#95011

CRUISE REPORT

1) **SHIP NAME:** RV Asterias, Woods Hole Oceanographic Institution

2) **CRUISE LEG:** AST95-1 (95011)

3) **PROJECT NUMBER AND NAME:** 9470-31416 Detailed Sea Floor Surveys of Critical Habitats, Long Island Sound Environmental Studies

4) **FUNDING AGENCY:** Ship Costs: USGS

5) **CONTRACT:** N/A

6) **AREA OF OPERATION:** Long Island Sound

7) **DATES AND PORTS OF CALL:**

6/06/95	Woods Hole, MA
6/06/95-6/12/95	Noank, CT
6/12/95	Woods Hole, MA

8) **CHIEF SCIENTIST/BRANCH PRINCIPAL:** L. Poppe

9) **SCIENTIFIC PARTY:**
L. Poppe - Marine Geologist, USGS
K. Parolski - Physical Scientist, USGS
R. Lewis - LISRC, CT-DEP
M. Cohen - LISRC, CT-DEP
D. Tolderlund - USCG

10) **SHIP'S CAPTAIN:** D. Olmsted, WHOI

11) **PURPOSE OF CRUISE:** Conduct detailed (continuous) 100 kHz sidescan sonar surveys in Niantic Bay, CT, and in Fishers Island Sound, Ct, NY, and RI. These surveys were completed (1) to determine the textural distributions of surficial sediments and to relate these distributions to active sedimentary processes; and (2) to delineate habitats and relate them to benthic community structure.

12) **NAVIGATION TECHNIQUES:** Differential Geographical Positioning System (GPS)

13) **Scientific Equipment:**
Klein 100 kHz sidescan sonar system with winch and cable
Q-MIPS data aquisition system
3.5 kHz subbottom profiler/ODUM echosounder
Differential GPS navigation system

14) **TABULATED INFORMATION:**
Days at sea: 5
Sidescan data tapes (8mm): 5

Navigation/Bathymetry Diskettes: 14
Analog data
3.5 kHz: 2 rolls
Sidescan sonar: 5 rolls
Number and length of lines completed:

	Lines	Total Length (km)
Niantic Bay Survey	44	167
Fishers Island Sound Survey	25	119

SOL/EOL Navigation:

NIANTIC BAY SURVEY

Latitude	Longitude	Sample ID
41d16.9128'	-72d7.2957'	SOL1
41d17.8785'	-72d8.1820'	EOL1
41d17.9464'	-72d8.3416'	SOL2
41d18.2466'	-72d10.1429'	EOL2
41d18.1676'	-72d10.1661'	SOL3
41d17.9097'	-72d8.4410'	EOL3
41d17.8235'	-72d8.3177'	SOL4
41d16.8639'	72d7.4104'	EOL4
41d16.7948'	-72d7.4580	SOL5
41d17.8169'	-72d8.3814'	EOL5
41d17.8576'	-72d8.5597'	SOL6
41d18.1127'	-72d10.1997'	EOL6
41d18.0219'	-72d10.1822'	SOL7
41d17.7658'	-72d8.4598'	EOL7
41d17.7240'	-72d8.3848'	SOL8
41d16.7788'	-72d7.5870'	EOL8
41d15.9786'	-72d8.3841'	SOL9
41d17.1245'	-72d8.3873	EOL9
41d17.2126'	-72d8.4791'	SOL10
41d15.9967'	-72d8.4858'	EOL10
41d15.9916'	-72d8.6274'	SOL11
41d17.8865'	-72d8.6150'	EOL11

