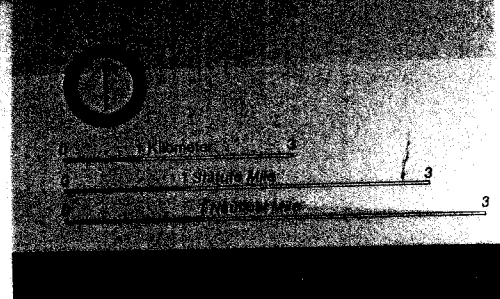
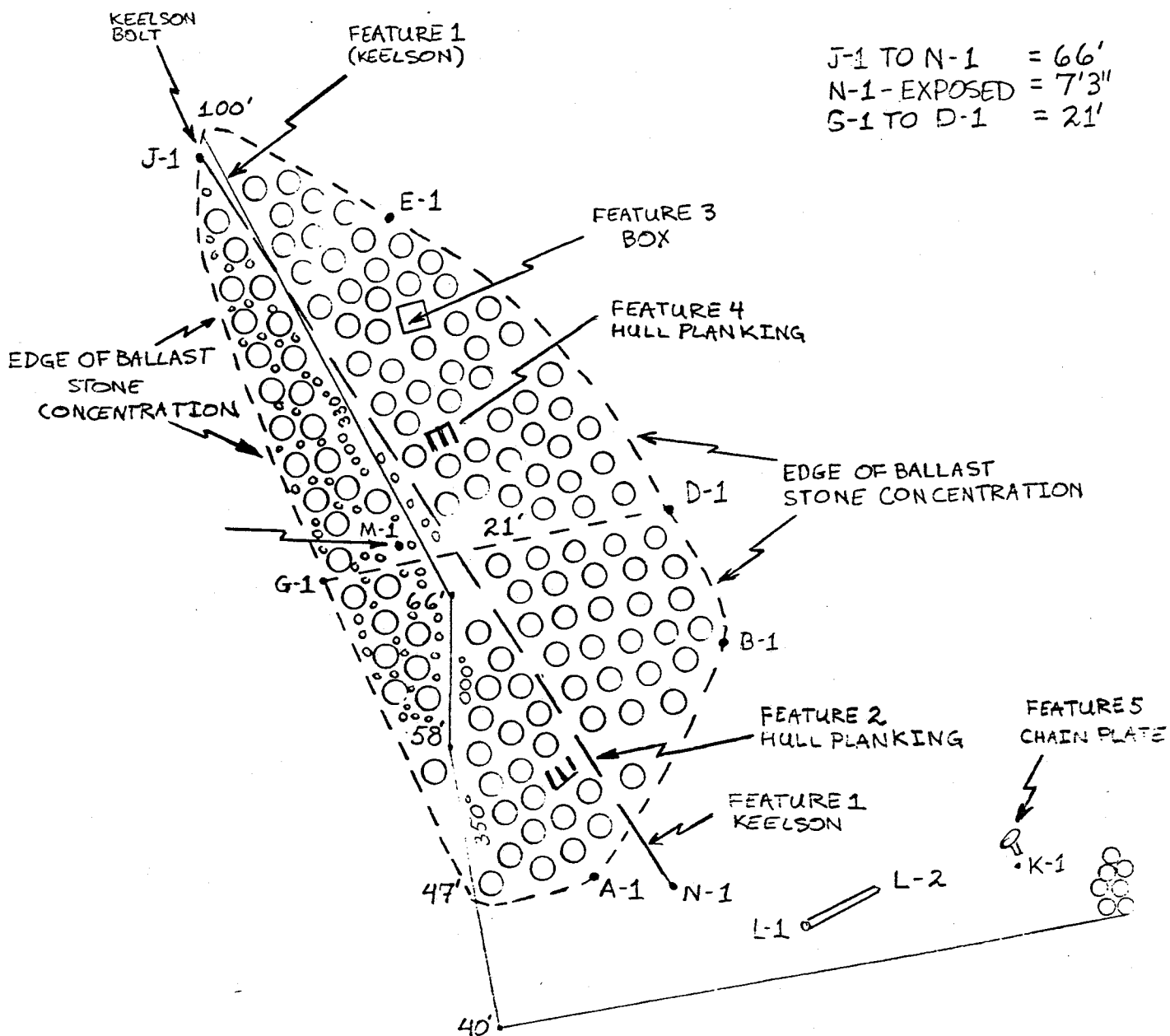
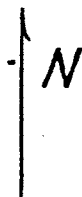
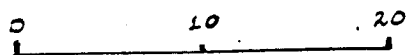


FIGURE 1. PROJECT LOCATION
SCHOONER REEF
WRECK (BISC UW-8)



SCALE

1"=10'



J-1 TO N-1 = 66'
N-1-EXPOSED = 7'3"
G-1 TO D-1 = 21'

Figure 2. Site Map. ~

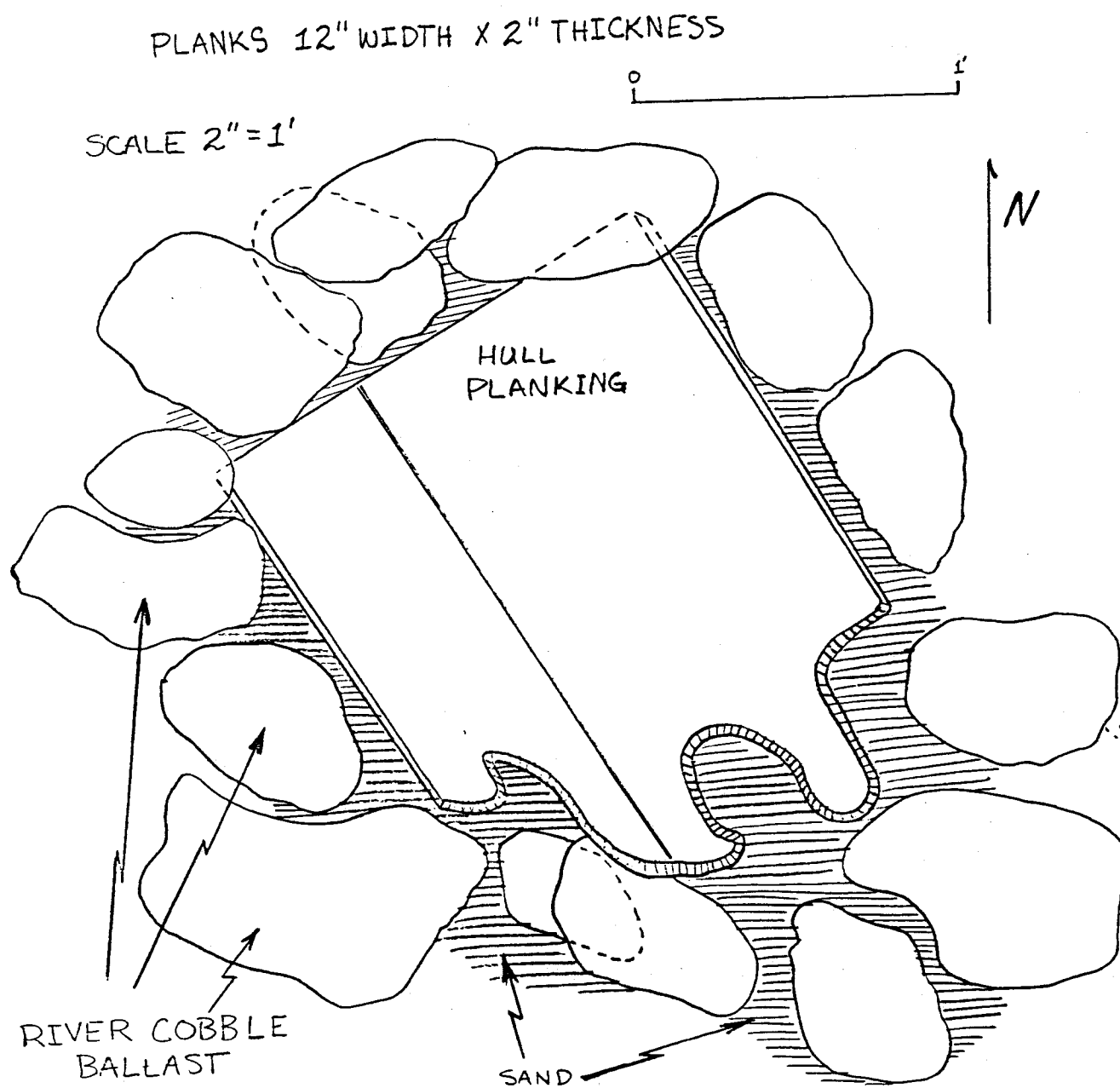


Figure 3. Feature 2: Hull Planking.