41d17.8583'	-72d8.7138'	SOL12
41d15.9983'	-72d8.7174'	EOL12
41d15.9496'	-72d8.8278'	SOL13
41d17.8902'	-72d8.8175'	EOL13
41d17.9113'	-72d8.9058'	SOL14
41d15.9896'	-72d8.9262'	EOL14
41d15.9700'	-72d9.0063'	SOL15
41d17.0961'	-72d9.0445'	EOL15
41d17.1291'	-72d9.1342'	SOL16
41d15.9927'	-72d9.1358'	EOL16
41d16.0098'	-72d9.2414'	SOL17
41d15.9927'	-72d9.1358'	EOL17
41d17.9587'	-72d9.3355'	SOL18
41d15.9936'	-72d9.3492'	EOL18
41d15.9579'	-72d9.4480'	SOL19
41d17.9736'	-72d9.4514'	EOL19
41d17.9816'	-72d9.5456'	SOL20
41d15.9779'	-72d9.5535'	EOL20
41d16.0184'	-72d9.6685'	SOL21
41d17.9670'	-72d9.6637'	EOL21
41d17.9383'	-72d9.7734'	SOL22
41d15.9963'	-72d9.7776'	EOL22
41d15.9142'	-72d9.8683'	SOL23
41d18.0102'	-72d9.8806'	EOL23
41d17.9931'	-72d9.9802'	SOL24
41d15.9928'	-72d9.9816'	EOL24
41d16.0201'	-72d10.0969'	SOL25
41d18.0337'	-72d10.0904'	EOL25
41d18.0310'	-72d10.1892'	SOL26
41d15.9930'	-72d10.1879'	EOL26
41d15.9988'	-72d10.2926'	SOL27
41d18.4056'	-72d10.3327'	EOL27
41d18.3068'	-72d10.4011'	SOL28
41d15.9845'	-72d10.3973'	EOL28

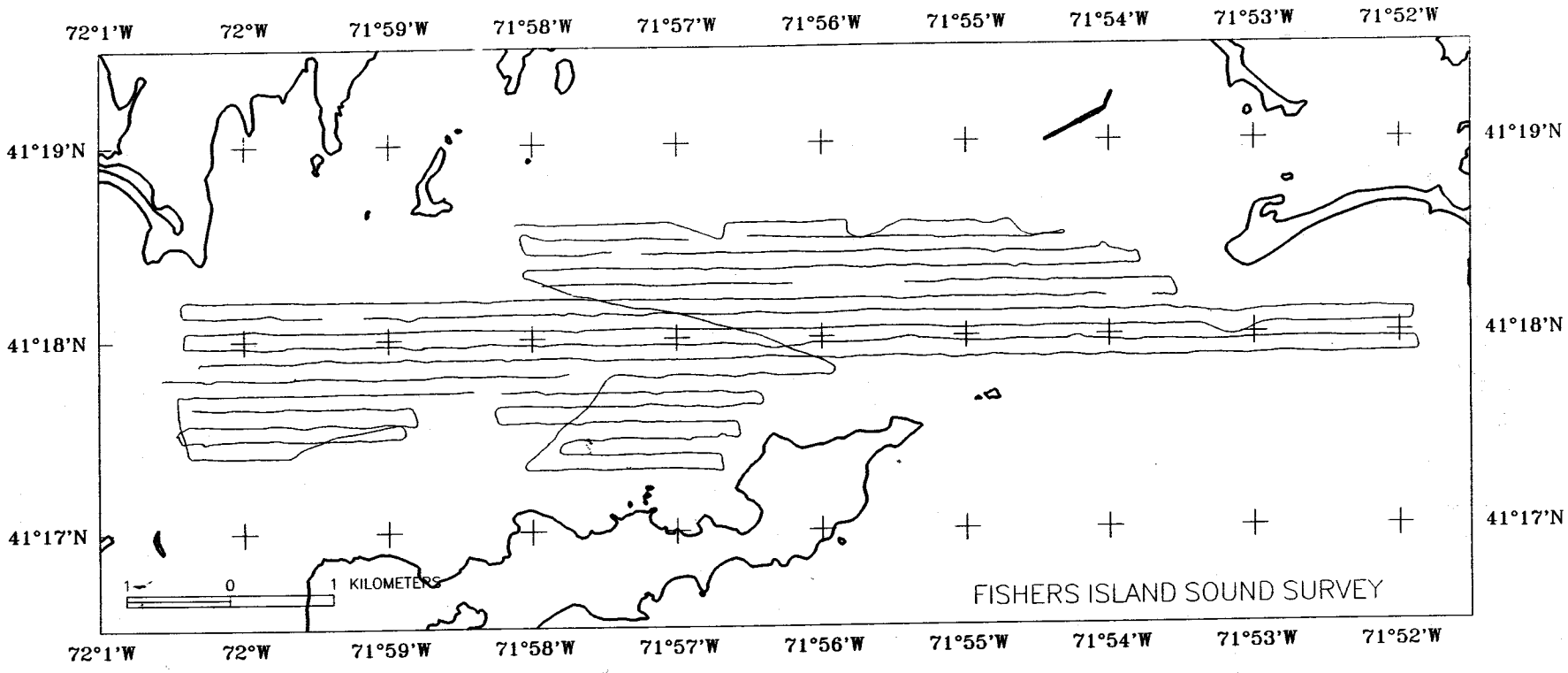
41d16.0086'	-72d10.5198'	SOL29
41d18.0054'	-72d10.5351'	EOL29
41d17.9608'	-72d10.6066'	SOL30
41d15.9987'	-72d10.6172'	EOL30
41d10.0056'	-72d10.7136'	SOL31
41d18.7119'	-72d10.7163'	EOL31
41d18.9175'	-72d10.8262'	SOL32
41d15.9864'	-72d10.8247'	EOL32
41d16.0883'	-72d10.9345'	SOL33
41d18.9901'	-72d10.9362'	EOL33
41d18.9818'	-72d11.0505'	SOL34
41d15.9894'	-72d11.0474'	EOL34
41d15.9984'	-72d11.1547'	SOL35
41d19.1283'	-72d11.1567'	EOL35
41d19.1060'	-72d11.2582'	SOL36
41d15.9955'	-72d11.2514'	EOL36
41d15.9866'	-72d11.3533'	SOL37
41d18.5458'	-72d11.3603'	EOL37
41d18.4874'	-72d11.4737'	SOL38
41d15.9942'	-72d11.4647'	EOL38
41d15.9942'	-72d11.5723'	SOL39
41d18.5048'	-72d11.5759'	EOL39
41d18.4750'	-72d11.6924'	SOL40
41d15.9754'	-72d11.6854'	EOL40
41d15.9392'	-72d11.8031'	SOL41
41d18.0081'	-72d11.7936'	EOL41
41d18.0077'	-72d11.8977'	SOL42
41d15.9637'	-72d11.8842'	EOL42
41d15.9637'	-72d12.0087'	SOL43
41d18.0042'	-72d12.0048'	EOL43
41d16.9555'	-72d12.1068'	SOL44
41d15.9754'	-72d12.0984'	EOL44