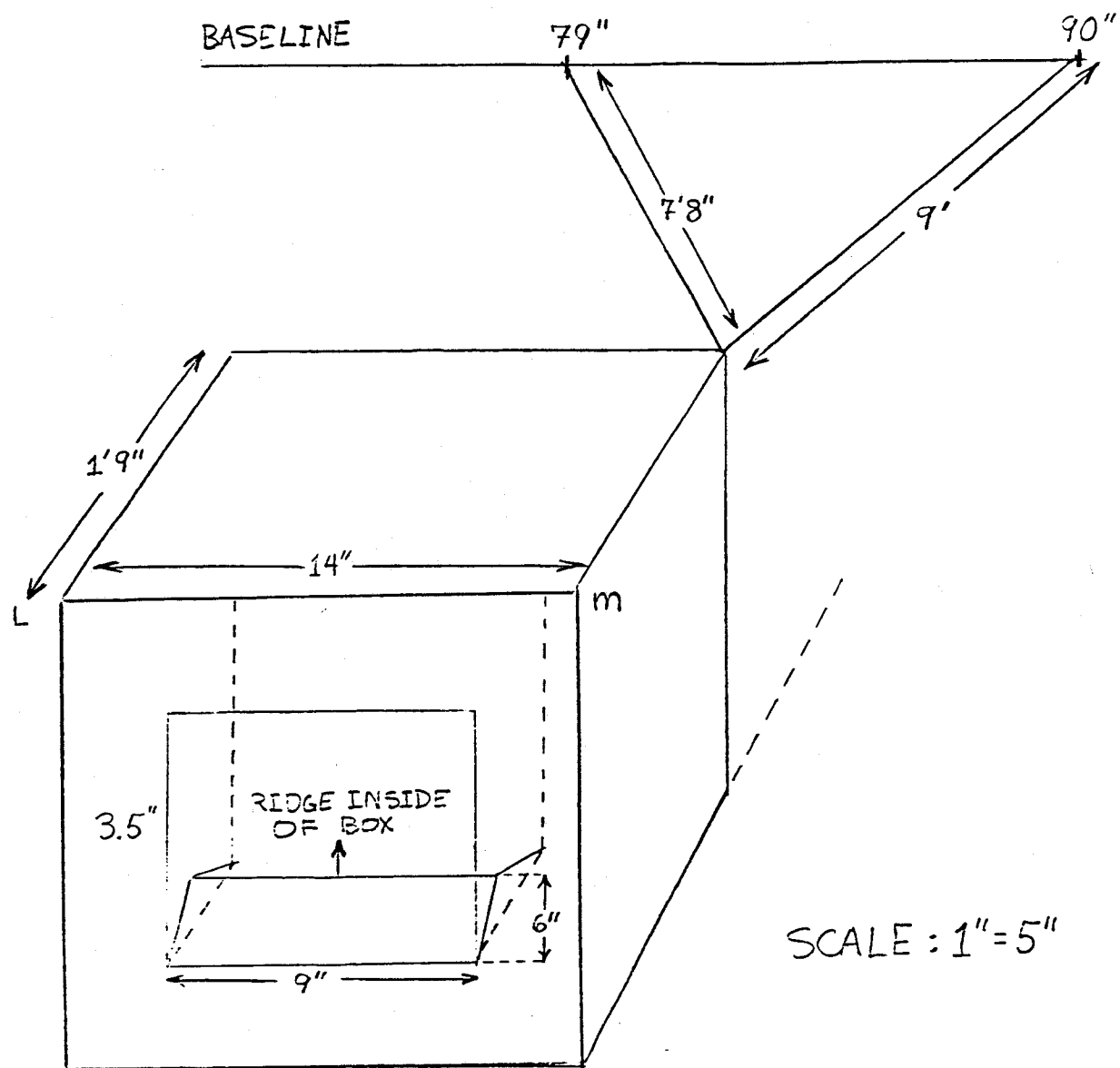


Figure 4. Feature 3: Iron Box.

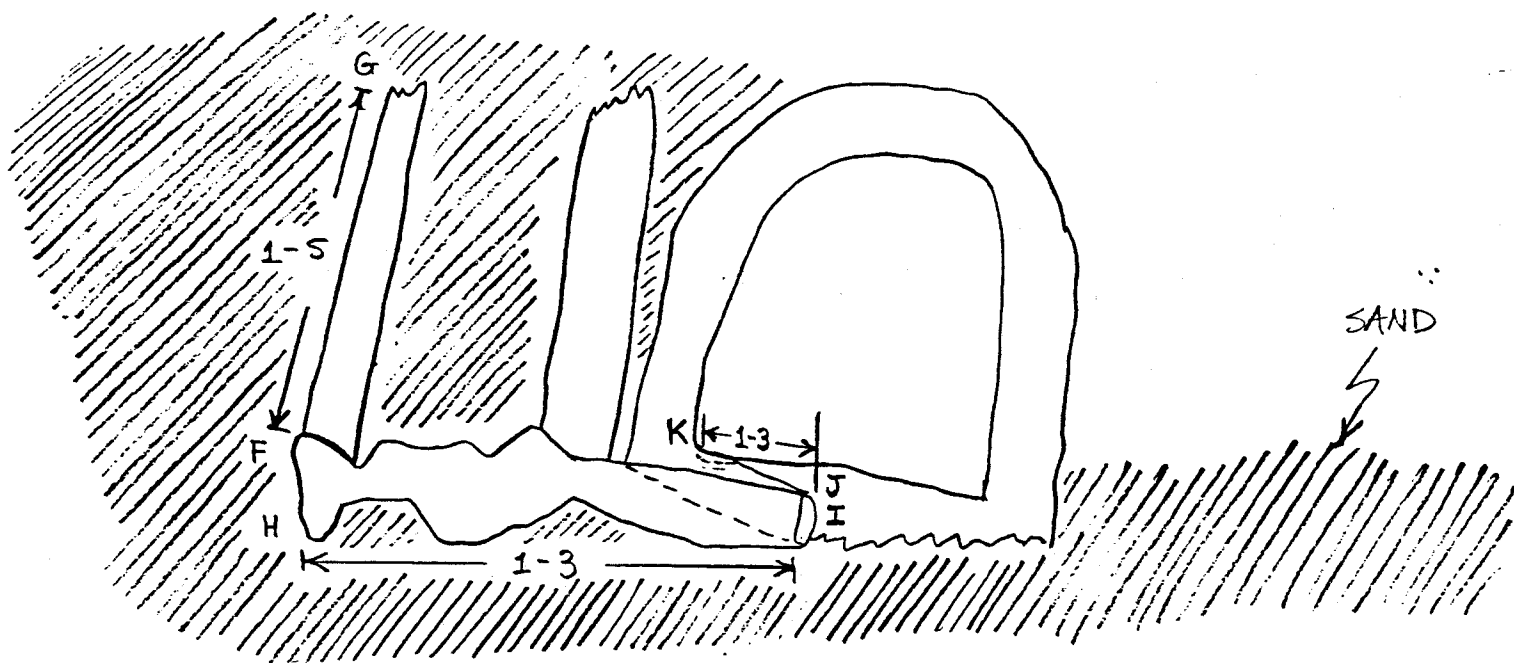