FISHERS ISLAND SOUND SURVEY

Latitude	Longitude	Sample ID
41d17.8848'	-72d0.2625'	SOL1
41d17.8933'	-71d51.9345'	EOL1
41d17.9650	-71d51.9599'	SOL2
41d17.9667'	-72d0.3324'	EOL2
41d18.0452'	-72d0.3217'	SOL3
41d18.0504'	-71d51.9910'	EOL3
41d18.1163'	-71d51.9452'	SOL4
41d18.1253'	-72d0.3346'	EOL4
41d18.2009'	-72d0.3089'	SOL5
41d18.1875'	-71d53.5731'	EOL5
41d18.2783'	-71d53.6322'	SOL6
41d18.2712'	-71d55.5123'	EOL6
41d18.2742'	-71d56.2339'	SOL7
41d18.2709'	-71d58.0137'	EOL7
41d17.8104'	-71d57.7895'	SOL8
41d17.8028'	-72d0.3303'	EOL8
41d17.6514'	-72d0.3084'	SOL9
41d17.6469'	-71d58.9243'	EOL9
41d17.5586'	-71d58.8742'	SOL10
41d17.5647'	-72d0.3359'	EOL10
41d17.4804'	-72d0.3920'	SOL11
41d17.4896'	-71d58.9279'	EOL11
41d17.3979'	-71d59.6801'	SOL12
41d17.3999'	-72d0.3275'	EOL12
41d17.7158'	-72d0.4073'	SOL13
41d17.7164'	-71d56.5117'	EOL13
41d17.6550'	-71d56.4783'	SOL14
41d17.6504'	-71d58.2147'	EOL14
41d17.5616'	-71d57.9373'	SOL15
41d17.5644'	-71d56.5885'	EOL15
41d17.4844'	-71d56.6300'	SOL16

41d17.4760'	-71d57.6907'	EOL17
41d17.3114'	-71d56.6977'	SOL18
41d17.3193'	-71d58.0168'	EOL18
41d17.8112'	-71d57.3838'	SOL19
41d17.8045'	-71d55.9973'	EOL19
41d18.3547'	-71d58.0209'	SOL20
41d18.3594'	-71d53.8199'	EOL20
41d18.4155'	-71d53.8728'	SOL21
41d18.4344'	-71d58.0255'	EOL21
41d18.5141'	-71d57.9430'	SOL22
41d18.5185'	-71d54.3741'	EOL22
41d18.5875'	-71d54.6917'	SOL23
41d18.5894'	-71d55.4350'	EOL23
41d18.5954'	-71d55.8429'	SOL24
41d18.5867'	-71d56.6477'	EOL24
41d18.5911'	-71d57.2255'	SOL25
41d18.5929'	-71d58.0472'	EOL25