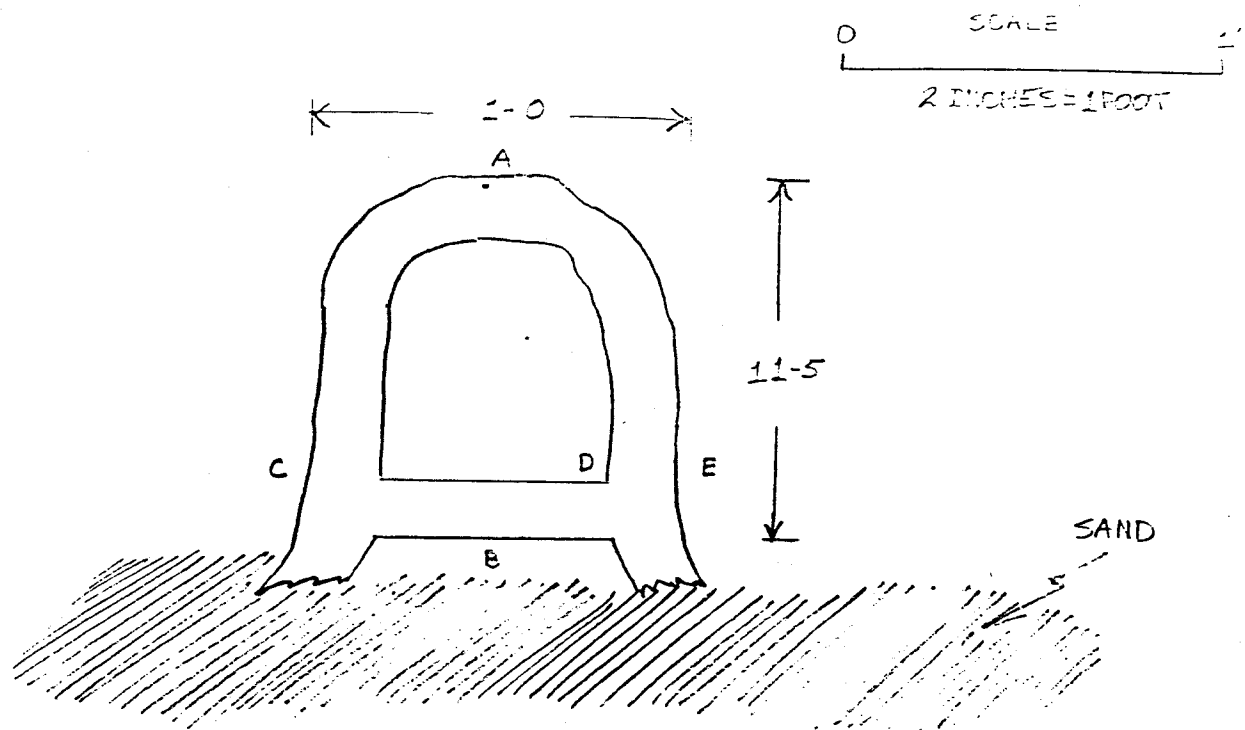