15) **SUBMITTED BY:** L. Poppe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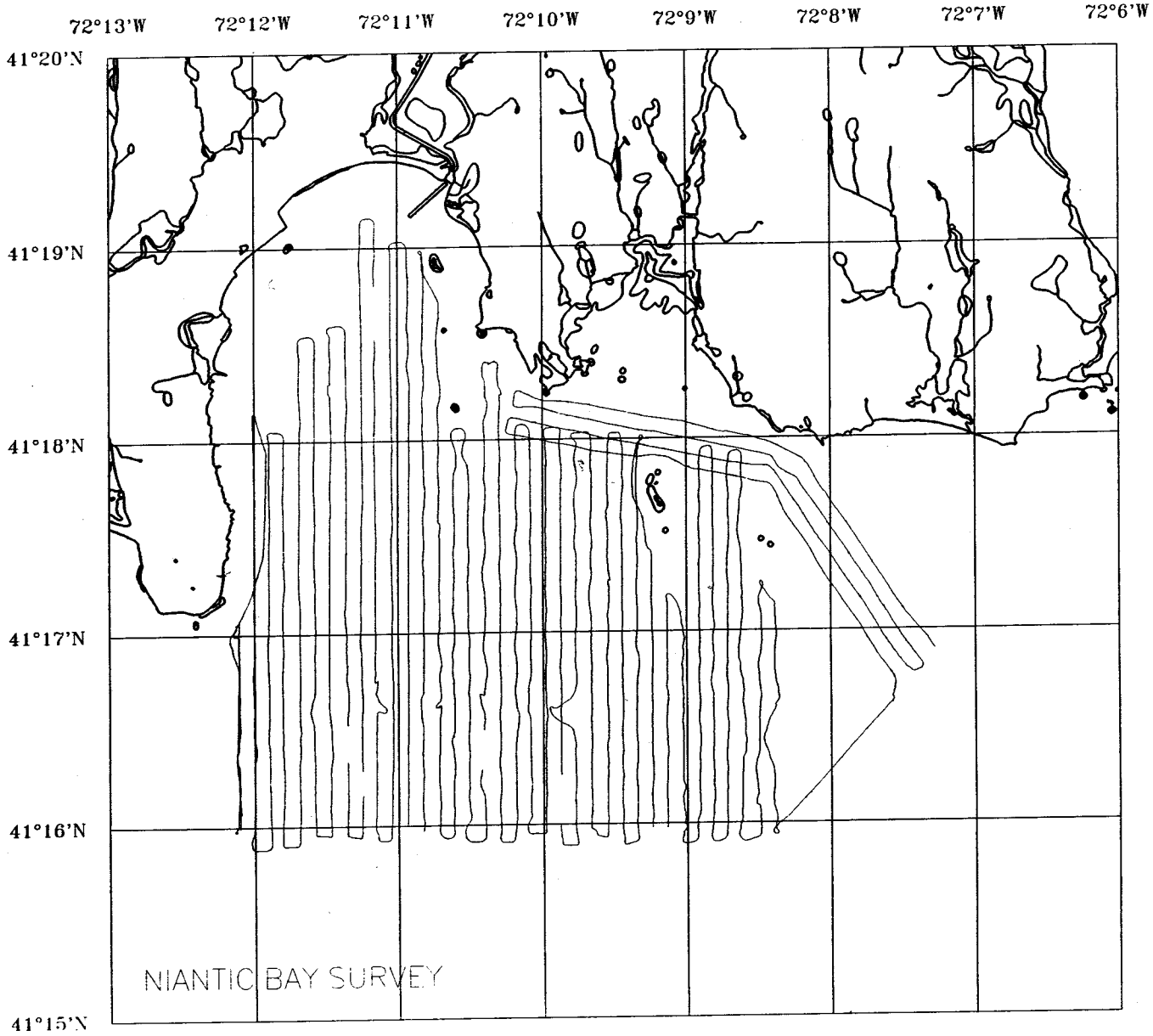
1 KILOMETERS
FISHERS ISLAND SOUND SURVEY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NIANTIC BAY SURVEY