Figure 5. Feature 5: Chain Plate.

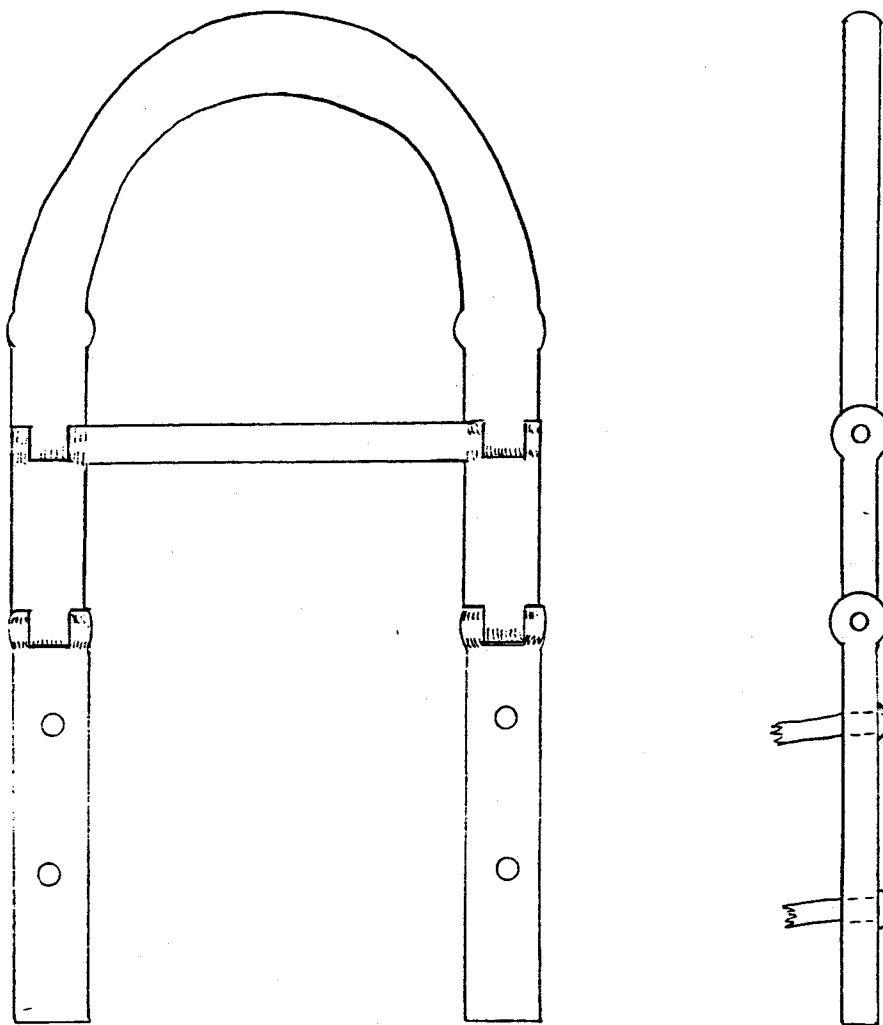


Figure 6. Interpretive Drawing of Feature 5 (Chain Plate).



Plate 1. Photograph of Feature 1 (keel).



Plate 2. Photograph of Feature 2 (exposed hull planking).

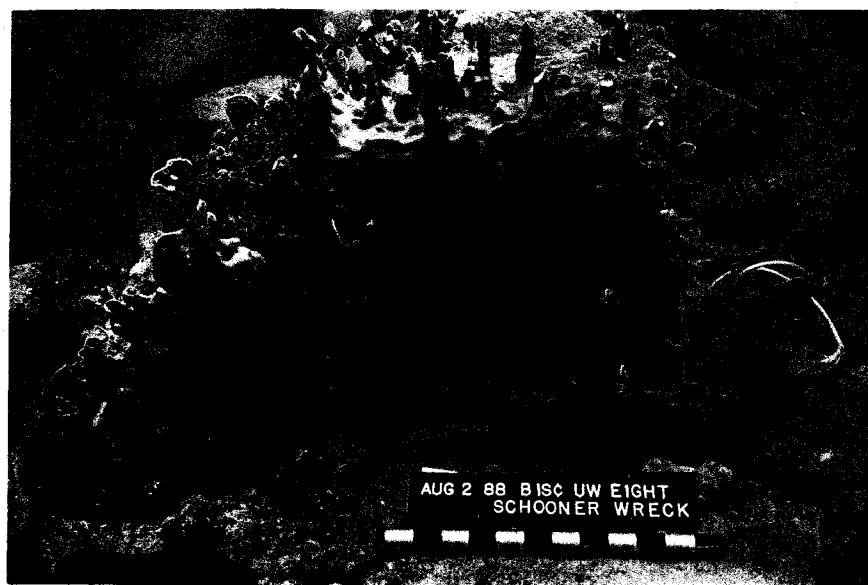


Plate 3. Photograph of Feature 3 (iron box).



Plate 4. Photograph of Feature 5 (chain plate).

THE MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY
Arlington, VA

SUBMERGED RESOURCES DATA SHEET
FOR
UNDERWATER ARCHAEOLOGY RECONNAISSANCE SURVEY



Information to be obtained about historic site, dive, and dive conditions.

Site Name: Schooner Reef Wreck

Date: 8/12/88 Site number or project number: BISC UW-8
State: Fla. County: Dade Body of water: Fla. Keys
Site coordinates: 23° 8' N Latitude: 80° 09' 21" W Longitude: Loran C:
Chart name: Upper Fla. Keys number: #38; Date: 1985; Scale:
Site size: 87ft. X 60ft. approx.
Was Loran C verified prior to going on site? [Y] [N] How?

Site Teams

Lead Archaeologist(s): Larry Murphy, Roger Smith, Sandy Stevens
Site Director: Richard Curry, M.A.H.S. Dir. Bill Eddy Site Conservation
Specialist(s):
Openwater SCUBA Instructor(s): Larry Murphy Lead Dive-
master: Bill Eddy Dive Safety Officer: Larry Murphy
Special Equipment Manager: Richard Curry Maritime His-
torian: Larry Murphy

Dive Team Members

Openwater Instructor: Larry Murphy; Archaeologist: Sandy Stevens & Larry Murphy; Conservator: Divemaster: Bill Eddy
; Rescue Diver: Ned Madden; Diver(s): Bill Eddy, Steven Anthony, Ned Madden, Sandy Stevens, Joanne Klieger, Lorna Larson, Richard Curry, Larry Murphy, and Roger Smith.
Site Type:

- | | |
|---|--|
| 1. ☐ unknown | 7. ☐ Scrap |
| 2. ☒ vessel | 8. ☐ disposal area |
| 3. ☐ rock pile | 9. ☐ artifact concentration |
| 4. ☐ wharf/landing | 10. ☐ fortification |
| 5. ☐ pilings/pier | 11. ☐ aircraft |
| 6. ☐ bridge remains | 12. ☐ other <u></u> |

Cultural Affiliation:

1. ☐ unknown 2. ☐ prehistoric 3. ☐ historic
 4. ☐ 17th century 5. ☐ 18th century
 6. ☒ 19th century 7. ☐ 20th century

Site Conditions

Shallowest and greatest depth(s) at mean low water: 8ft. to 12 ft.
 Depth to deck of vessel: . Current: 1 knots. Entanglement
 hazards: [Y] [N]; describe: None
 Any special problems getting to site (mud bottom, quick sand or
 mud, rough terrain, reefs, etc. Moderate surge from choppy seas, 20 ft of
visability.

Bottom Composition

1. ☒ sand 2. ☐ gravel 3. ☐ silt 4. ☐ shell (oyster)
 5. ☐ decaying matter 6. ☐ trees/timber 7. ☐ mud
 8. ☐ objects that could lead to entanglement; describe:
Coral reef. Special concerns on bottom
 composition: Fire Coral

Marine Growth

1. ☐ not present 2. ☐ shell clusters 3. ☐ barnacles
 4. ☐ mineral clusters 5. ☒ coral 6. ☒ plant life/algae
 7. ☐ other Turtle grass and seaweed

If site is a Vessel

Condition of Wreck:

1. ☒ broken up 2. ☐ intact 3. ☐ buried
 4. ☐ resting on keel 5. ☐ resting on port side
 6. ☐ resting on starboard side 7. ☐ keel side up
 8. ☐ unknown 9. ☐ other Keel & hull planking primarily buried
beneath huge concentration of ballast stones.

Orientation of Wreck:

Magnetic Heading (bearing from stern to bow): 330° North.
 Incline: ☒ level ☐ bow down ☐ stern down

Hull Remains:

1. ☒ wood 2. ☐ iron 3. ☐ copper sheathed wood
 4. ☐ ferrocement 5. ☐ fiberglass/plastic
 6. ☐ aluminum 7. ☐ steel/wood 8. ☐ steel

Masts:

Number Unknown Construction ; Size(s) 22 ft ballast pile

Are masts raked? [Y] [N] [U]

Centerboard box present? [Y] [N]

Ballast: Yes, large primary and small secondary ballast pile

Type of propulsion:

1. ☒ sail 2. ☐ sail/machinery 3. ☐ machinery
☐ steam ☐ oil/gas ☐ _____
☐ reciprocating ☐ turbine
☐ side wheel ☐ stern wheel ☐ screw
 4. ☐ oar.

Demensions:

1. Vessel length Keel 66ft. 2. Vessel beam (amidships) 22ft ballast pile ft.
 3. Length of centerboard box _____, of ballast remains _____ ft.
 4. Size(s) of hatches X, X, X.

Fastners:

1. ☐ hand drawn wood trunnels 2. ☐ lathed wood trunnels
 3. ☐ spikes (☐ brass ☐ iron) 4. ☐ straps X Iron drift
 bolts, possible square planking nail.

Outfit:

1. ☐ lead jigs 2. ☐ towing bitts 3. ☐ windlasses
 4. ☐ deadeyes 5. ☐ rigging (☐ fiber ☐ wire)
 7. ☒ chainplates 8. ☐ other _____.

Stern Configuration:

1. ☐ flat 2. ☐ rounded 3. ☐ other (illustrate) _____
Unknown

Special features of Site

Condition of Site Undisturbed but deteriorated ballast and keel remain.

Visibility 20ft. Time of year Summer Time of day 10:30am to 5:00pm

Are portions of site buried? ☒ [N] Under ballast and sand

Evidence of Site disturbance? ☒ [N] Describe Possible but not clearly obvious.

Looting? ☐ [Y] ☐ [N] _____

Damaged Hull? ☒ [N] keelson missing, keel buried, 2 " planks & 12" wide,
bolts on 12" centers.

Are knees present? ☐ [Y] ☒ [N] Armament? ☐ [Y] ☒ [N]

Other features: _____.

Are (cabin(s), pilot house, engine room, hold, etc) spaces
 intact? ☐ [Y] ☒ [N] _____.

Did you see/feel anything special? Iron box and chain plate

Artifacts Identified

1. Pepsi Bottle (intrusive) 2. _____ 3. _____

4. _____ 5. _____ 6. _____

7. _____ 8. _____ 9. _____

Specimens reported:

1. ☐ unidentified artifacts 2. ☐ ceramics (plates, dishes, jugs) 3. ☒ glass/bottles 4. ☐ brass
 5. ☐ other _____ (Pepsi Bottle)

Describe specimens: _____

Field Conservation methods utilized (describe for each item)

None as no artifacts were removed.

Conservation Specialist(s) recommendations for finds/artifacts (use conservation sheets)

na

For above artifacts/specimens identify: 1. Collector/reporter

2. date: _____ 3. time: _____

4. Address: _____ zip: _____ 5. phone: _____

6. Specimens reported/collected:

- ☐ unidentified artifacts ☐ ceramics (plates, dishes, jugs)
☐ glass/bottles ☐ brass ☐ other.

7. Data sheet number where specimens are described _____

Were ☒ photographic ☒ video tape records made? ☒ [Y] [N]

by: Roger Smith, Larry Murphy, Sandy Stevens, date (s): 8/12/88 time (s): _____

film used: ASA 400 meter readings: _____ lens settings: f/8 ASA 400

Techniques found to be effective: _____

ASA Tri X 400 and ASA 200 Kodachrome B/W & Color

Mapping of site

Location of Datum: Baseline down ballast pile Describe: 0ft. tied to buoy & 100 ft and at end

Equipment used: Tapes and Ballast pile of ballast pile.

(What equipment/procedures worked best? _____)

Baseline with attached taped worked very well

Recordings were in order of: Object(s) 1. _____ 2. _____

3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____

9. _____ 10. _____ 11. _____ 12. _____ etc. _____

Planned objectives completed: Site map recordation of features, video photograph

Planned objectives not completed: _____

Reason: _____

Special features near site that should be noted and mapped in:
Video whole site using base line and reference lines with reference markers
and feature tags in order to capture a better picture of site and location of
areas of interest.

Effectiveness of Survey Methods Used

What methods seemed to work best/why? 1. lay baseline, 2. trilaterate
the features and edges of the site, 3. video recordation of site. The combined
use of the V-9 video (Sony) and the 35mm Nikonos-2 and Nikonos-V with 15mm lens
and the 2.5 lens were very effective in capturing needed detail of the site.

Special notes about this site:

What specialist(s) will be needed for future work on this site?

☒ archaeology ☒ conservation ☐ diving ☐ equipment
☐ surface support

Level of diving skill needed for safely diving this site Open water diver.

Special team training/preparation needed prior to on site work:

☒ archaeology ☒ conservation ☒ diving ☒ equipment
☒ surface support

Future equipment for this site would include: Video, 35mm Nikonos with 15mm lens and
 2.5 lens, slates & pencils, reference lines and baselines, reference markers and
 feature tags, underwater transit and pelorus, and the leveling rod.